THE MONTHLY FARMERS ADVOCATE

PERSEVERE & SUCCEED

Vol. 4] DEVOTED TO THE BEST INTERESTS OF THE COUNTRY. [No.8

WILLIAM WELD, Editor & Proprietor. } London, August, 1869. { Postage Prepaid. Office—Richmond St., op. City Ha

AGRICULTURAL EMPORIUM PRICE LIST FOR AUGUST.

Patrons sending orders to us will obtain all kinds of implements and machinery at as low rates as they can be procured for from the manufacturers, and on quite as advantageous terms. Send your orders early.

THE LITTLE GIANT THRESHER AND SEPARATOR Price, alone, $100 cash,—or $105 half payable in winter of sale, and balance in next succeeding January, notes bearing 7 per cent. interest. Price of Thresher and Separator with Horse-power, Band-wheel, Tumbling Rod and Driving Belt, $180 cash,—or $185 credit. Terms as above.

SELL'S PATENT CIDER MILL AND PRESS.....$30; Double Gear, on same principle.. $35
We know of no better for Hand or Horse Power.

ABELL'S PATENT GRAIN CRUSHER.....1st size $30, 2nd size $35, 3rd size $40
A really good and efficient implement. It will save its price in two months where much grain is fed to stock.

THE EMPIRE SEED DRILL.....$65 to $75
There is no better Drill that we know of. They give entire satisfaction to all whom we have supplied with them.

SLADE'S PATENT HAND LOOM.....$40, for Twilling $50
For Plain Weaving; throws its own shuttle and requires no treadles. It is an excellent implement.

HURST'S PATENT CHURN, for six, eight, or ten gallons.....$4, $5 and $6

BAKER'S PATENT WASHING MACHINE.....$10 at Factory, $17 with Wringer.
This Machine is giving satisfaction to those that have procured them. The ladies will find them a great help.

SELL'S PATENT WASHING MACHINE. We hear good accounts about its work.....$10

FRYATT'S PATENT BAGHOLDER.....$5
A useful implement in barns and ware-houses.

SELL'S PATENT CHURN.....$5

GREENLEES' PATENT PRUNER, for Pruning trees while standing on the ground.....$2

Excellent Drain Tiles from two to six inches, from $7 to $40 per thousand; $2.50 additional for packing safely on the cars.

When these implements are not manufactured in this city, we charge the carriage to the city when delivered here; but orders from a distance will have implements shipped to them direct from the different factories.

☞ A few improved Berkshire Pigs, $10 each. ☜

We shall be able to supply the Treadwell, Deihls, Mediterranean, and Amber Midge Proof wheats in any quantity, at a slight advance on market prices. If any farmer has a really clean and good kind. they would do well to send in samples as it is the **BEST** we wish to supply. If any one has better than our own we wish to procure it if reliable. Quarter pound samples can be sent to us for four cents postage. We have many other rare, and some valuable varieties that will be sold in small quantities at higher rates. See next month's price list.

Address, W. WELD, London.

RAILWAY TIME TABLE.

—:O:O:—

G W R	Sarnia Line	G T R	L & P S R
LEAVE LONDON.			
WEST / EAST			
2 55 / A.M.	A.M. 6 00	A.M. 6 35	
6 25 / 6 00	P.M.	11 25	7 30
7 20 / 8 55	3 30		A.M.
A.M. / P.M.			3 00
12 40 / 1 40			
5 55 / 4 19			
P M. / 1 30			M

The Agricultural Emporium test of Seeds.

The Boughton Wheat is by far the earliest variety we have. It is a bald wheat, short in the head and stiff in the straw; it stood the winter well. We think it deserving of more extensive cultivation, especially in the parts of the country where the midge is to be found. We should give it the preference in such localities, although we do not think it would yield as much to the acre as some of the other varieties.

The second to ripen is the Deihls Wheat. This is a finer bald wheat, having a rather short but thick set head, but not quite so stiff in the straw as the Boughton variety. It bids fair to yield a large crop. On early lands this wheat may be sown to advantage. It is not entirely free from midge, but on suitable lands will mature before the midge has power to attack it.

The Amber Midge Proof is a bald wheat of rather dark color, and the heads rather short. It resists the midge as well as any kind, although we have seen the midge in it but have never seen it numerous enough to do much damage to the crop. This wheat is adapted to light lands; the straw is weak, and it is very liable to lodge and crinkle. It has been extensively sown the last season; in fact the larger bulk of the wheat in this county is of that variety

The Kentucky midge Proof is a bald wheat, stands well, is moderately white in color, and bids fair to become one of the leading varieties; in fact we shall try and procure a supply of this kind of wheat.

The Treadwell is half bald half bearded. Any one would believe it to be mixed, but both kinds look alike and ripen alike, bald heads have been selected and have grown both kinds; so also have the bearded heads with the same result. We have been condemned by some, for the past two years, in speaking too highly of this variety, but no farmer that we have seen that has good clay land, and such is the soil that is best adapted to its growth, but are this year fully satisfied with the correctness of our remarks. We stated that it would yield five or six bushels more per acre than the midge proof, and would command five cents more per bushel. It stands the winter well, and does not lodge as bad as the common midge proof. Many farmers now say that we might have even said more, and no one that we have met now dares to censure us about it. For our own crop we have it sown to a greater extent than any other variety, and are fully satisfied with its superiority over other procurable varieties.

The Mediterranean Wheat, of which we have four kinds, are not equal in our estimation to some other varieties, although they are still very extensively cultivated in some localities. We have a vast number of varieties to speak of but must continue in next month's and future papers.

POTATOES.

Never did the Potato crop promise a larger yield than at the present season. The haums are all remarkably stout, and the leaves as healthy as possible. No symptoms of blight or insect about them; we hope no rot will affect them.

THE EARLY ROSE.—We indulged ourselves in our first feed on this highly lauded variety, and can but add that we are really surprised to find them so firm and of such good quality and size. They, undoubtedly, are a good potato. We tried several hills of the other early varieties, and found them superior to all in regard to size and quality. It is yet early to speak as to the general crop of all the varieties, as at the time of our last examination many kinds planted at the same time had scarcely commenced to form their tubers. We do not find the Early Goodrich as large as the Meshanic, but they bid fair to yield a larger crop. The Miltors are a good variety. Our Worcester at two dollars a pound, we shall not disturb until they are ripe. Fuller reports will be given of other varieties and of the yield &c. We have a space allotted for correspondence which is not so well during the present month as at other seasons. Perhaps others may have some remarks to make about new kinds that they have procured from us or from any other source.

INVENTION.

One of our patrons informs us that he has now invented and put in operation, "a horse rake and self-loader," and that it is now tested and works to entire satisfaction. Look out for it at the coming Provincial Exhibition.

☞ Agents wanted in each township or county to canvass for the 'Farmer's Advocate." Also to take orders for seeds, stock, and implements. A good commission allowed.

NOTICE.—All persons having any claims against W. Weld. or the Agricultural Emporium, or the "Farmer's Advocate," are requested to send them in this month. Also all persons indebted to W. Weld or the Emporium or the "Farmer's Advocate," are requested to remit payment at once.

NOTICE.—We again request persons that are in arrears for their paper to remit it once, or the full credit notes must be charged.

Mr. G. Robson, the Middlesex Durham Breeder, has just returned from a trip to the States. He informs us that he has seen the recent importation of Durhams, consisting of eight head. He says they are the best lot that have ever been imported. They have been imported. They have been selected by Mr. R. Gibson for Messrs. Walcott and Campbell of Oneida, New York State. Mr. Robson informs us that the crops are not looking near as well in New York State as in this County.

THE SMALLEST STEAM ENGINE IN THE WORLD.

A writer in a London periodical thus describes a most minute model of the engines of the ironclad steamship, WARRIOR, made by Thomas Smith:—"This tiniest working model in the world is now in the possession of John Penn (of Greenwich), the eminent maker of the great engines of which it is the infinitely reduced counterpart. It will stand on a silver threepenny-piece; it really covers less space, for its base plate measures only 3-8ths of an inch by about 3-10ths. The engines are of the trunk form introduced by Penn; the cylinders measure 1-8th of an inch diameter, and the trunk 1 20th. The length of stroke is 6-40ths of an inch. They are fitted with reversing gear, and are generally similar in design to the great machines with which ships of the WARRIOR class are equipped. From the extreme smallness of this model, a few minutiæ—such, for instance, as the air-pumps—have necessarily been omitted; there is a limit beyond which human skill and minuteness can not pass. Still, so small are some of the parts, that they require a powerful magnifying glass to see their form. The screws which hold the members together are only 1-80th of an inch in diameter, and these are all duly furnished with hexagonal nuts, which can be loosened and tightened by a Liliputian spanner. The whole weight of the model is less than that of a threepenny-piece. It works admirably, and when working, its crank-shaft performs from twenty to thirty thousand revolutions in a minute."

German Amber Wheat and other Varieties.

The German Amber is a smooth or beardless, red chaff wheat imported from Germany, where it is still largely cultivated.

It produces in this country a medium sized head containing about forty grains, and is classed among the best red chaff smooth wheats. The spike is compact and generally square and erect, the apex slightly compressed with a few short awns at the end of the spike. The spikelets generally all fruit, the seed is oblong, ventricose, truncate, mealy and farinaceous, the bran thin, and the wheat highly prized for flour. There are several sub-varieties of this wheat differing very little from the original, either as to early ripening or hardiness. The German Amber makes larger spikes, and will yield more seed to an acre, but in other respects differs but little. When well matured it weighs fully sixty-two pounds to a bushel. Its desirable qualities are hardiness, early ripening, and its capacity, so to speak, to produce a reasonably good crop on but moderately fertile soil. The first secures it against the severity of winter, and the second against the attacks of the midge and Hessian fly. It ripens a stiff, healthy straw, and is rarely attacked by rust. Though it will produce a good crop on poorer soil than almost any other wheat, it is no less indifferent to first-rate soil and cultivation than any other, and yields accordingly. It ripens from the twentieth day of June to the fifth day of July, according to the locality and climate. It may be laid down as a general rule that the red chaff varieties of wheat are the hardiest, and this may be classed among the first in this respect, yielding a medium and sure crop each year. Experience also verifies the statement that red wheats succeed better on soils only moderately productive than white wheats. But in rich, loamy soils, white wheats are to be preferred, the yield being quite as large as that of the red wheat and the market price always much better.

Whether it is desirable to cultivate many or few varieties of wheat at the same time on a farm may be regarded differently by different persons. We think three or four varieties sufficient, as rendering partial success more certain and total failure less probable. The productiveness of any one variety of wheat differs from year to year, owing to different conditions of climate, season and soil, during the active period of the plant's growth, and while one variety fails another may succeed. Thus in a very dry season the long straw varieties are most productive, while in a wet season, the plant growing very luxuriously, the shorter varieties succeed best. By reason of these irregularities it is both prudent and necessary to success to cultivate several varieties at the same time on a farm. Every farmer should ascertain by experiment for himself what varieties are best suited to his particular soils and circumstances. But a blind preference for any kind of wheat, because it has been successfully cultivated for a long time in one's neighborhood, without testing its worth with other varieties, is to be deprecated and condemned as much as a constant shifting year after year from one new kind to another, in the vain hope of finding a variety that will cast all others into the shade. It has too much been the custom to sow a particular wheat in the same locality for a long time, and prefer it to all others. This is a sure way to cause the best variety to degenerate and become worthless. The cause of this degeneracy should be sought for less in the seed itself than in the treatment to which it has been subjected. Except on the richest and best cultivated soils, and under the most favorable climate, no variety of wheat can be long cultivated without manifesting signs of degeneracy. This arises from the imperceptible but certain decay of the organs of vitality in consequence of imperfect development, and, in unfavorable seasons, of fundamental derangement, and even of specific organic disease itself. The only remedy lies in a systematic change of seed from a different locality. But as this cannot always be effected without at the same time changing the variety or kind, the farmer should strive to get that which is hardy and vigorous and will suit his soil. A good plan is to try and regenerate or restore his own worn out or degenerated variety, as one best suited to his particular locality. This can be done by shifting the seed to another part of the country, and growing it on a different soil for a few years. When brought back it will be found to be greatly improved by the change, and to have regained its original vigor and hardiness.

Farmers should strive to select the largest and best formed heads for seed, and give to them the best garden cultivation. In this way they are enabled to maintain the vigor and purity of the seed, and also to restore them to health and vigor when lost by careless cultivation.

There is no doubt that many varieties which bear new names are only the purest and best of the old varieties restored to health and hardiness by judicial cultivation.—Careful attention to the variety and quality of the seed is essential to success in raising wheat, and even the profitless results of indifferent cultivation may be repaired by securing good seed, adapted to the soil, and obtained from a different and more favorable locality. Soil of a firm texture, naturally productive, and in a good state of cultivation, will always, in favorable circumstances, produce the best varieties of wheat.—*Experimental Journal.*

THE DRINK OF PLANTS

The use of manure-water is a matter of profoundest importance, and every point connected therewith should be canvassed freely and without prejudice. Long and careful observation has convinced us (GARDENER'S MAGAZINE) that the customary directions of the books are false in principle and injurious in practice. It is customary to say, "Give a strong dose at such a time, then pure water only, then another strong dose," and so on. It is quite true that some of our favorites endure such treatment without visible injury, but we feel persuaded that the results would be far more satisfactory were the plants, needing extra nourishment, supplied with weak manure water constantly instead of with strong doses at intervals. A little calm consideration of the manner in which plants take up and assimilate their food must surely tend to the conclusion that strong doses of liquid manure approximate very nearly to strong doses of poison; at all events, accidents resulting from such practice are by no means uncommon, and there are probably many more accidents of the kind than are heard of beyond the gardens in which they occur. We have never seen more satisfactory growth than in cases where the only water obtainable was constantly charged with manurial matters; yet the liquid was so far from being what we call "strong" that there was no indication to the senses of the peculiar properties of the fluid. Manure may be given in this weak state to almost any and every plant in cultivation with safety and benefit, and the constant use of such fluid has a far more satisfactory effect in the end than the adoption of a stronger solution for a season only. We must not be understood as advocating what are sarcastically termed "homœopathic" doses; infinitesimal quantities need not be thought of. We simply urge that liquid-manure may be so weak that seedling plants and newly-potted plants may be watered with it safely, yet so far strong enough that by its constant use the plants subjected to its influence will attain in the end a far higher degree of perfection than can be insured by the orthodox of any other method of artificial stimulus.

CANNING FRUIT.

A friend has handed us the following directions for canning fruits, specifying the length of time of boiling and the amount of sugar per quart of fruit that should be used, and requests us to publish the same, as he regards them valuable. He obtained the circular of some Fruit Jar manufacturer or dealer:—"Boil Cherries moderately, 8 minutes; Raspberries, 10 minutes; Blackberries, 10 minutes; Plumbs, 12 minutes; Strawberries, 12 minutes; Whortleberries, 10 minutes; Pie Plant, sliced, 15 minutes; Small sized Pears, whole, 30 minutes; Bartlett Pears, in halves, 20 minutes; Peaches, in halves, 10 minutes; Peaches, whole, 20 minutes; Pine Apple, sliced $\frac{1}{8}$ inch thick, 15 minutes; Siberian or Crab Apple, whole, 25 minutes; Sour Apples, quartered, 15 minutes; Ripe Currants, 10 minutes; Wild Grapes, 15 minutes. The amount of sugar to a quart jar should be:—For Cherries, 6 ounces; Raspberries, 6 ounces; Lawton Blackberries, 8 ounces; Field Blackberries, 6 ounces; Strawberries, 8 ounces; Whortleberries, 5 ounces; Small Sour Pears, whole, 8 ounces; Wild Grapes, 8 ounces; Bartlett Pears, 6 ounces; Peaches, 6 ounces; Pine Apples, 8 ounces; Siberian or Crab Apples, 8 ounces; Plums, 8 ounces; Pie Plant, 10 ounces; Sour Apples, quartered, 8 ounces; Ripe Currants, 8 ounces; Quince, 10 ounces."

FOUNDERING HORSES.

A certain cure for founder in a horse is to stand him in water up to his belly. I have known it practiced for fifty years; and swathing the legs in hot water, vinegar and sugar of lead are all good to some extent; but a founder must be relieved suddenly, or the horse will show stiffness in his action and have deformed and callous or tender hoofs.

Water applied to the legs I do not consider a positive cure; the disease must be attacked at the root, by bleeding and purging, a few drops of blood taken from below the fetlocks will hasten his recovery. But the most certain and quick remedy that I have ever known is a green gourd. Take a large green gourd, cut it up; put it into a gallon of water and boil it down to a quart. Strain the liquid and drench—in twenty four hours the horse will be perfectly himself. The gourd is a powerful diuretic, and will cause the horse to stale the most offensive odor.

In 1822, I traded for two fine young mares in Augusta, Ga. I rode one of them to Kentucky and my servant the other. Early one morning, at the crossing of Clinch river, Tenn. we found one of the mares so badly foundered that she could not be led out of the stable. I procured a green gourd and drenched her as directed above, and directed the servant to remain until she was able to travel, expecting that he would reach home three or four days after me; the next day after my arrival he came in, with the mare in as good plight as if nothing had happened.—COR. RURAL WORLD.

Onions, one year with another, are as profitable a crop as can be raised on small places where rotted manure, clean soil and plenty of labor can be had. Somehow the market is hardly ever well supplied with them.

MANGOLD CULTIVATION.

HORSE AND HARD HOE.—Twenty-seven inches between the plants in the row is more diversified, some singling out only eight inches apart, while others make twice the distance; twelve inches apart is common, but not so much so perhaps, as formerly, since an equal size of medium weight has been found the most profitable crop, from its containing more sugar. Thus with twenty-seven inches between the rows and singled out to six inches apart, there would be 38,720 mangolds per acre, which at three pounds per root would yield over 50 tons per acre, generally about the average crop in England. Manuring and watering newly braided mangolds, carrots, &c., is common, and especially can be recommended in a dry climate like Canada. As soon as the young plants begin to appear above ground, or rather when they begin to break the surface, the water drill is yoked, applying the liquid to two rows at a time. If the field is not more than a mile from the tank at the homestead, a man and cart with an active horse can do two acres a day, and if only half a mile four acres a day. The application not only secures an abundance of plants in the rows, but will prevent the ravages of the turnip fly. As the Swedes and common turnips braid, they may be watered, and if a small quantity of liquid or gas ashes from the gas works is dissolved in the liquid, the application will be the more effective against the fly. Liquid manure drilling in dry weather has much to commend it in general practice. Some liquid manure drills have a seed sowing apparatus combined with them, so that the two operations of liquid manuring and seed sowing are performed together by the combined machine; they also drop the liquid manure and seed at regular intervals, corresponding to the required distances between the turnips in the rows. Other liquid manure drills are only constructed for drilling the liquid, or for applying water or liquid manure to drilled crops; they are adapted for applying a larger quantity of liquid per acre, than the combined liquid manure or seed drills. The sowing of the seed follows by a separate machine; the use of them also gives rise to a difference in the covering of the manure, and thus some cover the manure as when the combined liquid and seed drill is used, others only half cover it. By the first plough, an opening is left on the top of the drill for the liquid manure; a second plough follows the liquid manure drill, setting up the ridgelet or drill in the usual way for the seed drill. By this practice a much larger dose of liquid per acre may be applied, and the seed is got better in than with the combined machines—advantages which more than pay for the extra team required to cover the manure. Liquid manure from the common water cart, has also been applied over the newly spread manure in the bottom of the drill; but the wheels of the water cart do harm to the manure, and when applied before the manure is spread, the wheels of the manure cart and the feet of the horses step and make holes and injure the land.

STRAWBERRIES.

By an exchange we see that 400 bushels of strawberries were shipped from Oakville in one day. That "Crazy Fool" previously spoken of, has done something for that place. It now appears to be the head-centre of strawberry culture in Canada. They are shipping from there to Toronto, Montreal, and we say it with disgrace, *to our county*, even to London, and far surpass the strawberries raised here. The prices paid have been highly remunerative; one farmer brought one load to this city and got $107 for it. Why cannot we as farmers enjoy our strawberries? We do not believe one farmer in five in this county have ever raised a quart of strawberries. No fruit is more nutritious. Every family should have them. They are the best food you can give the children. Try to raise some next year. Why import such when we can raise them?

DOMINION DAY.

We paid a visit to Strathroy on that day, as an annual agricultural pic-nic was held there. Various amusements were carried forward and a band of music enlivened the day. It is well to have a day for an occasional gathering of farmers, and although it was called an agricultural pic-nic and speakers of note addressed the meeting, but little was said in regard to agriculture. We, perhaps very wrongfully, regret that we are not gifted with eloquence. We have never heard an orator yet speak on agriculture when our main interest is or ought to be agriculture, the best speakers always aiming at political power in preference. Surely in a county like Middlesex some practical farmer might make an attempt. We hope at another meeting of the kind some will try.

REVIEW OF THE CORN TRADE.

The weather has again been ungenial and sometimes rainy, although interspersed with days of bright sunshine. Sharp night frosts have been frequent, and blackening many pieces of potatoes, and endangering the blooming of the earliest pulse; but the backwardness of the wheat has been its safeguard, and as yet it has been unhurt, if the thickness of the plant and spindliness of the stems do not give many signs of promise. In many parts of France they have been caught with storms and hail right in the midst of blooming time, producing perfect consternation in some localities; followed by a large business with advanced rates at Marseilles, partly responded to at Paris, where both wheat and flour have risen. With these reports travelling eastward ard northward, the nearer countries of Belgium and Holland have joined Germany in raising prices, and, while rain and cold have been subjects of general complaint in Hungary, they have suffered from drought and excessive heat. To whatever quarter, therefore, we turn, we see an upward movement justified by events, and he must be sanguine indeed who sits by his fireside in June, and expects vegetation, more especially wheat, will prosper without a due allowance of solar heat. We were recently told by a late advocate of the system, that our weather was certainly determined by planetary influence, but as the movements of the bodies are like clock work, Nature's face ought to have answered to them as a dial. Astronomy has, however, brought to light that our planet and the whole system are ever passing through regions of stars, and the wild vagaries of this season would seem to indicate that this more potent influence was felt in all its diversities, and kept our atmosphere by alternate heat and cold continually on the move. If so, let us hope we are near the end of these eccentricities, and that Nature may resume her normal state. Since the foregoing was written it has suddenly become sultry. The markets have fully gained 1s. over last week's rates, and in some places more; but as every gleam of sunshine seems to slacken the buyer's hand, so business has been ruled, with, however, a more decided tendency to gravitation than buoyancy, speculators well remembering its past effects. The cable advices received in New York have given some stimulus to prices there.—*Mark Lane Express.*

BLACKBERRIES.

The Editor of the Commercial Bulletin, published in Greensboro, speaks of Blackberries as follows:

Our fruit crop will be short this season, and we hope everybody will exert themselves to have every blackberry dried that can possibly be gathered. We guarantee they will bring a good price this season. They are a crop that never fails and no one has any idea in this vicinity the amount of revenue it brings into Salem. Our people must not put up with simply gathering enough to supply the families with groceries and calico; but wake up and look around. Salem is building a railroad out of the proceeds of her blackberries last year, and if Forsythe husbands her whole crop of blackberries this season, we have no doubt the county subscription may be cancelled by fall. Just think of the people of one county gathering off of the briars in the old fields $100,000 worth of useful fruit, and we in a sister county letting just that amount of money drop to the ground. We call on all good citizens to look to this matter and encourage the idlers to employ themselves and every child—of whom we, the people, have lots.

SYNODICAL.—Where should one always expect to find a bountiful supply of the milk of human kindness? With the pale of the church.

MEASURES AND WEIGHTS.

TO MEASURE CORN IN THE EAR IN BULK.—Rule: Multiply the length, breadth and height together, in feet and tenths of feet, and multiply this product by 4; strike off the right hand figure and the result will be shelled bushels.

TO MEASURE GRAIN IN BULK.—Rule: Multiply length, breadth and height together in feet and tenths, divide by 56 and multiply by 45, and the result will be struck measure.

TO FIND THE NUMBER OF ACRES IN A FIELD WHICH HAS PARALLEL SIDES.—Rule: Multiply the length by the breadth, and divide by 160.

TO MEASURE WOOD.—Rule: Multiply the length breadth and height together, and divide by 128. The quotient will be cords, the remainder will be feet.

TO FIND THE NUMBER OF TONS OF HAY IN A MOW OR BAY.—Rule: Weigh it. Or, to guess at the number of tons of hay in a mow, multiply the length, breadth and height together, which will give you the number of solid feet, and estimate from 350 to 800 feet to the ton, according to experience. There is no way that an experienced man can buy or sell by measure correctly.

THE PRICE PER TON BEING GIVEN, TO FIND THE VALUE OF ANY NUMBER OF POUNDS.—Rule: Multiply the number of pounds by half the price in dollars, and the answer will be mills.

ILLUSTRATION.—At $12 per ton, what are 3800 lbs worth? 3800 by 6, half the number of dollars, equal 22,800 mills, which is $22.80.

The New Board of Agriculture, and the Seed Business.

A farmer in Canada, who has devoted much time and money in procuring new varieties of seed grain, recently applied to the Board to be allowed a space of 10 feet by 20 feet wide to exhibit a large variety of grain in the head and in samples. He had procured them at great expense and labor. Many of the newly elected members—the practical farmers—that were at the Board, knew the importance of seed grain, and would have willingly granted the space, but a lawyer objected, and probably a doctor, and some of those persons that can talk, but get their bread from some political office, and are not farmers, would not grant the space. We think the Board should consist of men that are farmers. We all see the immense space that is allowed for trials of speed in horses. We believe the small space of 10 by 20 devoted to grain, might be the means of giving more information, doing more good, and be of more profit to the country, than all the acres that are devoted to trials of speed We regret to find that the farmers have not as much influence in the new Board as they should have.

HARVESTING.

We never saw nor heard of a more bountiful crop throughout our country, but the great difficulty is to secure it in good condition. The harvest is now generally commenced, and broken weather is now threatening us. We are all using every hour's sunshine with out utmost strength, and many are the suggestions to use it to the best advantage. We would issue a supplement this day in the curing of crops in catchy or wet weather, but we have to count the cost; the government would charge us $20 for postage, and the issuing of a good plement would cost us near $100. Many might be profited by it, but we should entail an additional heavy expenditure, and we are obliged to be careful. A plan that is approved of by many when the weather is precarious, (and we never had it appear worse for the harvest than at present,) is to put the grain together in small summer stocks in the field, putting about 150 sheaves together, setting the tops of the sheaves well a slant to shed the rain well. By this means much grain is often prevented from growing. It gives more labor at first, but if you have to unbind the grain the time and loss of so doing is far more than the loss of time to make the summer stocks, and the loss of so much grown wheat is by this means often avoided.

FRUIT CROP IN NEW YORK STATE.

A Buffalo paper learns that throughout the entire region of Central and Western New York, the fruit crop promises to be abundant. The crop of cherries is enormously full; indeed the only serious drawback to it is the rotting of the finer sorts in consequence of over-bearing. Peaches are a very full crop. Even plums, where the trees have not been totally destroyed by the black knot, are quite abundant. Apples and pears, in every locality heard from, have set abundantly and are coming forward finely. The only exception is the crop of grapes. The cool, wet weather of the early part of the season was unfavorable to this crop, and it is backward. Still, with genial weather for the remainder of the season, and exemption from early frosts, we may have a plentiful supply of grapes.

CONTENTS OF THIS NUMBER.

EARLY CUT HAY FOR COWS.

Whatever arguments there may be, based on science or experience, in favor of cutting hay late, that is to be fed to horses, mules, work oxen or beef cattle, none of these will apply to hay that is to be fed to milch cows. Hay seed, and matured, well ripened stalks of grass, may be excellent substances to develop animal heat, and to cause a deposit of fat, but they are certainly of very little value in the production of milk. Such hay contains too much carbon and too little nitrogen, to produce milk.

An Eastern paper states that Dr. Nichols, the judicious editor of the Boston Journal of Chemistry, records an experiment on this subject, which cannot but have great interest for farmers. He says that he had one acre of grass, red top and clover, that was cut June 19, and the hay stored by itself. On the first of last March, he put his herd of 10 cows upon it, and the immediate increase in the flow of milk amounted to ten quarts per day. The hay fed them before was of the same variety, but cut after the middle of July. The early cut hay "spent" fully as well as the later cut; no more of it was consumed, and Dr. Nichols estimates that the money value of the product from this hay, fed to ten cows, was greater by nearly a dollar a day, than that from the other. Dr. Nichols also repeats the opinion he has expressed before, that most hay is dried too much, and declares that if grass is entirely freed from external moisture, as that in the form of dew and rain, it will cure better in the mow than anywhere else, provided enough exposure to wind and sun is had to cause one-half of the water circulating in the vessels of the plant to be evaporated. This is accomplished in six or eight hours of favorable weather.

BLOWING A WINE-GLASS

I spent hours in the work-room of Murano, fascinated, despite the blinding heat, by the fairy forms and rainbow hues evolved before my eyes; by the intense, grave, silent enthusiasm of the workmen, which extended itself even to the small children admitted to watch the proceedings; by the impossibility of quitting the scene of labor until the piece in hand could be secured from failure by completion. On my first visit, the head workman was requested by Salviati to make me any article I might fancy; I chose a wine glass with deep bowl, initial stem, and broad ruby-tinted foot. The man dipped his hollow iron rod into a pot of molten white glass, caught up a lump, rolled it on an iron slab, popped it into the furnace, blew through his rod, tossed it aloft, and a hollow ball appeared. His assistant handed him a rod of metal, in which a green serpent seemed coiled in a white cage; this he caught, and, quick as lightning, formed two initials, touching the bowl with the tip of the M, to which it adhered. Then hia assistant offered more white glass, which was joined to the bottom of the M, spun round, opened with nippers, and so the foot was formed. Again into the furnace, and then the shears opened and hollowed the deep and slender bowl. Then the assistant handed a scrap of ruby molten glass, of which the master saught a hair, as it were, wound it round the rim of the bowl and of the foot. Once more into an upper oven, where it must remain till the morrow to cool, and then I drew a long breath of relief; for—knowing that if the metal be too hot or too cold, if too much or too little be taken on the rod, the weight and color will be faulty, that too quick or slow an action on the part of the assistant, in presenting or withdrawing his rod, may spoil the whole—one cannot watch such processes without intense excitement. This excitement the workmen share in their own silent fashion; and when any rare experiment is going on, all gather round the master in breathless anxiety, while no sound comes from the parted lips in the form of a hint or caution.

Sheep, according to the Virginia Advertiser, have nearly doubled in numbers in the United States since 1860, increasing from 23,000,000 to more than 40,000,000 and their wool from 60,000,000 to some 115,000,000 pounds.

The Great Wheat Producing States.

The following is the estimate made by a competent statistician of the product of the great wheat producing States in the American confederacy for the year 1869:

	Bushels.
Illinois	23,836,023
Indiana	17,848,269
Wisconsin	15,656,458
Ohio	15,119,947
Virginia	13,130,977
Pennsylvania	13,042,165
New York	8,681,105
Iowa	8,449,403
Michigan	8,336,268
Kentucky	7,394,899
Maryland	7,103,480
California	5,958,470
Tennessee	2,459,258
North Carolina	4,784,700
Missouri	4,247,586
Minnesota	12,000,000

From the above figures, based in part upon the comparative production of previous years it will be seen that taking population into consideration, Minnesota is by far the greatest wheat producing State in the Union.

THE CHRISTIAN GENTLEMAN.

He is above a mean thing. He can not stoop to a mean fraud. He invades no secret in the keeping of another. He betrays no secrets confided to his own keeping. He never struts in borrowed plumage. He never takes selfish advantage of our mistakes. He never stabs in the dark. He is ashamed of innuendoes. He is not one thing to a man's face, and another behind his back. If by accident he comes in possession of any of his neighbor's counsels, he passes upon them an act of instant oblivion. He bears sealed packages without tampering with the wax. Papers not meant for his eye, whether they flutter at his window or lie open before him in unguarded exposure, are sacred to him. He invades no privacy of others, however the sentry sleeps. Bolts and bars, locks and keys, hedges and pickets, bonds and securities, notices to trespassers, are none of them for him. He may be trusted alone, out of sight—nearthe thinnest partition—anywhere He buys no office, he sells none, he intrigues for none. He would rather fail of his rights than win them through dishonor. He will eat honest bread. He tramples on no sensitive feeling. He insults no man. If he have rebuke for another, he is straightforward, open, manly. He can not descend to scurrility. In short, whatever he judges honorable, he practices towards every man.

Opium Manufacture.—Poppy raising and opium manufacture is likely to become an important branch of industry in Addison county, Vt. Last year a man in Monckton raised poppies and manufactured opium to the value of $3,000, and a number of farmers propose this year to cultivate the plant quite extensively. There are to be several acres of poppies on one farm in East Middlebury.

An excellent remedy for inflamed udders of cows and heifers is to apply hogs lard warm, with a brush, and rub it gently with the hand. This should be done several times a day, rubbing the udder well each time to make it soft. It will effect a cure in the worst cases. Cows and heifers near calving time need watching, and when the udder begins to inflame, this application will prevent the inflammation from extending.

Domestic Economy.

SOAP WITH POTASH.

One pound of White Rock Potash makes fifteen pounds of white hard soap, or half a barrel of soft soap. Process:—Dissolve one pound of the potash in one gallon of boiling water; add five pounds of hot melted clean grease, stirring it quickly until it is smooth and clear, when it may be poured in a box mold.

Another.—Dissolve one pound of potash in three and one-half gallons of boiling water; add thereto five pounds of grease; keep stirring and boiling until the grease and lye are completely combined, which will take from five to ten hours; then add a little salt, which will separate and bring all the soap to the top; it may then be dipped out in a box, which will serve for a mold, and when cold cut into bars. In boiling it will be necessary to add water as it is evaporated. New grease requires more filling than old and rancid. The lye remaining unused may be boiled up with the grease scraps and kettle scrapings, adding two more gallons of water, which will make good soft soap when allowed to cool.

To make yellow soap, instead of five pounds of grease take two pounds of resin and five pounds of grease. Dissolve the resin in grease before adding the lye. While the soap is soft and warm stir in coloring matter if you want it "fancy," and to scent it, a very little oil of rosemary, rose, sassafras or bergamot.

Cup Cake.—Three eggs, two cups of sugar and one o butter; beat them together for fifteen minutes, stir in three cups of flour, beat it well and then add one cup of sweet milk; put in two teaspoonfuls of cream of tartar and one of soda; beat it up well before putting into the oven.

Bread.—Potatoes greatly improve bread. After being cooked, mash and rub them through a colander. Mix in and knead with flour. A pint of potatoes to three or four loaves.

A few pieces of Horse Radish root placed among pickles will prevent scum from gathering on the top of the Vinegar.—Moore's Rural New Yorker.

Canning Sweet Corn.—Mrs. Zena A. Lindsey writes to the New York Farmer's Club that corn can be canned so that it will stay canned, in the following way. Boil the corn fifteen minutes on the cob, and then cut it off and dry in the sun. The corn should then be seasoned to the taste with salt, and put into the cans with a very little water. The covers must then be placed on the cans, leaving only a very small aperture for the escape of gass; then place the cans in a kettle of water and boil slowly three quarters of an hour, when the can may be sealed with a drop of solder or even a little putty. Corn preserved in this way will always keep as long as it is necessary to keep it, and there is no danger of bursting the cans.

To Make Blackberry Wine.—Mrs. Greenough, in the Maine Farmer, contributes the following receipt for making blackberry wine, which is just now about the season for using:—"There is no wine equal to blackberry wine when properly made, in flavor or for medicinal purposes, and all persons who can conveniently do so, should manufacture enough for their own use every year, as it is invaluable in sickness as a tonic, and nothing is a better remedy for bowel complaint. I therefore give the receipt for making it:—Measure your berries and bruise them; to every gallon add one quart of boiling water. Let the mixture stand twenty-four hours, stirring occasionally; then strain off the liquor into a cask; to every gallon add two pounds of sugar; cork tight and let it stand till the following October, and you will have wine ready for use without further labor, that every family will highly appreciate and never do without afterwards if they can help it."

Youth's Department.

A Puzzle—The Wonderful Prophet.

There is on every farm, and may be seen by the curious, a most wonderful prophet, whose generation it is truthfully asserted, was before Adam. He was with Noah in the ark; he was with our Saviour when crucified; he was with Columbus when he discoved America; he was with Captain Cook on his voyage around the world; he followed Bonaparte into Russia, and was with him at the battle of Waterloo; he was with Nelson at the battle of the Nile; he knows not his father, nor did he ever suck the breast of his mother. His clothes are neither hair, cotton, silk nor woollen, neither wove, knit nor spun, neither are they made with hands, yet of a most beautiful color—were never dyed; his beard is of a splendid color, and is seldom cut. He goes barefoot like a grave friar; he cares not for the pomps or vanities of the world, but had rather live in barns and outhouses, than dwell in the palaces of princes; he never takes money if offered to him; the most he was ever known to receive at one time was a single grain; he never yet lay on a bed, nor sat in a chair. His voice is strong and piercing, and he cries out upon the wickedness of the world with outstretched arms. The Scripture makes mention of him as no impostor, for he constantly proclaims the day of the Lord. He is rather inclined to Popery, for he keeps Lent strictly. He is well skilled in the ancient and modern languages as regards his own. He leaves all men alone about their religion. He believes not in the resurrection of the dead, yet there is not one article of the faith he denies. He walks boldly in the face of the enimies, without either gun, pistol, sword or staff, yet has such a deadly weapon of defence that no man has ever yet used. He is strictly temperate and drinks nothing any stronger than water, and those that follow his example live to a good old age. He looks upon the Fenians as a barbarous set, and will some day be cruelly martyred by them. He neither wears hat, cap nor wig, and always takes rest standing. He is composed of flesh and blood, always comes when called for, but never answers when spoken to. He never yet spoke, still preached one sermon, which was so convincing that a great man was converted thereby. He is not the wandering Jew, nor John the Baptist, as some may think. Now, pray who is he?

METAGRAM—ANSWER "MONKEY."

Correct answers to Metagram from W. Hurst, Ellen Crossley, Elizabeth Smith.

SQUARE WORD ENIGMA.

ANSWER "BOAT, OHIO, AIRA, TOAD."

Correct answer from Elizabeth Finch.

ANSWER TO ANAGRAM.

Vice is a monster of so fearful mien,
As to be hated needs but to be seen;
Yet seen too oft', familiar to her face.
We first endure, then pity, then embrace.

ELIZABETH FINCH.

Correct answers from W. Hurst, Ellen Crossley, Elizabeth Smith, E. M. McCormick.

TO DESTROY LICE ON CATTLE.

A farmer, in the "Rural New Yorker" says: I have tried many remedies, yet I have found none which effects a cure as quickly and thoroughly as to make a strong suds of soft soap and rain water, adding a handful or so of common salt, which forms a thick, paste-like substance. Apply this by rubbing it thoroughly over the animal. If using it upon colts, blanket them well to prevent them catching cold. I have known one application to entirely obliterate all traces of these pests, leaving the skin in a natural and healthy state."

IMPROVEMENT IN GRAIN.

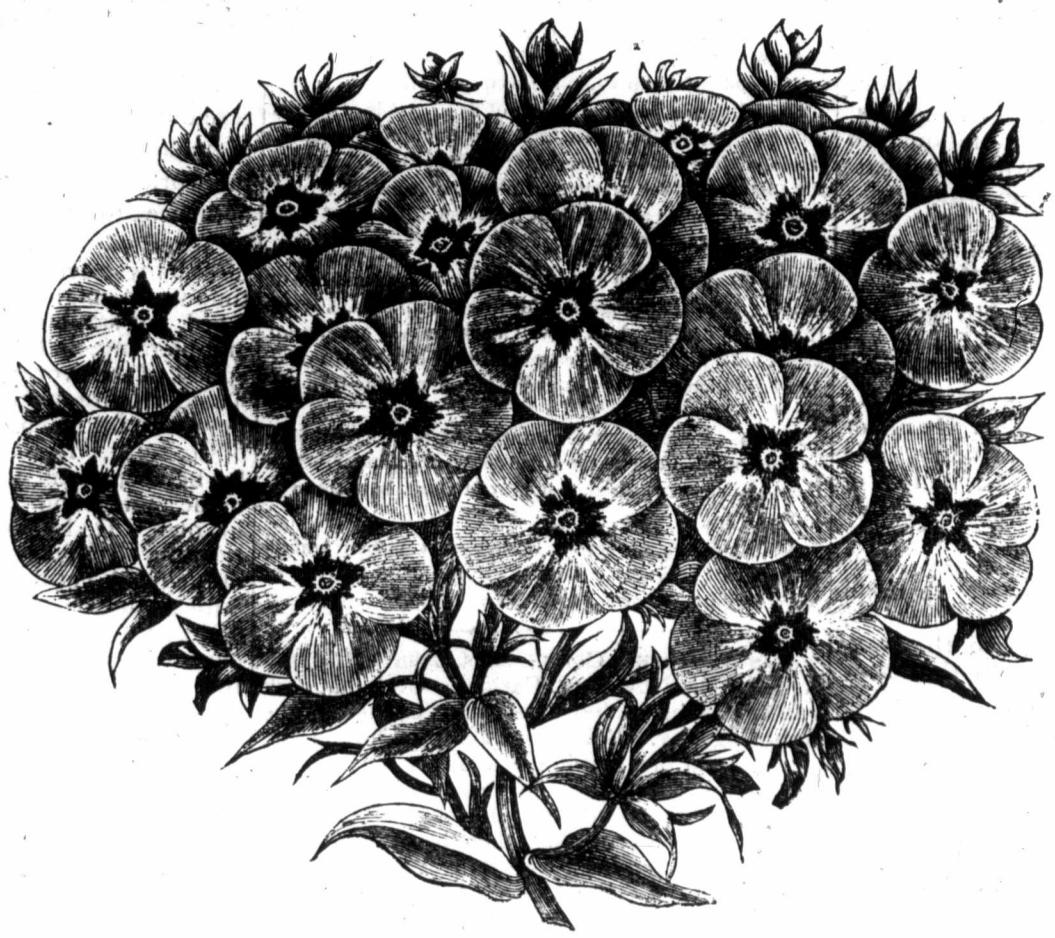
Experiments have demonstrated, and analogy has shown, that the finest and best samples of seed, continued for years, will improve the quality and quantity of the product. A better wheat is thus raised; even a variety may be established. On this principle, in farm stock, we have the short-horn, the blooded horses, and the different breeds of sheep, swine, poultry, &c. Experiments have been made on the human species, but the same, no doubt, holds good there.

We plant and sow "as it comes." We take the seed of the same grain that we use in the aggregate, and sow it. Is not this the case almost always? Corn is an exception to some extent—but why do we except corn? Because it is handy to select. But why select at all? Because it is understood to be good. Analogically, then, it is good to do the same with wheat, oats, barley, &c. But this is less easily done; we therefore neglect it. How long will it take a farmer to go through his wheat and secure the finest and ripest heads sufficient to sow an acre, or half an acre, or a quarter—or even a pint of seed? This pint sowed will be sufficient to form a test crop. The best heads taken from this again, and sowed, will yield another test crop, from which should be taken as before; and so on for a number of years, say half a dozen,—more still better. But three or four years will work a decided difference. But the thing should be continued from selected wheat every time. In this way grain can be improved and crops enlarged. There will be larger grains, earlier maturity and better growth.—*Rural World.*

ALSIKE CLOVER.

One of our readers in the States is applying to us for a quantity of Alsike Clover. We disposed of all our stock in the Spring, and could not supply sufficient for our customers. If any one has any good seed of that kind on hand, please forward a sample to us, stating price and quantity at command; or as soon as any one threshes their new crop, please send a sample and state price. A quarter of a pound may be sent by mail for four cents.

PICKLED WALNUTS.—I have procured from an English lady a receipt for making walnut pickles. She informs me that butternuts will answer the purpose, but are not so nice as the English walnut. Gather the nuts just before the kernel commences to harden, prick them through and through several times with a coarse needle, put them into a crock, pour over them rather strong brine, and allow them to remain for three or four days; drain and spread them in the sun until they are dry and have turned to a dark brown or nearly black. Put them now into a suitable jar, and pour over them boiling spiced vinegar, using 2 ounces of mustard seed, a little mace, 2 ounces of allspice, and 2 ounces of whole black pepper, to one gallon of vinegar. A few onions may be added if your taste will permit. This pickle may be used at any time after making, but is much better for being kept a year. After the pickles are used, the vinegar may be boiled and bottled for catsup, as it is excellent.



PHLOX DRUMMONDII—FLOWERS NATURAL SIZE.

PHLOX DRUMMONDII.

As the present is the season for flowers, we give you the representation of the Phlox Drummondii. We hope the seeds which we suyplied you in the spring are now adorning your gardens. Some of ours have not proved quite as good as last season, but the majority of them are doing very well. The Dahlias never were better, and the roses have been magnificent where the rose caterpillar has not destroyed the leaves. We hope to be able to show an entirely new flower at the Exhibition, or, at least, one that we have never seen or heard of in Canada. If it does well with us we shall give you full particulars in due time about it.

MOWING MATCH.

The South Huron Agricultural Society's annual Mowing Match came off near Kippen, last Thursday, the 15th July. It was a great success, nearly a thousand people present. Thirteen machines entered and competed, all performing the allotted task in first-rate style. It must have been a hard matter for the judges, Messrs. Biggins, Arbuckle and Willis, to decide which was best. They, however, awarded the 1st prize to a "Junior Mower," manufactured by Richmond Hill; the 2nd to a "Ball's Ohio," made in St. Mary's; the 3rd to an improved St. George Machine, improved by Alex. McArthur, and manufactured by Potter of Elora; the 4th to a "Ball's Ohio," manufactured by Glen of Oshawa. It was the opinion of a large majority present, that the improved St. George should have got the 1st prize. Every machine on the ground mowed perfectly to suit any farmer. The coming Reaping Match will be a better test of their general usefulness.

A STORY WITH A MORAL.—We were told on Saturday the story of a robin, which is one of those little incidents in the natural course of things which circumstances sometimes impress upon the mind, and which leave their lessons to call up the better feelings of even a reporter's nature. A few days ago a lady living on Paddock Street, was attracted to her garden by a fluttering noise, and upon looking in the direction from which it came, she saw a young robin in the mouth of a cat, while the parent bird was firmly fastened to the animal's back, and madly pecking at its neck and eyes, in order to make it give up its prey. The lady chased the cat away, causing it to drop the bird; while the old robin flew to a tree, and the poor little fledgling lay uninjured and trembling upon the ground. It was taken up and carefully placed in an artificial nest prepared for it in a basket, its brave defender in the meantime flying back and fourth, as if determined not to forsake it, yet afraid to alight in the yard where it was placed. Then the lady suspended the basket from the upper story window, and the mother, venturing nearer and nearer, soon alighted on the edge of the basket, and finally hopped into it beside its young one. Every day since, with a care, beautiful in its solicitude, the old robin returns with food, gravel and leaves to the nest, and ere the little adventurer is permitted to spread its pinions again, it will be able to guard itself against its natural enemies, while it will doubtless always remember its adopted home and kind protector.

Answers to Correspondents.

J. Manning, West McGillivary—You do not state if your land is in crop now or not. Plough as soon as possible if in early grain; sow rape broadcast, and plough under; sow clover early; plaster in the spring. Rye does not make a good crop to plough under. You soon can remit by mail in postage stamps or bills at our risk when registered.

THE PROVINCIAL EXHIBITION

Will be held in this city on the 20, 21, 22, 23 and 24 of September. There has been more difficulty than usual in making the necessary preparations this year; the principal cause has been the objection of the Mayor and aldermen of this city, in not readily complying with their promise to the Board to provide necessary accommodation. We by no means justify the dignitaries of this city in the steps taken by them. If the exposures of the financial affairs of the association have been very unsatisfactory to the farmers of the country, it does not justify the citizens in deviating from their pledged word. It must, to a greater or less degree, cause dishonor and act injuriously on us farmers of the Western Section. Nothing could do us more harm than the refusal of Eastern men to exhibit here. A great and false idea has been spread in this vicinity, that a Western Fair can be held here annually; that would be of as much advantage as the Provincial held periodically. Although the first Western Fair might have been a partial success, every exertion had been used to raise a large subscription and get up an excitement, which would not as easily be done again for twenty years. There is not a county that would join with Middlesex to establish and keep up a Western Fair. The Provincial Exhibition has done and is doing much good, despite some mismanagement; and we should be sorry to see its utility checked by sectional divisions.

The County Council of Middlesex may have only granted a small sum towards defraying the expenses, but the financial statement of the association shows no necessity of a large grant from them. We cannot condemn them as many do for their parsimony on that score, still we believe, for the interest of the parties who they represent, that in some cases economy has been carried by them to a lower step than is covered by that word. Whenever a person accepts public office, he should look to such things as pertain to the public good. We never should have a railroad, or a canal, or a telegraph, or an Exhibition, unless there was some public spirit to introduce and bring forward such improvements. We believe the coming exhibition will be a good one, the present prospects as regards crops, never being more favorable.

WINTER BARLEY.

We have still another application for Winter Barley. If any of our readers have it, we should be obliged if they would forward a sample to us and furnish us with accounts about it. Some few years since we procured some that was highly spoken of, but it proved a failure with us.

Receipts of the Agricultural Emporium for July.

A fine sample of the celebrated Nicanor Strawberry from Mr. McNamara, of this city. A beautiful basket of Triomphe de Gand, from Mr. Alex. Ponty, Westminster. This is a tried and really good variety of berry. A branch of the White Smith Gooseberry, from Mr. J. Campbell, London. This is a very large and fine Gooseberry, said to resist the mildew. A sample of very large heads of Treadwell Wheat, from J. Freeman, Nissouri. A sample of Cocksfoot Grass, from N. Carruthers, Westminster; he has it now growing from seed sown twenty years since; it is rather coarse; the cattle do not eat it well in summer, but it makes a great mass of feed on the ground, which stock enjoy in winter. A handsome pair of Flower Vases from Mr. A Rowland, Richmond street. A very superior drain tile from Mr. McIntosh. These tiles to be sold by us by the 100 or the car load. Price at the kiln $7 to $40 per 1000, depending on the sizes; $2.50 additional per 1000 for packing safely on board the cars. Farmers can now drain their lands efficiently by the use of them.

Slade's Patent Hand Loom. This is far superior to the old looms; it does the work by merely the motion of the beam; a child can use it; no treadles are required, and it throws its own shuttle. It is the best hand loom we have seen.

Mr. Thomas Greenbees of Hamilton has brought us one of his Patent Pruners which he has just now commenced to manufacture. They appear a handy and useful implement for pruning. By the use of one of them, a person can prune an apple tree without the use of a ladder or getting into it. It has a saw to cut limbs off, and a chisel on the top of the frame to push upward and cut small limbs or to smooth the cuts with. Also a hooked knife to cut by drawing it downwards. The price of the pruner is $2; it may be seen and procured at the Emporium.

We have procured from Mr. G. A. Deitz of the "Experimental Farm Journal," Pennsylvania, a pair of Chester White Pigs. They are a much larger class of hogs than the Improved Berkshires, and each class will have their admirers.

FUMIGATING OUT-DOOR PLANTS.—Some one having enquired through the Country Gentleman how to do this, a correspondent replies: "Tell R, who asks for information how to fumigate out-door plants with tobacco, to invert over the plants a suitable sized, one-headed cask, tub or keg, and put a few live coals in a dish under the cask, and place a little tobacco on the fire, and the fumigation will soon be completed; or a funnel made from paper may be inverted over the plants, and smoke blown from a fumigator, under it. A cheap and available fumigator may be made from a common tin spice box, with a suitable lengthened hollow stem fastened to each end of the box; the cover may be made moveable. Fill with tobacco and place live coals behind and blow through, directing the smoke by the stem, where desired. Hoop-skirt springs may be used in making paper funnels, to better keep the paper in form and shape."

REMEDY FOR CURRANT WORM.—A correspondent says: "Please say to your readers who are troubled with currant worms, that I cleared them all out last year with one application of skim milk applied with a syringe. Worms, they say, breathe through their skins; stop the breathing holes, and they die. Milk does that; perhaps molasses and water, say equal parts, would accomplish the same result; so would thin glue or gum water; but as the milk left me without subjects to experiment on, I did not try the latter as remedies."

MAKING SWEET PICKLES.—Cut the tomatoes through, or, if large, slice in three pieces; let them stand in weak brine over night. To a quart of vinegar, add three pounds of sugar; in this cook the tomatoes until a fork can easily be passed through them. As fast as they are cooked, take them out with a fork and lay them down in a jar—say two or three layers of tomatoes; sprinkle pulverized cinnamon and cloves, and a thin layer of sugar; then alternately tomatoes, spices and sugar, cooking all the tomatoes in the same vinegar; if necessary, add more sugar and vinegar. When the jar is filled, cover the tomatoes with good cider vinegar cold, throwing away the vinegar in which the tomatoes were cooked. Lay some horse-radish root over the top of the pickles, and put a weight on to keep them covered. This recipe is equally good for ripe cucumbers.

SETTING OUT STRAWBERRY BEDS.

Strawberry plants can now be set out from the middle of August to the end of September. It is true, August is a very warm and very dry month, but in case of the absence of rain, the newly planted beds must be watered every day or two, until they become established.

The bed should not be in a damp situation nor the soil heavy. Dig deep, pulverize finely, and apply a pretty heavy dose of good barn-yard manure. Let the divisions be about three and a half feet in width, and as long as may be desirable. Set the plants about eighteen inches apart, insert them in the ground firmly, but not too deeply, and then keep clear of all grass and weeds.

SEED.

Mr. Miller of Ingersoll, complains of our remarks about the Fall Wheat supplied by him for Spring Wheat. We do not wish to infer that it was intentionally done, and as Mr. Millar has been at great expense to introduce the varieties, he deserves credit for the attempt to improve our production. It is of considerable loss to us and to those we supplied, but as we only supplied a small quantity to others we can soon arrange about that, great as our own loss may be, as we kept more than we supplied. We fear some of our customers will be dissatisfied.

We know from practical experience, that an establishment is required where seeds are tested and reliable accounts furnished of them; and it takes time and money to test new kinds. The majority of new kinds will be found inferior to our old, but when one reliable kind is found, it is of great advantage to the country.

WATERING PLANTS.—A writer in an exchange says:—"Plants set against walls and piazzas frequently suffer from want of water, at this season, when even ground near them is quite wet. Draw away the soil from each plant so as to form a basin; fill in with a bucketful of water, allowing it time to soak gradually away, and when the surface has dried a little, draw in loosely the soil over it, and it will do without water for some weeks. This applies to all plants wanting water through the season. If water is merely poured on the surface, it is made more compact by the weight of water, and the harder the soil becomes the easier it dries; and the result is, the more water you give the more is wanted.

MEADOWS.—To have your meadows produce large crops of the best grass, topdress the field or meadow after mowing, with twelve to fifteen loads of well composted barn manure per acre, and give it an extra seeding of the grasses you wish to raise. You will find by attending to this top-dressing not only how to keep up the full yield of grasses, but have a larger yield and better quality of grasses.

Why are candle-makers the worst and most hopeless of people.

THE CROPS AND PROSPECTS.

The season up to the present time—July 23—has been remarkably cool and unusually wet. The crops of wheat, oats, peas, barley, and potatoes, promise to exceed any previous crop raised in Canada. Fruit is a bountiful crop. Some places the apples are but a partial crop, at others very good. Corn and vines of all kinds have not done as well as usual.

Prospects are such, that a decline in prices must be expected. Our subscribers will do well to thresh their grain, whether wheat, peas, or oats, as soon as possible, after they are in the barn, or even in the field, even if you have to pay harvest wages to get it done, and hire teams to take it to market; as the old crops are closely used up, and by delaying a few days, others may have taken the advantage of present prices, and you may have to be satisfied with lower prices.

Those that have Alsike Clover, would do well to let it stand for seed, as the demand is likely to be good for it in the spring. The Americans took all we could supply last year, and are already applying for more.

POSTAGE.

Why should we be taxed for near $200,000 a year for agriculture, and postage be charged on agricultural papers to help make it up?

See the difference! G. A. Deitz advertises to send four pounds of seed wheat to any part of the United States for $1, post paid; which in their money would be worth 60cts. To send four pounds of wheat five miles per mail in Canada, will cost 64 cents in gold. It is more than the wheat and postage together. We have written to the Board of Agriculture but as yet to no purpose. Mr. Buckland, the secretary, writes us that he knows of nothing wrong about it, and has heard no complaints; and, besides, he adds, it does not belong to the Agricultural Department. Well, if the seeds do not belong to the Agricultural Department as it now is, we think we should have some change and not let stuffed birds be the leading features. It is of much importance to the country that every facility that can be given to the dissemination of seeds and information about them, should be attended to, and no department has been less cared for.

Correspondence.

To the Editor of the Farmer's Advocate.

ALSIKE CLOVER.

SIR:—I have to-day sent you a sample of my Alsike Clover, which I think is hard to beat; the length is over five feet. There was a large breadth of ground seeded to Alsike clover last year, but the summer being very dry it did not get a large growth by fall. A number of farmers that had sowed it, was fearful that it would not stand the winter, but it came out first rate in every case that I have heard of and will produce a very heavy crop of hay and seed; and I would advise farmers to let it ripen its seed and thresh it, for it then makes good hay and they will get a number of bushels of seed to the acre, which I think will demand a good price next spring.

The crops in general are looking well in this section. Haying is progressing slowly on account of bad weather. Barley and Fall wheat which are both a fine crop, will very soon be ready to cut.

H. M. THOMAS,

Brooklin, July 22nd.

To the Editor of the Farmer's Advocate.

INSURANCE.

Sir:—In the columns of your paper. I see an advertisement of the Agricultural Mutual Assurance Association. Please give me your opinion about it.

A SUBSCRIBER.

It is perfectly safe. Terms are moderate, and all losses except from incendiarism on the part of insurers have been punctually paid. A very large accumulated capital is at their disposal. We have been insured in it since its commencement, and know of no better company for farmers to insure in. The managers are reliable men and are working for the good of the company and the country. —ED.

The Weather and the Crops in England.

(FROM OUR OWN CORRESPONDENT.)

We are now entering upon the most critical part of the season, in regard to the growing crops and the prospects of the result. One thing is certain, that we shall not have so early a harvest as we had in 1868, and it is not very probable it will prove so productive. It will undoubtedly turn out a fair average one, even if everything as far as the future weather be concerned should prove favorable. The wheat is in ear and presents to the observer a very gratifying appearance, but on closer inspection will show that the cold, wet weather of May, was anything but conducive to the healthy progress of that or any other grain, which will now require an accession of warm, sunny weather (such as we now have) to restore to the wheat crop a luscious and healthy appearance. As to the present we are beginning to feel the effect of the extra consumption consequent on the early harvest last year, coupled with the previous exhaustion of the stock of wheat in bulk. This has had a tendency on the part of some speculators to raise the present prices a little, no doubt thinking that the unfavorable weather would support them; but the alteration to bright sunshine has caused them by this time to find out that they have burnt their fingers pretty sharply by their impetuosity. Everything at that period conspired to press upon the growers the necessity of bringing their produce to market, as soon as, or even before it was housed, for so mature and dry was its condition that much was threshed in the field and delivered at once. The fine price, the fineness of the quality, the active demand, coupled with a good yield, all conduced to render it desirable to sell out to as large an extent as possible. The result proves that the growers were right in their calculations for the price of wheat, and with it that of other grain has now for many weeks been tending downwards. Although the deliveries of English grain have fallen off, and the stocks still in the hands of the farmers are reduced at least to the average amount of the season, if not below this, such a case is easily to be accounted for by the extraordinary circumstances under which the new crop was so early begun upon, and continuously pressed upon the market from the first. At any rate, the present holders of wheat have no reason to hasten its delivery, for under any ordinary circumstances there can be no fear of prices declining just then this side of harvest; but I fear that after that time, owing to the prospects of splendid crops in Europe, we shall see a decline equal to what it has ruled here previous to the year 1866; and I conjecture that there will be little required from your side of the Atlantic, so that your farmers must share in the low prices, and must not think that it is policy always to have high prices. Prices now are fairly remunerative here, for both the grower and consumer.

London, England, July 7th, 1869.

To the Editor of the Farmer's Advocate.

SIR:—I am highly pleased with the appearance

of the different wheat I procured from you. I believe they will be of advantage to this vicinity. The oats are lookin as well as possible. I will report further about them after harvest.

Komoka, Ont. J. CRAIG.

To the Editor of the Farmer's Advocate.

Farrowing of Sows.

MR. EDITOR—Sir:—As you are offering to furnish information on various subjects, per haps you could oblige me and others of your subscribers in giving information in regard to the farrowing of sows. There has been three fine sows lost recently in this vicinity from their inability to deliver their young. The sows were in a healthy state, not over fat, and have been latterly fed on swill and running in grass. Please state cause and remedy, and oblige yours,

A CONSTANT READER.

Dear Sir:—The inability of a sow to deliver her young, may depend upon some malformation of the Pelvis, by its either being too narrow, or there may be some diseased action going on within the Pelvick Cavity; or there may be a preternatural presentation, requiring manual assistance to necessitate delivery by turning the Foctus or young pig in the Uterus or womb. Appropriate instruments may also be required at this stage

If Hydrocephalus or dropsy of the head is present, and the head is very much enlarged so that it cannot pass through the Pelvick Cavity, the operation of Craneotomy must now be performed, which means the opening of the head in parturition, by laying hold of, and breaking down the bones of the head. In conclusion, allow me to remark that in cases of this description, it will be to the benefit of the farmer or others, to apply to the nearest properly qualified Veterinary Surgeon for assistance.

Yours &c.,

JOHN L. POETT, V. S.

To the Editor of the Farmer's Advocate.

ORCHARD CULTURE.

It appears to be a vexed question among fruit growers just now, whether an orchard should be cultivated or not.

We are told on the one hand that the root fibres of fruit and other trees are produced annually, like leaves, and that lying so near the surface as they do the cultivation of the ground by any implement cannot fail to mutilate them, and therefore interfere with the healthy growth of the tree. Hence we are told to allow the orchards to remain in grass.

This is said by parties on the other hand, to be a dangerous doctrine, to inculcate that we have already seen too much of the ill effects of this let "alone" system of fruit growing; that a farmer with his easy habits of negligence clinging to him, will be but too ready to adopt this plan, and come to the convenient conclusion that all he has to do is to let the grass grow; that he will, in this system, find an excuse for doing the hundred and one things that are absolutely necessary to keep an orchard in a good, healthy, bearing condition.

We are inclined to coincide with those who say keep the ground of an orchard well cultivated with a harrow or cultivator, not with a plow; and where the growth is slow, stimulate with a top dressing of manure every fall—putting in some hoed crop—never grain—until the branches cover up most of the space between the trees; then it will be found that the roots occupy and require the whole surface, to the entire exclusion of any other crop whatever.

To the Editor of the Farmer's Advocate.

HORTICULTURAL.

HINTS FOR AUGUST.

FLOWER GARDEN AND PLEASURE GROUNDS.

At first thought we might be tempted to believe at this season of the year—setting aside the constant attention the weeds require—there was nothing to do in the Flower Garden or Pleasure Grounds, except either wander about the walks of the former, or languishly recline beneath the branches of some favorite tree in the latter, and contemplate the effects of our labor through the three busy months that have passed.

Towards the end of this month, evergreen hedges should receive their last pruning till the next summer; hitherto the hedge if properly managed, has been severely pruned towards the top, and the bottom allowed to run comparatively wild. Now, that in turn must submit to the shears to bring it into regular shape and form, which should be conical and almost as wide at the base as it is high.

Specimens of ornamental trees and shrubs, if not looked to last month should now be pruned into shape and made to look symmetrical, especially should this be the case where they stand near the house and where order and neatness ought to prevail, rather han in the more remote portions of the grounds.

If not done last month, all the varieties of shrubs and roses can be propagated by layers early in this. This is done by taking a strong shoot of this season's growth, slitting it upon the upper side, having an eye or bud near the commencement of the cut, and making a tongue from one to two inches long. Give the branch a half turn, so as to throw this tongue to one side of the branch, and peg down into the ground, some two or three inches deep—bringing up the end of the shoot in a perfectly upright position; a handful of fine sand thrown into the hole, will materially assist the process of rooting.

Should the weather be dry and hot, along now, many things transplanted the past spring may suffer from drouth. This will be observed by the foliage having a withered appearance.

A little water put to a tree is worse than none. Make a basin around the stem and pour in the water liberally; then suffer to soak away, and afterwards draw the earth back again into its former position, covering the place then with a mulch of moss or litter.

Seeds of all hardy perennials should be sown as soon as ripe.—Dahlias, copiously watered with liquid manure and securely tied to stakes as they grow. Lillies or any other spring flowering bulbs which have done flowering and the stems died away, should be taken up and replanted.

For the Farmer's Advocate.

ROTATION OF CROPS.

The word rotation signifies a turning round, as a wheel or any other body revolves on a real or imaginary axis, till a complete revolution is made; that is, till each part is brought to the point or place occupied by it before the revolution commenced, and such revolutions may be continued to any fixed or indefinite length of time. When the term is applied to agriculture, it signifies a succession of different crops, instead of a succession of the same crops, no two years in the period assigned for a rotation, to have the same crop. This may be better explained as follows. In garden culture, should early potatoes be planted on any given tract one year, sweet corn the second year, cabbage the third year, carrots the fourth year, peas the fifth year, beans the sixth year, and melons the seventh year, this would be called a rotation. And when completed, the same order of change might be observed, if judged best, for a second rotation; or for another period of seven years. This is the principle of the rotation of crops in agriculture, as well as in horticulture.

The reason for rotation of crops is this. It is known that the proportion of elementary substances that enter into the composition of plants, is not the same in all. Probably it is not precisely the same in any two plants. The soil containing the substances for the growth of plants, imparts them as needed till nothing remains, when the plants cease to grow. Supposing a particular ingredient for a particular plant was lime; it is evident that when the lime is all exhausted, or drained from the soil, that plant can no longer be produced on it. So also of all other plants and all other substances which compose them.

The rotation of crops grow out of experience. The practical farmer observed that, in most cases, when the same plants were grown for two, three, or more years consecutively upon the same soil, it did not yield the same abundant harvest; whilst, when another crop was tried upon that soil, the

production was satisfactory. Observation and experience, subsequently and gradually established for different parts a different alternation of crops. In this, at first, science had no agency: the reason for it was wholly unknown. But whilst the practical farmer was content to rest simply on the facts supplied by experience, and remained satisfied with believing that some plants exhaust the soil, while others do not, the theorist endeavored to discover the key to this remarkable phenomenon, as it then appeared. Different theories were suggested, but it was a long time before one was adopted that seemed exempt from objection. This theory is the same as has been intimated; that the utility of the rotation of crops depends exclusively upon the circumstance that cultivated plants withdraw from the soil unequal amounts of certain ingredients for their nutrition. Assuming this as the hypothesis, all the known facts relating to it are satisfactorily explained. Thus science comes to the aid of experience, demonstrating what was before a mere matter of fact, without a knowledge of the reasons for it.

The question may be asked, that if any one crop is sought successively every year, will there be an entire failure? There may not be an entire failure the second, third, or even fourth year; but each succeeding year, all other things being equal, there will be a diminished crop. But other things may not always be equal. Droughts or cold may destroy or greatly injure a crop of Indian corn one year, and the next year, being no droughts and an abundance of heat, the crop of corn may be far better than the preceding year. The soil too, may be so amply furnished with a particular elementary substance for vegetable growth, that several crops of the same plant may be raised in succession, before material diminution will be perceived; but this makes no exception to the principles for a general rotation. Sooner or later this substance will be exhausted, and there would then be a complete failure.

The theory for rotation may be further illustrated if we take a field for instance, the soil of which contains the mineral and saline materials required to produce wheat, and yet only in a quantity sufficient to produce but a single crop, it follows, of course, that a second crop of wheat cannot be raised on the same field. The soil is completely exhausted for the time, and will remain so forever, if it does not contain substances which may by disintegration and decomposition, furnish a new supply of ingredients necessary to the growth of plants, or if these essential matters are not artificially supplied. Such a complete exhaustion of the soil, however, is not common. The case supposed is for illustration, and is not likely to ever happen in fact. But what really happens, and common enough is, that although all the salts are not exhausted, yet being present in the soil in relative proportions very different to the amounts required by various plants, a single crop of wheat may deprive the soil so completely of one of its mineral constituents, that another crop of wheat would not grow upon it, and yet this soil may still contain abundant mineral constituents for the production of a good crop of clover or turnips.

There is no fixed period assigned by agriculturists for a complete rotation. It depends upon the particular crops that constitute the rotation. Different individuals vary it according to fancy or to the results of their past experience, or the productions of which they have most need. Five, six, or seven years, is the usual time, unless it be for lands that may advantageously remain a long period in grass. In that case, as long as a good grass crop is yielded, they are permitted to remain. The necessity for rotation is prevented by keeping up an annual supply, by artificial means, of the fertilizing agents of the soil equal to what is taken away by the plants. Thus gardens are usually kept so highly manured as to require no rotation; and, it might not be necessary on the farm, if it were as highly enriched in the same way.

I shall have something more to communicate on this important subject in the next number of your valuable paper.

CHARLES L. MANLEY.

St. Catharines.

To the Editor of the Farmer's Advocate.

THE VETERINARY DEPARTMENT.

Tetanus or Locked Jaw, is derived from the Greek term to stretch, and may be defined to be spasms of the voluntary muscles, and as the disease progresses the muscles of involution become more or less affected. Tetanus may be divided into Traumatic and Idiopathic. Tranmatic when arising from wounds or injuries; Idiopathic when attacking an animal without any assignable cause. When the muscles of the lower jaw are affected, the disease is termed Irismus or Locked Jaw, this term being used synonymous with Tetanus.

The causes of this malady are numerous; it has been known to frequently supervene after the operations of nicking and docking have been performed. Wounds or injuries in the immediate vicinity of joints, or in those parts where white, fibrous tissue abounds. One of the most common causes, however, is the foot being punctured by a nail, either accidentally or by the carelessness of the farrier or blacksmith. Tetanus has also been known to come on after the operation of castration; cold, rain, inordinate draughts of air, are all originators of this disease.

It may attack animals at any age, and is seen more frequently in tropical than in temperate climates.

The symptoms of this disease once seen will never be forgotten, more especially if seen in the latter stages. The first indication of the approach of this disease, is a noticeable stiffness of the head and neck, those parts become rigid; the mouth being closed and the nostrils dilated. The animal becomes very irritable, and will not admit of its head or neck being handled.

The tail is erect and tremulous, and the ears become pointed and rigid. The Cartilago Nictitans, or more commonly called the haw of the eye, is pushed over the eye ball itself. As the disease advances, the spasms affects every part of the body. The horse now stands with legs wide apart, the head and neck protruded, and if made to walk moves with a stiff straddling gait; the eyes almost seem to protrude from the sockets, and when the head is raised the haw flies over the eye as a sort of shield. In the early stages of this disease the respiration and pulse are but little affected, but as the disease runs its course, the respiration or breathing becomes irregular and the pulse thin and intermittant. The horse will generally remain standing to the last in this disease, or will suddenly fall, expiring in convulsions.

TREATMENT.—This disease has received all the attention that skill and science could bestow upon it, and no positive rule has as yet been laid down for its treatment. The first thing to be done is to support the system as much as possible, by giving nutritious drinks and very sloppy diet, with admixtures of boiled carrots and turnips. Keep your patient perfectly quiet and give a good strong dose of purgative medicine, which can either be administered with a bottle or with a large piece of gas piping. Envelope the body in hot rugs, and if convenient, apply new-flayed sheep skins over the Loins. Administer Nitre Camphor and Belladonna, internally. Quassia and Quinine has also been used with great benefit. Injecting an infusion of white Hellebore into the veins have also been recommended.

It is useless to dwell any further upon the treatment of this disease, as there are so many different modes of treatment now in vogue for the alleviation of the suffering of an animal with Tetanus.

Before concluding this letter, I would remark that my father when Veterinary Surgeon to the 7th Dragoon Guards, and during his long period of service extending over 26 years in the British Army, had treated several cases with marked success by his particular mode of treatment. And I may further add that other Veterinary Surgeons of high professional standing in England, have met with similar successful results by following the treatment as recommended by my father.

JOHN L. POETT,

Veterinary Surgeon and Fellow of the Edinburgh Veterinary Medical Society.

Owing to a few typographical errors in last month's issue,

Pephritis—read Nephritis; Oval—read Ovid; Burnt Hay—read Mow Burnt Hay; Pephritic—read Nephritic.

INSURANCE IN GREAT BRITAIN.—In the year 1867 farming stock in the United Kingdom was insured against fire to the amount of £79,643,401; in the year 1868 to the amount of £83,768,784. There was and is, no duty or tax on these insurances. Other property has hitherto been liable to duty on assurance against fire, but in 1865 the duty was reduced from 3s. to 1s. 6d. per £100 insured. The amount insured was at that time increasing by about 40 millions sterling in a year; in the year ending the 31st of March, 1866, it increased to £1,259,853,000, and in the next year it was £1,133,484,000, an increase of 73 millions or nearly 6 per cent. But this rate of increase did not continue; in the year ending the 31st of March, 1868, the increase was but about 43 millions, or very little more than had become usual under the higher duty. The Inland Revenue Board stated in their last report, that, so far as they could then judge, there would not be a larger amount insured in the year ending the 31st of March, 1869, which by the present Budget, wil be the last complete year of fire insurance duty!

TWO BIRDS WITH ONE STONE.—A planter near Lake Peigeur, Louisiana, who had been much annoyed by the coons destroying his newly planted corn, some weeks ago determined to rid himself of these pests by means of poison. Soon after dead coons were lying at various places along the banks of the lake; these were devoured by the alligators, which were also poisoned in great numbers.

AGRICULTURAL ITEMS.

Poles five feet high for Lima beans are just as good as those that are ten, and better, as it is bean nature to get to the top of its post before it steadies down to the work of bearing fruit.

Gapes in chickens are caused by a little red worm in the throat, which is visible to the eye. Anything that gets them out cures the evil—a twisted horse-hair, a feather swab, caustic, etc., are all recommended. A good preventative is to keep the chicks away from the forage grounds and roosts of the old fowls and cook their food.

The way to cure a balky horse, a Maine paper says, is to take him from the carriage and whirl him rapidly round till he is giddy. It requires two men to accomplish this, one at the horse's tail. Don't let him step out. Hold him to the smallest possible circle. One dose will often cure him, and two doses are final with the worst horse that ever refused to stir.

THE POTATO QUESTION.—The Pittsfield Eagle says a farmer in Southern Berkshire has planted this spring one hundred and thirty-six varieties of potatoes—all the known named varieties except four, and he hopes to obtain these in time for planting. He purposes to thoroughly test them all, giving to each the same soil and cultivation, and carefully weighing the crop obtained in a rod of drill. The list includes all the new and famous seedlings, and the result will, in a measure, settle the potato question.

TO CLEAN PAINT.

There is a very simple method to clean almost any kind of paint that has become dirty, and if our housewives should adopt it, it would save them a great deal of trouble. Provide a plate with some of the best whiting to be had, and have ready some clean warm water and a piece of flannel, which dip into the water and squeeze nearly dry; then take as much whiting as will adhere to it; apply it to the painted surface, when a little ubbing will instantly remove any dirt or grease.—After which, wash the part well with clean water, rubbing it dry with a soft chamois. Paint thus cleaned looks as well as when first laid on, without any injury to the most delicate colors. It is far better than using soap, and does not require more than half the time and labor.—COACH MAKER'S JOURNAL.

HOW TO CATCH MICE.

A correspondent of the Journal of Pharmacy says:—"Having on several occasions noticed mice in our seed barrels, I bethought me of some method how I might trap the little intruders; they having gained entrance by eating through the chime. To kill them with a stick was impracticable, as the little fellows would invariably escape as soon as the lid was raised to any height. I then thought of saturating a piece of cotton with chloroform and throwing it in, then closing the lid. On raising it again in a few minutes, I would find that life had almost or quite departed. Having on one occasion left the piece of cotton in the barrel, on again returning, found three mice with their heads in close contact with it, and dead. In the evening I saturated another piece, and placed it in the barrel, and on opening it next morning, to my surprise I found nine dead mice."

The provision of the Budget abolishing the last remaining shilling duty on foreign corn, which took effect from Tuesday, sweeps away a relic which has existed as a reminder of the great struggle between Free Trade and Protection a quarter of a century ago. The Act retaining the one shilling duty has been in operation rather over twenty years. From the passing of the Corn Importation Bill of Sir R. Peel in 1846, abolishing the sliding scale which had kept up the price of wheat to over 70s a quarter, it was enacted that a greatly reduced duty should be levied until February 1, 1849, when a uniform rate of one shilling should be imposed upon the importation of all kinds of grain. This enactment is now repealed.

HOP INTELLIGENCE.—The hop vine has made a little progress this week both in Kent and Sussex, but the temperature has still remained too cold of an evening—frequent frosts having occurred—for the growth to be very material. In the Ashford neighborhood fleas are still plentiful, and in some parishes, especially Hothfield, the long-winged aphis has appeared in great numbers. Round Maidstone, the accounts show that the vine will be very short unless warmer weather speedily ensues. At Biddendon and Cranbrook the plants are looking far from healthy; last year at Cranbrook on the 1st of June the hop-vine was over the tops of the poles, now it is only about half-way up them. At Hawkhurst and Wittersham the plantations have a sickly hue. In some of the parishes of East Kent—Wye and Chilham—there is a rather better appearance than elsewhere, but still the prospect is not promising.

The champion strawberry has been exhibited in New York. It measured 7¾ inches around, and weighed 1 oz. and 7 dwts. It was raised by Nathaniel Niles, at Madison, N. J., and is a cross between the Wilson and the Agriculturist. Gov. Randolph, of New Jersey, has christened it the "Niles Seedling."

LONDON MARKETS, LONDON, July 26th, 1869

Fall Wheat, per bushel			$ 95	to	$1 02
Spring Wheat	do		1.00	to	1 05
Barley	do		65	to	75
Oats	do		58	to	60
Peas	do		70	to	75
Corn	do		85	to	90
Cherries, per quart			4	to	5
Currants, red	do		3	to	4
Currants, black	do		10	to	12
Hay, per ton			8.00	to	10 00
Butter, prime, per lb			13	to	14½
Eggs, per dozen			13	to	14
Potatoes, per bushel			40	to	60
Flour, per 100 lbs			2.00	to	2 25
Mutton, per lb., by quarter			6	to	8
Beef, per pound (on foot)				to	
Cows	do		25.00	to	35 00
Sheep			3.00	to	4 00
Lambs			2 00	to	3 00
Wool, per lb			35	to	37½

PRIME CHESTER WHITE PIGS

WE are making a specialty in breeding the above; also

POULTRY

And persons wishing to improve their stock should send their orders to us.

PRICES OF OUR PIGS.

Boar and Sow two months old, not akin.....$25
Sows with pig, seven months to one year old..$45 to $75

These prices include boxing and delivery at Express Office. All pigs warranted to arrive safe and of perfect purity.

THOS. B. SMITH.
Stony Brook, N. Y.

THE EXCELSIOR CHURN

PATENT makes Butter in a Shorter Time than any other Churn, and quite as good. If properly worked it will come in from Seven to Fifteen Minutes. Being made entirely of Tin, it is easily kept clean.

No. 1. to Churn 10 galls.....$6 00
" 2. " 8 " 5 00
" 3. " 6 " 4 00

Any size made to order on receipt of Cash.

PATENT RIGHTS FOR SALE.

☞ P.O. Orders to be made payable to
1 in p W. HURST, Orilla

BUCKWHEAT

HOW and what manure to use to insure a paying crop, and at the same time improve the soil.

TURNIPS.

What manure used in growing the largest crop in Central New Jersey known for years.

Save your Stable Manure for the crops to which it is best adapted. For Buckwheat and Turnips you want

BAUGH'S

RAW BONE PHOSPHATE

IMPROVED:

Warranted, and without an equal at an any price. Sold by
CHAS. DAWBARN & CO.,
124 King-st. East, Toronto.

TO GARDENERS, FLORISTS AND OTHERS.

TWO	Inch	Flower	Pots	$1.00	per	Hundred
3	"	"	"	1 50	"	"
4	"	"	"	2 00	"	"
5	"	"	"	2 50	"	"
6	"	"	"	4 00	"	"
7	"	"	"	5 00	"	"
8	"	"	"	6 00	"	"
9	"	"	"	7 00	"	"
10	"	"	"	9 00	"	"
11	"	"	"	10 50	"	"
12	"	"	"	12 00	"	"
13	"	"	"	13 00	"	"
14	"	"	"	14 00	"	"
15	"	"	"	15 00	"	"

Saucers from 12½ to 25cts. per dozen

CHARLES SIBLEY, LONDON,

Manufacturer of Draining Tiles, Flower Pots, Vases, Chimney Pots and earthenware of all kinds. Orders shipped punctually to all parts. Samples may be seen and orders taken at the Agricultural Emporium Wareroom. Address,

W. WELD, London, Ont.

NEW PATENT CIDER MILLS

H. SELL'S PATENT FOR 1866.

THIS Mill first cuts and then crushes the apples perfectly fine making a saving of more than one-eighth of the cider over any other mill. It never clogs, owing to its novel discharge, and is very substantial. It carried off the

FIRST PRIZE

at the Provincial Fair held at Kingston, 1867, and also was awarded a

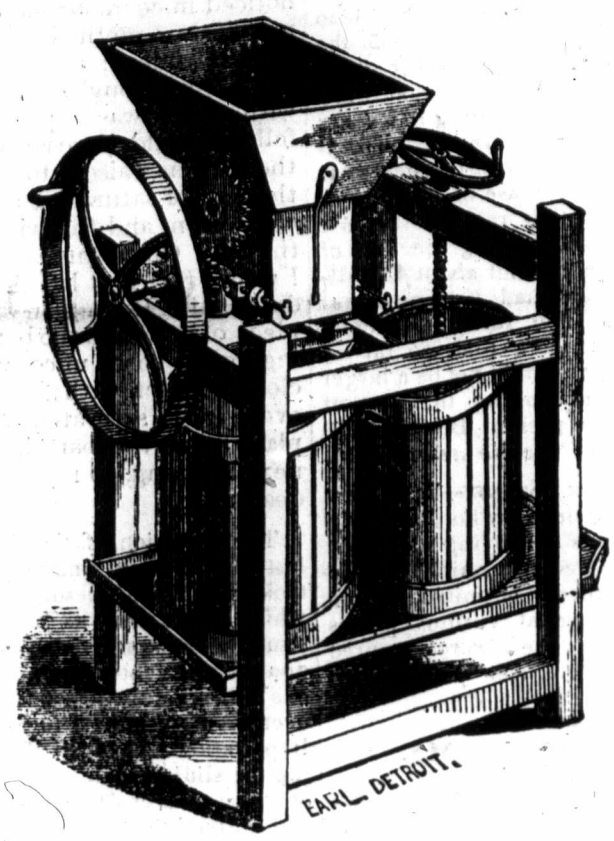
DIPLOMA

the same Fall at the New York State Fair held at Buffalo, and again it has carried off the

FIRST PRIZE

at the Provincial Fair held at Hamilton. Hundreds of these Mills are now in use in Canada and the United States, giving the

Best of Satisfaction



We furnish the Mill and Press complete with two curbs, for $30; or Double Mill on the same principal for $35, at our factory. Both are equally adapted for

Hand or other Power

FARMERS

Send in your orders early, stating your port or Station and Post Office Address. All orders will receive

PROMPT

ATTENTION.

Agents Wanted

All over the Dominion. Address

H. SELLS, & Co
Vienna, Ont.

Samples seen and orders taken at the Agricultural Emporium London.

CAHOON'S BROADCAST SEED SOWER.

WILL enable one man to sow more seed in a single day than can be done by the old method in three. This will be seen at a glance, on examining the action of the machine, which can be regulated with the greatest nicety in proportion to the size and weight of the crop intended to be sown. The following is a short table of the distances at which the seeds most commonly used are thrown, with a regularity which could not be surpassed if every single seed were placed by hand.

Wheat and Rye from	30 to 36 feet.
Barley	27 to 33 "
Hemp	27 to 30 "
Oats	21 to 25 "
Clover—Millet and Hungarian Grass	20 to 24 "
Timothy	15 to 18 "

The undersigned have been appointed Sole Agents in Ontario for the sale of the above most valuable Machine, which will be found one of the greatest labor-savers ever invented. They will be happy to show the above in operation, and to furnish prices and full directions for use to dealers and others who may be disposed to purchase.

CHAS. DAWBARN & Co., Seedsmen,
124 King Street East, Toronto, Ont.

Patent Bagholder and Carrier

THE above cut represents Fryatt's Patent Bagholder and Carrier, which was patented 10th March, 1869. This is a very useful and practical labor-saving as well as bag saving machine, inasmuch as it holds the bag open at full size between the rims, and the bag can be wheeled where required when filled. It is simple in construction, not liable to get out of repair, can be manufactured for a small sum bringing it within the reach of every farmer, grain dealer, miller or feed store. J Kinney and J. Keefer have purchased the right for Middlesex and the city of London, and expect to be abl to supply the machine to parties desirous of obtaining it, in a few days. Price $5; delivered at any railway station in Middlesex. A sample machine may now be seen at the Agricultural Emporium Ware-room, Richmond street, and orders taken there.

ANDREW CHISHOLM & CO.

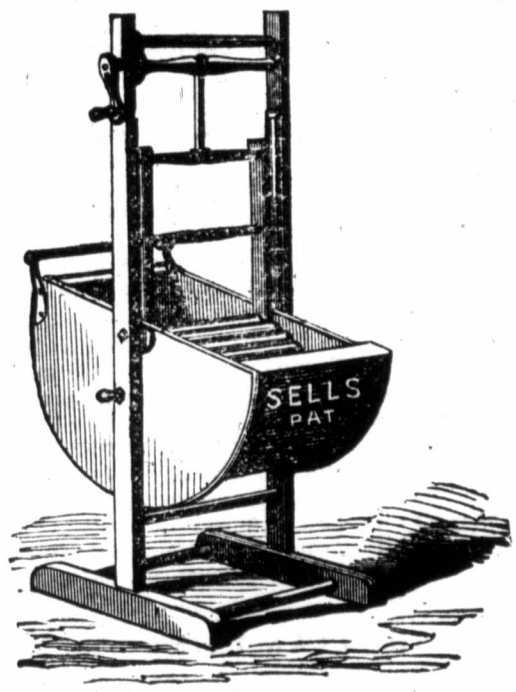
IMPORTERS of Staple and Fancy Dry Goods, Carpets and Oil Cloths. Manufacturers of Clothing and General Outfitters. Dundas Street, London, Ont.

SIGN OF THE STRIKING CLOCK

Opposite the Market Lane.

TEALE AND WILKENS MARBLE CUTTERS

DUNDAS STREET LONDON, ONT.



H. SELLS' DOMINION WASHING MACHINE

Patented Feb. 16th, 1869.

THIS MACHINE NEEDS ONLY TRYING TO BE APPROVED BY ALL.

IT is on an entirely novel plan, having a corrugated revolving pressing roller, and the fabric or clothes being washed are forced under this roller by being placed in a swinging circular box.

It washes thoroughly, without damage to the finest of fabrics, or injury of buttons. It will also speedily wash the heaviest of bed-clothes, and that too with the greatest of case, requiring no more than half the power that drives other machines.

PRICE TEN DOLLAS.

May be seen at the Agricultural Emporium Wareroom London, Ontario.

Vienna, 1869.

Joseph Hall Machine Works, Oshawa, Ontario.

Established

1851.

Joseph Hall

Manufacturing

COMPANY

Proprietors

The business carried on

TO OSHAWA,

by the late

Joseph Hall,

and more recently by his

EXECUTORS,

has been purchased including

SHOPS,

Machinery, Patterns &c.

by the

JOSEPH HALL

MANUFACTURING Co'Y.

who will continue

THE BUSINESS,

in all its

BRANCHES

with increased

ENERGY

AND

VIGOR.

OUR

FACILITIES

will be very much

INCREASED

by the addition of new

Machinery,

and a more thorough

ORGANIZATION

Through our

Connection

with the

GLEN & HALL Manufacturing Co. of Rochester. We shall continue to receive all valuable improvements introduced in the United States.

We shall offer this season our well-known Machines with many valuable improvements, and shall, as usual, keep constantly on hand duplicate parts of all our manufactures, thus enabling us to supply the wants of our customers, and save them from delay in case of accidents.

MR. F. W. GLEN

Will continue to give his time to the Management of the Business. We are determined that all that capital, skillful workmen, improved machinery, perfect organization and division of labor can do, with the best material, shall be done to put into the hands of our patrons the best machines made in Canada, at the lowest possible price.

For further particulars address

F. W. GLEN,

President,

OSHAWA, ONT.