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AGRICULTURAL REVIEW.

NOVEMBER.

CONTENTS:—Provincial Exhibition of London, C. W.—The cattle and implements.—The banquet.—The Hon. Mr. Scott's speech in answer to the toast: "The sister association of Lower Canada."—Convention of the Delegates of all the Agricultural Societies of Upper Canada about amending the Agricultural Act.—The Governor General's views on Agriculture.—Our Fall Shows.—List of the Officers of the Agricultural Societies in the Lower Province.—Fall Work.—Subsoil Ploughing.—The garden.—Storing potatoes.—Agricultural implements.—Seely's churn.—Messrs Gausson, Waterous & Co's Horse Power Threshing Machine.—Portable Steam Engine.—How to keep a Pig.—On fattening poultry.—County of Chateaugay Agricultural Exhibition.—The Corn crop.—The weather.

PROVINCIAL EXHIBITIONS.



THE principle of competition is now being developed to an extent never before observable in the history of this Province.

What a mighty impetus has been given to invention and well-directed industry, by our Provincial Exhibitions! The results of these Exhibitions are pregnant with inestimable benefits to all classes of the community. They have planted the seed of which the future will produce most abundant fruit. Among

the eager thousands whose interest was excited, and whose curiosity was gratified, must have been many who obtained profitable suggestions at every visit to the show grounds of the London Exhibition. While the manufacturer and the artisan would learn the most valuable of all lessons—the disadvantages under which they had laboured, the deficiencies they had to remedy, and the prejudices they had to overcome; the agriculturist too, would be laying in an important stock of knowledge, to be hereafter applied to his own advantage and the public good. Our modern agriculturist is no longer the half-educated, semi-civilized, though noble-hearted specimen of humanity that he was, even in the beginning of this century. Then, the sole instruments of tillage in the cultivation of the soil were the plough and the harrow,

Bloomfield's description of which is no unapt portraiture of their proprietor:—

"The ploughs move heavily, and strong the soil,
And clogging harrows with augmented toil,
Dive deep."

But the modern plough is an improvement constructed on mathematical principles, which by its mould board raising each slice of earth (furrow slice) from its flat position, through an upright one, lays it over, half inclined on the preceding slice." The perfect instrument produces the skilled labourer. A good ploughman will set up a pole a quarter of a mile distant, and trace a furrow so true up to that goal, that no eye can detect any divergence from absolute straightness. Mr. Pusey, a high English authority, justly says, that this is a triumph of art. Soon, however, this triumph of art will give place, as many "triumphs of industry" have, to the crowning industrial triumph—steam, and our children when they hear such expressions as that of James Montgomery, relative to the seed of knowledge, "broadcast it o'er the land," will one day ask what "broadcast" means. Remarkable the President of the Royal Agricultural Society of Great Britain, at the recent meeting at Manchester, "It is but a short time since it (steam) was thought inapplicable to agricultural purposes, from its great weight, but more recent experience has proved this to be a mistake; and already in most districts we find that it has been pressed into the service of the farm. The small locomotive, mounted on a frame with four wheels, travels from village to village with its attendant, (the threshing machine) performing the operations of thrashing, winnowing, and cleaning, at less than one-half the cost by the old and tedious process of hand

labour. Its application to ploughing and tillage on a large scale is, in my opinion, still in its infancy, and I doubt not that many members of this association will live to see the steam plough in operation over the length and breadth of the land."

To stimulate skill and invention, and thereby benefit society at large, in increasing, improving, and cheapening its articles of food, and in stimulating the industry by which we acquire the means of obtaining such food, is the object of our Exhibitions whether Provincial or local. If at the former the entries of stock were not so numerous as some had expected, the first-class quality of that stock was ample compensation. The cattle and sheep, and some of the horses, would have stood high in the most extended competition. In the implement department nothing was left to be desired by a reasonable mind, as well in number as in excellence. The show was a splendid one. The thousands who thronged the ground were quite competent to appreciate the advantages, as they right heartily enjoyed the pleasures derivable from the collective exhibition. Never do we remember to have seen so many people so highly gratified.

On Thursday evening an Agricultural banquet was given by the local committee in the City Hall. The loyal toasts being drunk with the usual enthusiasm. Sir Allan Macnab proposed "The Provincial Agricultural Society of Upper Canada."

Mr. Barwick, the President, responded with much pleasure. All must see that the Association had conferred much benefit upon Upper Canada. It had been acknowledged on all hands that their present meeting had been a great success. He would mention that a Scotchman, who was present at the last meeting of the Royal Agricultural Society, had stated to him (Mr. Barwick) that the Canadian cattle and sheep were equal to the Scotch. (Cheers.)

Mr. Barwick concluded by alluding to the desirability of sending delegates to the Agricultural Association of Lower Canada, in order that by discussion and by being made acquainted with each others improvements, the improvement of the farmers of both sections might be advanced. (Loud cheers.)

The CHAIRMAN proposed "the Legislature of Canada."

Hon. DAVID CHRISTIE, M.L.C., replied. He said he was satisfied the Legislature of this country would always be ready to do

all in their power to promote the best interests of the farmers of the country. Abundant proof of this had been given, and though, perhaps, the wishes of the agricultural community might not on all occasions have been met, it was because an expression of their feelings and wishes in reference to agricultural matters had not been made known. He had great pleasure in endorsing the remarks made by previous speakers in praise of the Exhibition. He thought it was perhaps the best Exhibition we ever had in Upper Canada. The stock, whether of Short Horns or Herefords, or the Devons, Galloways, or Ayrshires, was superior to anything seen in Canada before. (Loud cheers.) He (Mr. Christie) had the pleasure of visiting the Agricultural Exhibition of New York State last week, and while he would freely confess he saw some animals perhaps superior to many exhibited here, yet taken as a whole, our Exhibition would contrast favorably with that of the great State of New York. [Cheers.]

COL. THOMPSON proposed "The sister Association of Lower Canada."

Hon. Mr. SICOTTE responded to the toast of the "Sister Agricultural Society" of Lower Canada. In the name of the Sister Association which he had the honour to represent, he offered his sincere thanks for the manner in which the toast had been received. He should return to Lower Canada ready to add his testimony to the success of the Exhibition. He would acknowledge to all the proof they had given of their wealth, their industry, and their energy. Lower Canada might, perhaps, not be able to compete successfully with Upper Canada in agricultural matters. As it was observed by the gentleman who had proposed the toast, the climate of the East was not so favourable as that of the West. The time allowed for cultivation was so limited that it was surprising Lower Canada had achieved so much, in spite of the difficulties against which she had to contend. (Cheers.) In the meantime, he must state that there was an erroneous impression as to the condition of agriculture in Lower Canada. It was not so backward as some here were inclined to believe. In producing wheat they had in years past been successful, proving that Lower Canada was a wheat growing country. Of late years they had renewed their attempts, and last year they had been able to export a considerable quantity. (Hear, hear.) They

were large exporters of barley and oats, and in these could compete with Upper Canada. (Loud cheers.) The interests of Upper and Lower Canada were identical, but if Lower Canada continued to progress as she had done of late years, it would not be long before she would be in a position to compete in all things with Upper Canada. Some of the speakers had mentioned that it was much to be regretted that the products of the industry of Canada should not be represented at the Great Exhibition of 1862. He might be allowed to state that the Board of Agriculture in Lower Canada had pressed upon the Government the necessity—not only the advantage, but the necessity—of enabling Canada to be represented at the Great Exhibition. On Saturday last it was his (Mr. Sicotte's) duty to forward a memorial in the name of all the Boards of Lower Canada to urge upon the Government the necessity of declaring their intention to ask of Parliament a grant to assist Canada to appear at the Exhibition. Although the Government might be disposed to be economical, he thought they could find some way of economising upon some less important matters. [Cheers.] He [Mr. Sicotte] in returning to Lower Canada, would be able to bear his testimony to the success of the London Exhibition. It was all that could be desired. The grounds were probably the best that could be had in the Province, while the building was certainly a credit to London, both as to the architecture and as to the cheapness with which it had been erected. Mr. Sicotte concluded by expressing the hope that the time would come when the Province would no longer be known as Upper and Lower, but would be thought of and known simply as a whole. He resumed his seat amid loud applause.

Other toasts were given and duly honoured.

The annual meeting of the delegates to the Association was held on Friday, in the Horticultural tent. After voting for Toronto as the next place for the holding of the Provincial Exhibition in 1862, Col. THOMPSON moved—"That notice be given to the several electoral division Societies, to send each one delegate to attend a meeting to be holden in Toronto, the month preceding the meeting of the Legislature, for the purpose of agreeing upon and recommending such alterations as they might deem necessary in the Agricultural Statute."

Hon. Mr. ALEXANDER seconded the motion.

Hon. Mr. CHRISTIE justified the course he had taken in opposing a Bill introduced by Major Campbell. In the first place, as we had a Minister of Agriculture, the bill ought to have been introduced by him; and in the second place, no petition had been offered in its favour, and he (Mr. Christie) conceived that in a matter of so much importance hasty legislation ought to be avoided.

Upon the suggestion of Dr. BEATTY, of Cobourg, the words "and that the Boards of Arts, Manufactures, and Horticultural Societies be invited to attend," were added.

Mr. FERGUSON moved—"That in order more fully to carry out the spirit of the foregoing resolution a synopsis of the bill introduced at the last meeting be published, and a copy be sent to each county and electoral division Society, and that the travelling expenses of the delegates be paid out of the funds of the Association.

Both resolutions were carried.

THE GOVERNOR GENERAL'S VIEWS ON AGRICULTURE.

At a recent meeting of the Royal Agricultural Society of Ireland, Lord Monck in answer to the toast of the evening, is reported to have expressed himself as follows:—

Lord Monck rose, and was received with applause. He said—"Your Excellency, my lords and gentlemen, the duty has devolved upon me by the Council of our Society of bringing before the meeting the next toast on your lordships' list—that of "The Royal Dublin Society, and the Sister Societies in England and Scotland." My lords and gentlemen, fortunately the operations and objects of this Society are too well known to most of the present company to require any lengthened recommendation from me to ensure a favourable reception to the toast. In the Royal Dublin Society you have an association of gentlemen who, though not exclusively interested in the furtherance of agriculture, claim, and claim with justice, to be the oldest agricultural institution in the British Empire. It is now considerably upwards of one hundred years since the attention of that society was first directed to the improvement of the agriculture of the country. Within our own memory they were the first to take the lead in the institution of annual cattle shows which, commencing by very small beginnings have developed themselves into what I, as an Irishman, say with pride and gratification, is the best exhibition of stock that is shown in these countries, both as to quantity and quality. My lords and gentlemen, I may be permitted in passing, to express my satisfaction that a difference of opinion between the majority of the members of that Society and the public authorities of the country has, by the good sense and discre-

tion of the majority of members, been arranged in an amicable manner, and in a manner which will give us the continued benefit of the exertions of that Society with unlimited resources. My lords and gentlemen, next in point of seniority comes the Highland Society of Scotland. Scotland has long been noted for the advancement of its agriculture, and its farmers take the lead as well in the promotion of their art as in the organisation of the society for exhibiting its perfections. Nor were the farmers of the sister kingdom of England slow to follow; and these societies—the Royal Dublin Society, the Highland Society, and the Royal Agricultural Society of England—have always worked in most complete harmony and unanimity with the society whose meeting we are met this evening to celebrate. My lords and gentlemen, the advantages which have been directly conferred on the agricultural prosperity of the country from the exertions of these societies are manifested, not so much in the magnificent specimens of animals brought to our exhibition, as in the improvement to the practical farmers of our country in the general stock. But, gentlemen, I should fail to do justice to the claims of these societies, and kindred societies upon your confidence, if I found the claim principally on the direct advantages which they confer upon the country. If there is any one lesson which the events of the last few years have taught us more than any other, it is that to which our noble chairman has so well adverted in the course of his observations—that the dependence of the prosperity of this country rested upon its industry and commerce. You cannot stimulate the agriculture of the country, if you do it in the legitimate way, and in conformity with those great economical canons which are now enacted in our Legislature, without giving an impetus to its trade, to its commerce, and its manufactures. Gentlemen, there is another ground upon which I think the indirect tendency of these societies is entitled to your highest praise. We have all our own opinions upon religion and politics, and we all conscientiously hold them, enjoy them and God forbid it should ever be otherwise! Free discussion, in my opinion, is the life-blood of progress and advancement. In intelligent minds, conscientiously holding and energetically maintaining antagonistic opinions, are enshrined those bright principles which take their place among genius and literature, and science and art. But gentlemen, the constitution of the human mind is such as that the maintenance of antagonistic opinion is very likely to produce personal antagonism and sectarian rancor; and it appears to me that, if you can bring men who differ in politics and religion to co-operate and act in common for the attainment of any common object, you are likely to smooth down those personal asperities which may arise in the maintenance of antagonistic opinions, and, by doing so, you will be all working together for a common object, and, probably induce them, without sacrificing the strength of their opinions upon other matters, to assert these opinions with greater forbearance and moderation. Gentlemen, such an opportunity is afforded by

Societies like that which we are now met to celebrate. Here is the common platform upon which men of all creeds and parties may, for a moment, cast aside their particular differences and work harmoniously and cordially together for the promotion of the most ancient, as I believe it is the most important, interest of society; and for the advancement of their country and the prosperity of its population. To these Societies may be applied most justly the beautiful words of that great historian and poet, whose loss we have lately had reason to deplore—

Here none are for a party, here all are for the State!

Here the rich man helps the poor, and the poor man helps the great.

Our Fall Shows all over the country, with very few exceptions, have been very successful, and prove beyond doubt that a steady improvement is going forward among our agricultural population. We can well remember the time when but three or four agricultural societies existed in the whole Province, and when the Government grant was neither fixed in amount nor certain in its payment. In the *primitive times*, some half dozen farmers of means, mostly English and Scotch, formed the whole society; and their annual subscriptions, increased by donations from our merchants, and the possible grant from Government, forming altogether a very uncertain amount, constituted the premium fund which was annually divided in a pretty equal ratio among subscribing farmers. Times have since changed, and it must be admitted the change is greatly for the better. The agricultural societies are now national institutions, supported and legalized by the Government, and holding out their healthful stimulant to all classes of our rural population. The distribution of prizes only for products of the soil and superior animals doubtless did good; but it was not till a more large and enlightened policy induced the directors to employ their funds in the importation of improved breeds—horses, horned cattle, sheep, and pigs, that the full advantage of these societies began to be felt throughout the community. The shows of the present year are the best comment upon the wisdom of those directors who originated the important system. Would some of the directors of our societies in like manner take the lead in encouraging subsoil ploughing, and thereby prove themselves benefactors of our common country? The following is a list of the Officers of all the Agricultural Societies in the Lower Province:

AGRICULTURAL SOCIETIES, LOWER CANADA, 1861.

<i>Sociétés.</i>	<i>Organised at</i>	<i>Presidents.</i>	<i>Vice-Presidents.</i>	<i>Secretary-Treasurers.</i>	<i>Board of Directors.</i>
Argentéuil	St. André	Edward Jones Jr.	Thomas Jefferson.	H. Howard.....	Georges Glines, Stephen Burwash, James Gordon, Alexander Gordon, John Hay, James Wilson, Daniel de Stulol.
Arthabaska	St. Christophe.....	A. Stein.....	J. Goodhue, jr....	B. Thérond, jr....	L. Tribodeau, P. Perreault, F. Larivière, E. Germain Paradis, E. Legendre, O. Pelletier, L. Emerson.
Bagot.....	Stq. Rosalie.....	J. Pilon.....	N. Blais.....	P. S. Gendron....	Frs. Bélangier, M. Mousset, P. Duhaime, C. Lefebvre, A. Morin, M. Desmarais, Hubert Gendron.
Beaubarnais	Beaubarnais.....	J. Keith	J. B. Scott.....	J. M. Browning..	J. B. Rougie, John Symons, David Benning, H. Laurin, Peter Lynch, Pierre Leduc, Thomas Watson.
Beauce.....	St. Joseph.....	Cette Société ne s'est pas organisée	en 1860 et 1861.		Les officiers de 1859 étaient: J. O. C. Arcand, Z. Bertrand, T. S. A. Bélangier, Hon. Et. H. J. Duschesnay, T. J. Taschereau, I. P. Proulx, L. Labréque, G. Lessard, A. Pageot, A. Cathcart.
Bellechasse	St. Michel.....	O. C. Fortier.....	E. Fongues.....	P. Fongues.....	J. Lemieux, A. Audet, F. Fournier, L. E. Turgeon, E. Lacombe, Jacques Laineuse, C. Paquet.
Berthier.....	Berthier.....	L. M. Olivier.....	J. D. O. McBean..	Chs. Emond.....	M. Grandpré, X. Désy, jr., R. Magnan, A. Hameton, P. Piet, A. Paquet, E. O. Gauthier, E. Mousseau.
Bonaventure, No. 1	New Carlisle.....	Wm. Macdonald..	R. H. Montgomery	Chs. Kelly.....	Wm. McPherson, Wm. McDonald, Barnabas McGie, D. Kerr, F. Briard, A. Carcard, E. Martel.
Bonaventure, No. 2	Carleton	Joseph Mengher..	J. Fraser.....	Mann & Meagher	D. Fraser, Peter Ingram, R. Bustead, J. Campbell, S. Allison, F. Cook, J. N. Verge.
Brome.....	Brome.....	Elie W. Hall.....	C. Emerson.....	H. S. Foster.....	J. Larauray, S. Péttes, A. C. Squires, G. C. Robinson, F. Hand, J. Mooney, A. Sargant.
Charlevoix, No. 1.	Malbaie	J. Nairne.....	J. F. Reeve.....	Ed. Tramblay....	J. McLaren, G. Demeule, F. Belleville, F. Harvey, A. Lemieux, P. Harvey, T. Villeneuve.
Charlevoix, No. 2.	Baie St. Paul.....	D. Tremblay.....	T. Fortin.....	S. Boivin.....	R. Savard, J. Gimon, M. Perron, O. Simard, P. Danais, O. Clement, G. Girard.
Chambly	St. Hubert	J. Yule.....	J. Hurteau.....	P. B. Benoit.....	C. Trudeau, L. David, L. Brosseau, J. B. Charon, A. Rocheleau, C. de Boucherville, O. Robert.
ChAMPLAIN.....	Ste. Geneviève	Bat. F. Filteau.....	S. Rocheleau.....	Rob. Trudel.....	A. Massicotte, Jos. Grenier, A. J. Martineau, A. R. Laféche, L. Fugère, M. Trudel, G. Gervais.
Chateauguay.....	Ormslow.....	G. W. Baker.....	T. Gibbie.....	A. McEachern....	G. Elliott, J. Elliott, J. Cairns, J. Cowan, W. Woods, J. Orr, T. Reid.
Chicoutimi.....	Chicoutimi.....	P. C. L. Dubois..	R. Blair.....	O. Bossé.....	L. Tremblay, L. Mignier, A. Fortin, F. Larouche, jr., N. Boucher, R. Maltais, J. F. Langhais.
Compton.....	Eaton	A. Stimson.....	B. Lebourveau..	A. O. Kellam....	J. McLary, A. S. Merrill, S. J. Pomroy, R. Lindsey, Wm. Searned, D. H. Pope, G. P. Ward.

AGRICULTURAL SOCIETIES, LOWER CANADA, 1861. (continued.)

Societies.	Organised at	Presidents.	Vice-Presidents	Secretary-Treasurers.	Board of Directors.
Deux-Montagnes.	St. Benoît.....	J. Bte Daoust...	W. Ingliss.....	D. Masson.....	O. Limoges, W. McGeock, J. Rodrigues, A. Lefebvre, C. Masson, T. Dobie, R. Walker.
Dorchester.....	St. Anselme.....	J. B. Carrière...	J. Roy.....	F. F. Buteau.....	Z. Audet, F. Dion, L. Turgeon, P. Audet, J. Audet, M. Dallaire, H. Plante.
Drummond, No. 1.	Drummondville..	Hon. W. Sheppard.	E. Hemming.....	R. N. Watts.....	H. Hemming, V. Cooke, J. Boisvert, W. Robins, A. Lesperance, J. Ralph, P. McCabe.
Drummond, No. 2.	Durham.....	G. H. S. Browne.	J. Bothwell.....	James Bothwell.	B. Reed, J. Royston, J. Mairs, Wm. Barrill, G. Evans, A. Wilcocks, T. Atkinson.
Gaspé, No. 1.....	Percé.....	T. Savage.....	John Baker.....	O. T. Connick..	J. M. Hemon, M. Furlong, J. Lenfestey, T. Cain, J. Couture, H. Mahan, J. E. Tuzo.
Gaspé, No. 2.....	Gaspé Basin.....	John Eden.....	J. Perchard.....	Joseph Eden....	Major Hecheurveur, A. Coffin, W. Clarke, R. Patterson, W. Annot, J. Carter, F. Coffin.
Hochelega.....	Montréal.....	H. Brodie.....	F. Beaudry.....	J. Smith.....	J. Lanouette, D. Lochead, L. Laporte, F. Girard, F. Charretier, J. Clarke, J. Drummond.
Huntingdon.....	Elgin.....	S. H. Schuyler...	A. Henderson....	P. Macfarlane..	J. White, P. Aubery, A. Oliver, D. Macfarlane, N. Manning, A. McGregor, J. McDearmid.
Iberville.....	St. Athanase....	F. X. Poulin....	J. Ouimet.....	L. Hamel.....	A. Comeau, P. Gosselin, P. Desrochers, J. Choquette, J. Bower, F. Meunier, Moise Benjamin.
Jacques Cartier..	St. Laurent....	A. Sommerville..	L. Legault.....	N. M. LeCavalier	L. Dagenais, F. Sauvé, J. Cousineau, J. Dawes, B. Lefevre, A. Hislop, O. Desforges.
Joliette.....	Industrie.....	Wm. Berczey....	L. Levesque.....	Ed. Guilbeault..	B. H. Leprohon, J. Beausoleil, M. Massicotte, Chs. Guilbeault, J. Bte. Renault, J. Desmarais, H. Daly.
Kamouraska.....	Ste. Anne Kam..	Frs Pilote, prêtre.	P. Dessaint.....	Emile Dumais..	O. Martineau, L. Miller, Dr. L. Tétu, J. Bte. Richard, J. Bte. Lezègue, H. Pelletier, F. de Guise.
Laprairie.....	Laprairie.....	A. Moquin.....	W. Lawson.....	H. Lanctot.....	J. Dunn, A. Barbeau, W. Cleghorn, D. Monnette, F. Trudeau, J. Beaudin, L. Brosseau.
L'Assomption...	L'A.somption...	Hon. P. U. Archambault	U. Deschamps...	A. Archambault	Jos. Auger, P. Archambault, A. Trudeau, N. Lapierre, J. Bte. Perrault, Ed. Bourque, N. Vinette.
Levis.....	St. Henri.....	F. M. Guay.....	P. Lagueux.....	Frs. Bourget....	J. Demers, A. Plante, P. Côté, P. Morin, C. Bouchard, V. Corneaux, T. Brouard.
L'Islet.....	St. Jean Port Joli.	A. Dionne.....	C. F. Fournier...	P. G. Verreault.	M. Boucher, L. Caron, S. Drapeau, T. Gagnon, A. Miville, L. Bois.
Lobinière.....	St. Sylvestre...	P. Stoken.....	P. Montgomery..	J. Parke.....	T. Walker, J. Brown, Chs. McCaffery, T. Taylor, H. Mackie, J. Lefevre, S. Wark.

AGRICULTURAL SOCIETIES, LOWER CANADA, 1861. (continued.)

Societies.	Organised at	Presidents.	Vice-Presidents.	Secretary-Treasurers.	Board of Directors.
Laval.....	St. Martin.....	P. Gravelle.....	J. B. Legault.....	Dr. Smallwood.....	F. K. Kimpton, G. Desnoyers, F. X. Auchair, P. Gravel, P. Onimet, H. Van- nier, M. Lacroix.
Maskinongé.....	Rivière-du-Loup.....	J. Fortin.....	J. Carufel.....	G. E. Mayrand.....	J. Vovsard, F. E. Doucet, D. Gagnon, Ed. Caron, A. Lesage, P. Bergeron, G. E. Lessard.
Megantic No. 1.....	Inverness.....	D. McKinnon.....	W. Moat.....	D. McGilivray.....	R. Cox, P. Campbell, J. Wallis, S. Statter, J. Shaw, J. McKenzie, D. D. McKenzie.
Megantic No. 2.....	Leeds.....	J. R. Lambly.....	Jno. Ross.....	J. Hutchison.....	W. Fraser, T. Scallan, A. Dunn, J. Craigie, A. Church, C. Allar, J. Hune.
Montmagny.....	Montmagny.....	L. H. Blais.....	Dr. J. O. Beaubien	Major N. Nadeau	L. Dupuis, L. Fortin, W. Bossé, G. Blais, P. Blais, J. Paré, J. Carbonneau
Montmorency.....	Chateau-Richer.....	Rev. P. Gariépy.....	C. Rhéaume.....	O. Gravel.....	F. Caron, P. Fillion, A. Fillion, P. Bilodeau, A. Gravel, C. Huot, L. Bélan- ger.
Misissquoi.....	Bedford.....	W. Baker.....	J. Hunter.....	H. O. Meigs.....	W. C. Baker, C. B. Hibbard, J. F. Mouth, N. M. Blinn, H. S. Throop, S. Raye, J. H. Morher.
Montcalm.....	Ste. Julienne.....	J. Dufresne.....	J. Melrose.....	A. H. de Caussin.....	T. Brault, M. Dorval, A. Beaudry, G. Poirier, B. Bertrand, M. Bordelean, J. Smily.
Montréal.....	Montréal.....	T. J. J. Loranger.....	P. J. O. Chauveau	M. C. Desnoyers.....	D. Laurent, E. Demers, A. Mousseau, N. Duvernay, J. Perrault.
Napierville.....	Napierville.....	J. G. Laviolette.....	C. Lefebvre.....	P. D. Hébert.....	J. Gregoire, L. Martin, A. Merizzi, D. Samisizette, P. Benoit, Toussaint Ca- tudaal.
Nicolet No. 1.....	Béancour.....	T. A. Lambert.....	L. E. Leblanc.....	J. Jutras.....	A. Macdonald, A. Leblanc, A. Buisson, E. Brassard, J. Pratte, A. J. Labarre, W. Demers.
Nicolet No. 2.....	Ste. Monique.....	Rev. C. Z. Rousseau.....	J. Beaubien.....	P. Milot.....	J. René, P. Décoteau, M. Provancher Vilbrun, L. Beaubien, J. Trudelle, F. Mansau, F. Roy.
Ottawa No. 1.....	Aylmer.....	R. Conroy.....	R. Kenney.....	C. Symmes.....	H. Parker, T. B. Prentiss, C. Delisle, R. H. Klock, W. H. Hurdman, J. Lucl, Sen.
Ottawa No. 2.....	Thurso.....	G. W. Cameron.....	J. Cummings.....	A. Waters.....	J. Parker, G. Millar, J. Cochrane, J. Lamb, C. Wright, J. Larwell, A. Mc- Naughton.
Pontiac.....	Clarendon.....	A. Stewart.....	G. Hodgins.....	M. Judgson.....	W. William Cobb, T. Morelle, J. Hodgins, S. Morray, G. Morrisson, T. Cra- ham, J. Wyman.
Port-Neuf.....	Capsanté.....	J. E. Thibaudeau.....	C. Arcand.....	F. S. J. Rinfret.....	F. X. Frenet, R. Bernard, F. S. Hamelin, L. Leclaire, L. Dussault, J. L. Hardy, F. S. X. Larue.
Québec (Cité).....	Québec.....	H. S. Anderson.....	L. Bilodeau.....	W. Moore.....	J. Bte. Renaud, J. Ashworth, W. Crawford, J. Dinning, R. S. Hopper, C. St. Michel, A. Robertson.
Québec (comité).....	St. Roch.....	Lt. Col. J. Laurin	Cap. P. Dorion.....	J. Be. Détiage.....	F. Sansfacon, T. H. Hamel, M. Scullion, H. Moss, T. May, Jacques Dion.
Richelieu.....	Sorel.....	J. W. Dorge.....	C. Magaann.....	J. G. Crebassa.....	R. Latraverse, J. C. Chapdelaine, J. B. Houle, W. Piasse, C. Neau, H. Mo- rin, L. Chapdelaine.

AGRICULTURAL SOCIETIES, LOWER CANADA, 1861. (continued.)

Societies.	Organised at	Presidents.	Vice-Presidents.	Secretary-Treasurers.	Board of Directors.
Richmond	Melbourne	W. H. Webb	W. R. Philbrik	J. Main	C. Hall, N. Lawrence, E. Scott, J. Wilson, S. Baker, G. Silver, A. Fry.
Rimouski	Rimouski	A. E. Gauvreau	Rev. M. Duguay	J. Bte. Lepage	J. Bte. Bélanger, L. Bérubé, O. Roy, E. Lepage, Rev. M. G. Nadeau, A. Lavoie, M. Beaulieu.
Rouville	St. Césaire	Major Campbell	O. C. Rolland	J. Bte. St. Onge	M. Fregeau, L. Gobeille, O. Crossfield, F. Bessette, R. Daigneau, C. E. Létiu, Dr. Béique.
Shefford	Waterloo	S. W. Blackwood	A. E. Knowlton	G. H. Allen	J. R. Clark, L. H. Knowlton, S. G. Johnson, T. Boyd, T. Wallace, A. Sanborn, Z. Greenwood.
Sherbrooke	Sherbrooke	Major H. Beckett	Rev. C. P. Mallory	Chas. Brooks	T. G. Robertson, A. D. Ball, H. Moe, A. Stevens, D. H. Muslin, H. Wilson, W. S. Felter.
Soulangier	Coteau Landing	W. Ray	A. Charest	G. M. Dumesnil	D. McPherson, M. Giroux, J. Bte. Lebus, J. J. Pilon, P. Vincent, T. Parsons, F. Priteur.
Stanstead	Stanstead	S. Bean	H. J. Pierce	L. K. Benton	G. Pomroy, J. G. Christie, J. H. Hervy, L. Clevehand, P. B. Wilcox. A. Hoyet, J. Baldwin.
St. Hyacinthe	St. Hyacinthe	J. C. Perreault	F. X. Marin	A. Desilets	A. Besisale, H. Messier, M. Cordeau, L. Bourgeau, Olivier Senécal, J. Bte. Michon, D. Morison.
St. Jean	L'Acadie	J. Bissonnette	B. Booth	L. L. Roy	S. Coupal, Jos. Bissonette, A. Boissonneault, C. Bouchard, Ed. Lord, F. G. Marchand, M. Denuau.
St. Maurice	Yamachiche	L. L. Desaulniers	C. Lajoie	F. E. Milot	G. Alarie, T. Meunier, N. R. Dufresne, J. Crête, J. Bellemare, P. Lemai, D. Lacerte.
Terrebonne	Terrebonne	A. Turgeon, jr.	J. Morris	Dr. Smallwood	F. Forgeat, R. Filion, M. Moody, P. E. Marier, J. Oswald, A. Kimpton. A. Payment.
Temiscouata	Isle Verte	N. Tétu	J. B. Pouliot	L. N. Geauvreau	Ant. Lebel, Abr. Lebel, L. Demeul, L. A. Bertrand, E. Dusette, D. Bertrand G. Gagnou.
Trois-Rivières	Trois-Rivières	J. McDougall	O. Duval	E. Aubry	Frs. Dufresne, A. Cloutier, D. Dufresne, H. Lacerte, O. Goin, F. Bettey, Ed. Bernard, fils.
Vaudreuil No. 1.	Vaudreuil	R. U. Harwood, jr.	J. Ahern	Ed. Lefavre	E. P. Groux, G. Arde, F. X. St. Denis, A. Léger, A. St. Julien, A. Lande, Jos. Pilon.
Vaudreuil No. 2.	Égards	D. McMillan	A. C. Cholet	E. N. Fournier	S. Fournier, A. St. Denis, A. McLachlan, J. Park, S. Bedard, C. McGreavy, F. E. Chev. ir.
Verchères	Varennes	L. H. Massue	A. Vandandaigue	J. N. A. Archambault	F. X. Renoit, E. Dufresne, R. Marchesseault, C. Chabot, P. Chicoine, [McConnell, F. Geoffrion, C. Beauchemin.
Wolfé	Dudswell	W. H. Lothrop	J. C. Lasell	A. Lothrop	N. Andrews, B. C. Bishop, H. G. Bishop E. Westman, D. Smith, E. Coté, R. I. Gill, L. Gill, J. Duguay, A. L. Goin, F. X. Labaie, père, J. M. Coté, P. Payan,
Yamaska	St-François du Lac	J. Wurtelé	M. Fortier	Et. Boucher	

FALL WORK.



WE have been very much surprised that so little action should have been taken up to the present time, by the different Agricultural Societies in Lower Canada, upon the subsoil ploughing question.—

There are tens of thousands of acres of land in this section of the Province, that, by proper attention to this subject, might be made productive, that is now but a stage removed from actual barrenness. Worn out farms, consisting of stiff clays, if properly subsoiled, would astonish the owner, and would, by the first crop, more than doubly remunerate him for his additional trouble. As a general rule, these heavy clay lands are scarcely worth the trouble and expense of cultivating them, according to the present mode. They have been made to grow wheat and oats till they could grow them no longer. Peas are now sown, and by the aid of gypsum, middling crops are sometimes obtained. But this also must soon come to an end, and the famous boast that mind shall triumph over matter must be reversed. The thistle will then take possession, to reproduce itself a thousand fold, to the annoyance and injury of the neighbouring farm on every side. Now the remedy which we would urge is this, *subsoiling*, knowing as we do from practical experience that this practice, if adopted, would soon bring about a change of the most beneficial character. Soils supposed to be exhausted would be in effect renovated; and fields of waving wheat would be seen where the thistle and barrenness held undisputed reign. The action of the frost upon the stiff subsoil then thrown to the surface, would be to pulverize, and so cause the earth not only to allow the roots to descend into congenial mould, but the earth thus brought under the action of the

atmosphere and the plough, would yield to the growing crop nutrition, which, under the present state of things, has been worse than locked up.

We are quite aware that however clearly the benefits of subsoiling may be proved by argument, experiment must first demonstrate the fact, before the practice will be adopted upon a large scale. We would therefore suggest to the local societies the importance of awarding premiums, say for every acre, or larger quantity in proportion, of land properly, and to a given depth subsoiled, say before the middle of November. Should this hint be adopted, we feel persuaded that no argument will afterward be needed to induce those who have once tried it, to continue a practice which will at a comparatively small outlay, give fields of rich grain, where, save the Canadian thistle, everything else belonging to the vegetable kingdom has almost ceased to exist.

We shall return to this subject at an early day. Meanwhile we invite communications from practical farmers upon it.

With the first severe frost much of the little remaining beauty of the garden departs. The work to be done during the remainder of the season consists mainly in removing decayed stalks, digging the borders and giving them their annual allowance of manure, and affording such protection to tender shrubs and plants as they may need.

The autumn is far the best time for manuring and digging up the flower borders, particularly if the ground be of a heavy description. The loosening of the soil gives an opportunity for the frost to act more efficiently upon it, making it more mellow and easy to work. In the autumn also there is generally more time to attend to such matters, as the work in spring is much greater in amount, and more pressing in its nature than in the fall.

The manure for the borders should be ordinary stable manure, well rotted. Coarse, littersy manure is utterly unfit for the garden, however well it may answer for the coarser products of the field.

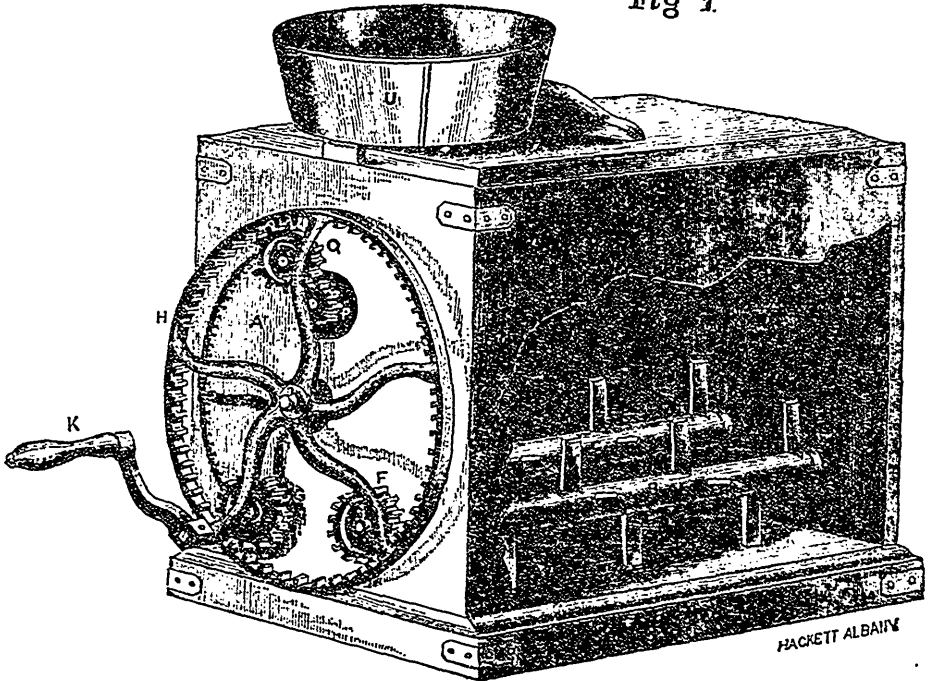
All herbaceous plants should be labelled and at this season these labels should be examined, and if the part in the earth is rotten, new ones should be substituted. This is a matter of considerable importance, for it is more pleasant to know and be able to give the names of all the plants in the garden, than to be obliged to confess ignorance of such as have no labels. The tops of the plants should be cut down, and when the weather becomes severe some coarse litter should be placed on such as are tender, and it will do no harm if all are covered. Such shrubs as are tender, if too large to have their branches bent down and covered with earth, should be bound with straw. Roses of

tender sorts must be protected either by covering with earth or litter.

Pinks and Sweet Williams should be divided in the fall, as they bloom much better than when this operation is delayed until the spring. On the whole we think this season preferable for setting out new shrubs, dividing herbaceous plants, &c., as the ground is generally in better condition to work than in the early spring, at which time it is necessary to plant them, as they commence their growth very early. Besides they will put forth some roots before winter sets in, and are thus prepared for an earlier start and better bloom than when the planting is deferred until spring.

The *Quebec Chronicle* says that a Mr. Murphy has tried the experiment of pulling out the potato stalks on the first indication of black spots on the leaves; and that, as a result, he has discovered, much to his satisfaction, that, wherever this was done, not a single potato was touched by the rot. For every single bushel lost by the rot this year, at least twenty were lost last year before this simple improvement was put in practice. By steeping potatoes in lime water they are kept from disease, even if already partially attacked.

Fig 1.



Seely's Churn, Albany, New York.

AGRICULTURAL IMPLEMENTS.

This Churn is constructed on purely scientific and mechanical principles. It is so constructed that it gives a greater amount of friction on the milk or cream with less time and labor than any other Churn ever yet invented.

It will make a superior quality of butter from sweet or sour milk, or cream, in from two to five minutes.

It is easily worked, simple, cheap and durable, and needs only to be seen to be appreciated. It is acknowledged by all prac-

tical and scientific men who have examined it, to be one of the most valuable inventions.

Description. — Fig 1, represents the Churn A, with one side broken away to show the double serew dasher B. & C. which are driven by the pinions F. and G. which mesh into the driving wheel H. with cogs on the inside, and to which is secured the crank handle, K. The shell discs L & M together with the double faced plate N, fig. 3, which revolves between them, is driven by the pinion P, which gears into the driving wheel H, by means of an intermediate wheel Q, which slides in and out on a stud

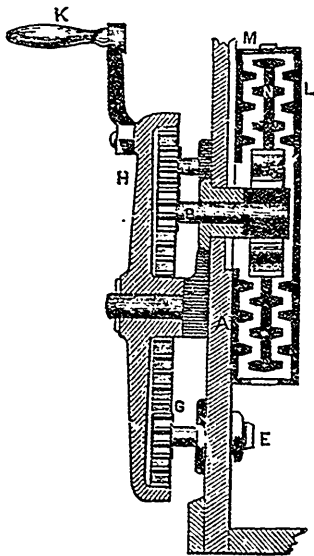
fastened to the side of the Churn, and is shown in section, fig. 2.

Operation.—The milk being put into the dish U, on the Churn, passes down through a groove in the end of the Churn, into the center of the discs, which is made in three pieces, L, M, N, fig. 2, two of which form a shell being corrugated, and having diamond shaped pins on the inside, between which the double-faced plate N, revolves, having arms or buckets, S, in the center, which force the milk or cream against the pins on it, and against the shell discs, L, and M, with such force as to break the sacks or globules in the milk or cream, and form it into small particles of butter as it passes through the discs into the churn, to

be gathered by the double screw dashers. When the milk is run through the discs, the double-faced plate N, is stopped revolving by sliding a pinion, and remains stationary. The discs can be worked separately, or together with the dashes.

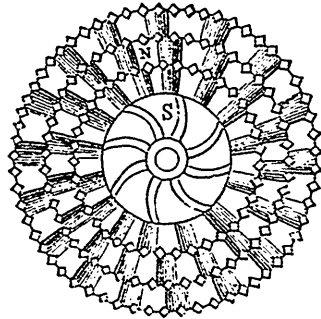
Testimonials.—I have very carefully examined Mr. David W. Seeley's invention in Churns, for which he made application for a patent August 8th, 1861, which patent we ordered to issue on the 14th of the same month, and which will bear date August 27th, 1861, and from an acquaintance with this class of inventions, acquired during an experience of fifteen years, as an officer in the Patent Office, the last six years of which was in the capacity of a chief exam-

Fig. 2



Section of discs.

Fig. 3



View of disc.

iner, and member of the Board of Appeals, I have no hesitation in saying, that in my opinion, it is the best that has ever fallen under my observation. The principle upon which the invention is based, is strictly correct, and in all its details, it is carried out in full accordance with that principle. In my judgment, Mr. Seeley's Churn cannot fail to give entire satisfaction to all who may be induced to give it a trial.

A. B. LITTLE.

To D. W. Seeley, for Scientific Churn, the Committee recommend a Large Silver Medal. This Churn was put to test, and made butter in one minute and fifty seconds,

from fresh milk. It operates on a new principle, and the Committee, after careful examination, think it worthy of special mention.

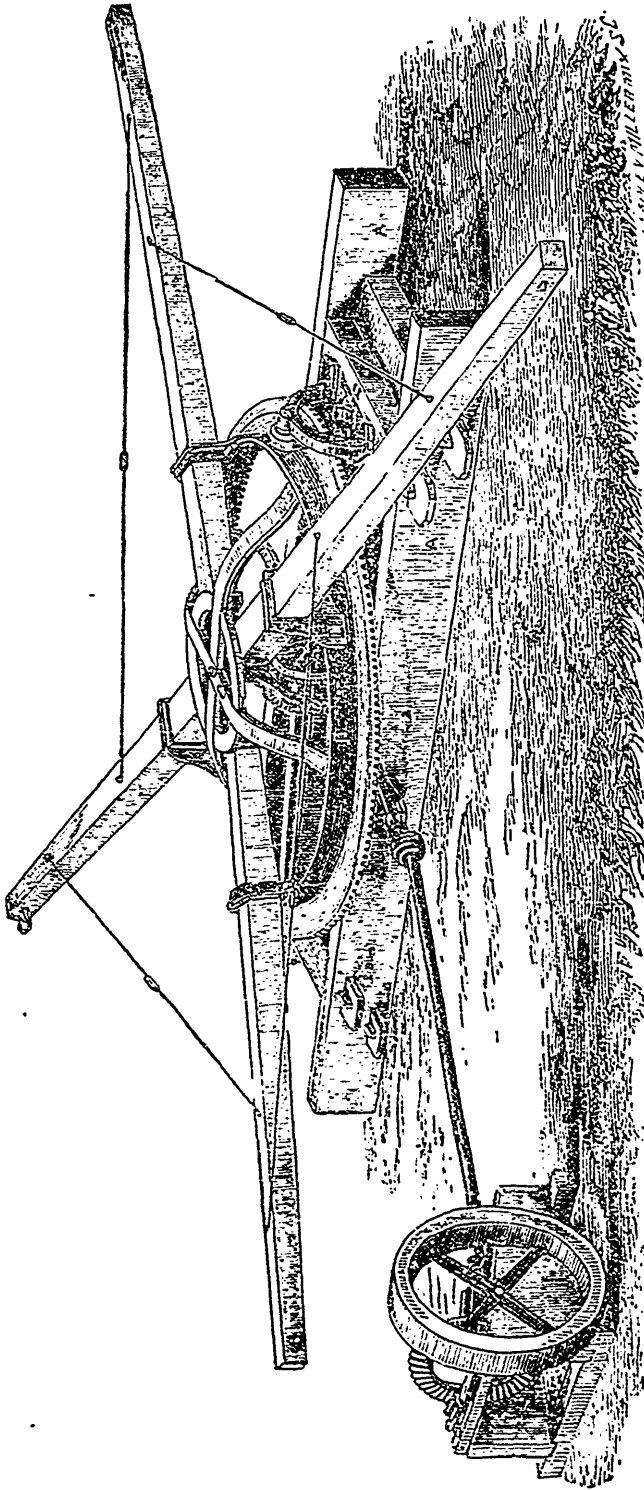
J. T. F. Wright, Hiram Walker, Henry Keeler, Committee.

I hereby certify the above is a copy of the Report of the Committee at the State Fair of New York, at Watertown, September, 1861, B. P. Johnson, Secretary.

Certificate of the Committee on implements at the Provincial Fair, London, C. W., Sept., 1861.

We, the Committee, on implements at the Provincial Fair held at London, C. W.,

September, 1861. Certify that we carefully examined D. W. Seelye's Patent Scientific Churn and saw it make a superior quality of butter from sweet milk in less than three minutes, leaving the milk as sweet it as before churning. This Churn involves a new principle, and we

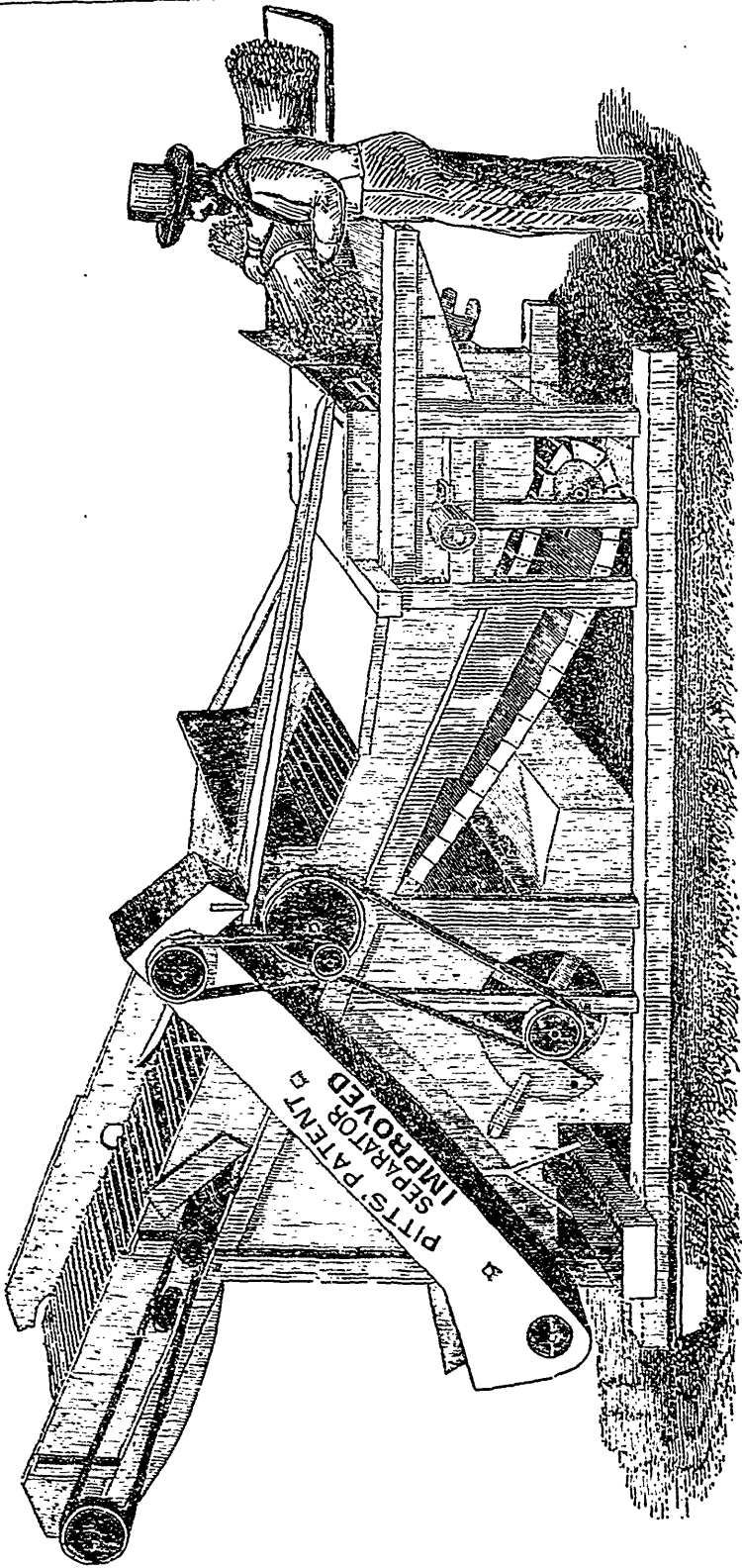


Messrs. Ganson, Waterous & Co's Horse Power, Bradford, C. W.

believe far superior to any Churn that we have ever seen, and take pleasure in recommending it to the public as one of the most valuable inventions of the age. We awarded it the highest premium, and recom-

mended the board of officers to award it an extra premium for superior merit.
ALEX. BUYER, Windsor, C. W.
HENRY WRIGHT, Malden, C. W.

o paid a visit a few days since to Messrs. Ganson, Waterous's. & Co's. Steam Engine Works, on Dalhousie Street, and were highly gratified to observe the unmistakable signs of industry, enterprise, and a thriving business in every department of their extensive works. As an evidence

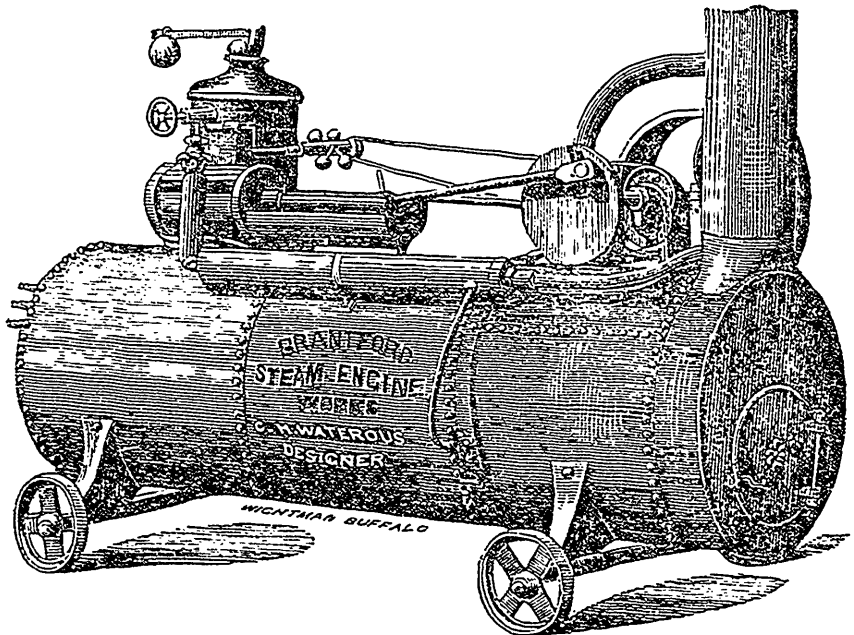


Messrs. Ganson, Waterous & Co's Threshing Machine, Bradford, C. W. part of it nearly finished, Engines, Threshing Machines, Reapers, Mowers, &c., to the amount of \$23,000. The number of workmen

at present employed by the firm is sixty, and the annual product of their labour ranges from \$70,000 to \$100,000, according as the number of the artisans employed varies. The principal articles manufactured at this establishment are portable and stationary Steam Engines, Reaping and Mowing Machines, Threshing Machines, Clover Mills, &c. Probably there is no other establishment in Canada which has, within the last eight or ten years, turned out so large a number of Mowers, Reapers and Threshing Machines, as that of Ganson, Waterous & Co. Their Machines are known throughout the Province for their superior workmanship, sim-

licity of construction, durability, and efficacy in the field. Indeed, in all these respects, they have attained among agriculturists a well known and unrivalled celebrity.

The Steam Engines,—specimens of which may be found in every part of Upper Canada,—manufactured by Messrs. Ganson, Waterous & Co., under the immediate superintendence of Mr. Waterous, one of the best practical Machinists in America, are universally admitted to be superior to any other in Canada, and quite equal to the very best turned out by the most noted makers in the United States. We do not pretend to a practical knowledge



Messrs. Ganson, Waterous & Co.'s Portable Engine, Brantford, C. W.

of the working of Steam Engines ourselves, but we have heard on more than one occasion, Machinists of great experience both in England and America, declare that in speed, power, economy in the consumption of fuel, perfection in workmanship, and adaptation for general purposes, the Steam Engines turned out by Messrs. Ganson, Waterous & Co., of the Brantford Steam Engine Works, will compare favourably with any they have ever seen either in England or America.

Our attention was called particularly to a small portable Engine, which Messrs. Ganson, Waterous & Co. are now manu-

facturing in considerable numbers for the Eaniskillen and other oil regions. This engine is small and portable, weighing only about one ton and a half. It is extremely simple in its construction, runs smoothly and beautifully, is of about six horse power, consumes but little fuel in proportion to the power produced, is just as well adapted to run a threshing machine, cut wood, or for general shaft purposes, as for pumping oil from the wells, the immediate purpose for which it has been constructed. As the boiler is heated by six or seven hundred iron pins passing from the furnace flue into the boiler above, and not by tubes as is

commonly done, all danger and trouble from leakage caused by expansion and contraction, is totally avoided, and a more rapid generation of steam effected from a given amount of fuel. This little engine is a perfect model of its kind, and so simple in its construction, and requires so little skill in its management, that a mere lad can run it as effectively and as safely as an experienced adult. We commend it particularly to those who require but a comparatively small power. The cost of an engine of this kind, of from six to eight horse power, is only about \$550 to \$600. The character of Messrs. Ganson, Waterous & Co., as men of honour, integrity, and as thoroughly reliable business men, stands so high in the community, that they need no commendation from us. As an evidence of this we may state, that during the many years they have been engaged in this town as Manufacturers, they have never had a law suit or a dispute relative to one single piece of Machinery they have turned out, notwithstanding that during the last twelve years they cannot have turned out less than \$1,000,000 worth of work. We look upon Messrs. Ganson, Waterous & Co., and all other Manufacturers in the town as its benefactors; for to its manufactories is Brantford chiefly indebted for its growth and prosperity. Let manufactories increase, and just in proportion to that increase will Brantford grow in wealth and population.

HOW TO KEEP A PIG.

As the sty is the first thing to be provided, let this be built of any rough materials, say six feet square, with a raised floor, sloping in a trifling degree towards the corner next the opening. The roof must be of tiles or slates; the whole, sides and front, weather tight. The opening should be about two feet wide, but no door. Outside this, rail a space off as large as you can afford (the more room a pig has, the better he thrives); to this outer place there must be a door to enter for the purpose of cleaning, as well as for the accommodation of the tenants. Let the outer space be paved or concreted in a solid, substantial manner. If twenty sties were required, this should be something like the plan of all: the only improvement that could be made would be in the size, which might be increased. However, we are providing for only one sow, or a couple of store pigs. The outer place should slope a little towards the door, for the facility of cleaning. A substantial vessel to hold wash, and occasionally water, should be one piece of furniture, and the trough for the food another; and, with a good litter of straw inside, the pig-house may be said to be furnished.

Of the various breeds and cross breeds of pigs,

it would be useless to say much; they have been crossed in every direction, till every feeder calls his pigs a breed of his own; and we are as wise after looking at fifty alleged sorts, as if we had only seen the last half dozen. In one little treatise on the pig, there are nearly thirty breeds and crosses mentioned; and if every cross were recognised, there would be as many to record as there are feeders. In selecting a pig look for a good square body and short legs and head, and there will not be much amiss; for unless the pedigrees are regularly handed down like those of horses, and gruntings are named like racers, none will know Tom Nokes' improved Essex from Jem Styles' improved Sussex; and so of the rest. A well formed pig cannot be a bad sort; judge for yourself, therefore, and select one that can be recommended by a vendor whom you know. If you are going to keep them for killing, buy two—the sty is large enough to accommodate them unless they fight. Once placed them in possession of their mansion, and a few good feeds will soon reconcile them to their situation. As pigs are not over dainty in their food, all you have to care for is that, however coarse, it is wholesome. Save for them the water that anything, even greens, are boiled in; but the food should not be given sloppy, whether it be meal of any kind, middlings, bran, or otherwise. Let what moisture you put to it be scalding hot, and do not make it thin; let it be of the consistency of very thick hasty-pudding, such as the spoon will almost stand upright in. Let the animal go to his wash or water-trough for his drink. Grains from home brewing are good for them; but the ordinary brewers' grains have little nourishment.

If pigs can have a run on a common, give them a good meal the first thing in the morning, and when they come at night; they will forage during the day, and thereby amuse, if they do not satisfy, themselves. They will never require to be fetched home, for the comfortable meal and a good bed will do all that. While they are thus treated they will grow, but not fatten much: when you resolve to do this, keep them in and give them the mid-day meal. We are advocates for changes of food, that is, changes from peas to barley meal or oatmeal, and *vice versa*; but, when fattening, all their food should be substantial; wheatmeal is excellent, that is, with all the bran, husk, &c., in it, just as it leaves the mill. Potatoes boiled are good; but not more than one meal a day should be given, when getting ready for the knife. In fact, some who are in straitened circumstances make the pig live on the waste of the garden, and the run of a common or roadside, and give them but one solid meal in the twenty-four hours, and that is on their return in the evening. Where there is a good farm-yard and plenty of dung, and all the vegetable waste is thrown, pigs will thrive greatly—what with the unthrashed corn left in the straw, and the numerous pickings among all kinds of collected waste, they want but little other feeding; water they require, or drink from the wash-tub, and little else.

The most profitable mode of keeping is to grow your own provender. The ordinary vegetable waste of the garden will do a good deal

towards it. The chat or small potatoes from your stock cannot be better applied. The peas haulm, after gathering the crop, is a great favorite: and a feed of good barley-meal, pollard, middlings, or other grain or meal, once a day, besides the garden supply, may do. As, however, the pig advances, there may be two feeds a day of the substantial food, and what he likes to take of the vegetables. One of these feeds may be of peas, when you come to the last four or five weeks of his life, and change the middlings to barley or oatmeal. The run of the garden vegetables, as a sort of mid-day meal (if he has not got a run in other fields), peas the first thing in the morning, and as much meal as he will take in the evening, will bring on a pig rapidly. The last fortnight very little vegetable is to be given; but we must increase the peas to as many as he will eat, and the same with the meal; yet it is a good plan to change the barley-meal and oatmeal, or any other food of a similar nature. Care should be taken upon two or three essential points; for instance, all the vegetable food will be better for boiling, and giving it warm, especially in the winter months. The middlings, meal, or pollard should be scalded, and not made thin. The wash should be given in another trough, and not mixed with his more substantial food. His sty should be regularly cleaned out; his bed well supplied with straw, and bemade warm and comfortable; he should have as much as he can eat at any meal, but no more, and whatever he leaves should be removed, and the trough cleaned. His meal times should be morning, noon, and evening; but he may always be supplied with vegetables, because he will eat no more than he likes, and they should be put into his wash-trough, after having been boiled or stewed. Potatoes stewed or boiled do a pig infinitely more good than raw ones, and are next in point of nutriment to the different kinds of meal.—*Glenny's Farming for the Million.*

ON FATTENING POULTRY.

The food usually selected for fattening poultry is oatmeal mixed either with milk or scalding water; the cause of the superiority of this meal over that of barley has already been stated. Cooped fowls should be supplied with fresh food three times daily—namely, at day-break, or as soon after as possible, at mid-day and again at roosting time; as much as they can eat should be given on each occasion, but no more than can be devoured before the next meal; should any be left, it should be removed and given to the other fowl, as, if kept, it is apt to become sour, when the birds will not eat it freely. The troughs for the soft meat should be scalded out daily, which can only be done conveniently by having a supply of spare ones.

In addition to soft food, a supply of fresh water must be constantly present, and a little gravel must be given daily, otherwise the grinding action of the gizzard, which is necessary to the due digestion of the food, does not go on satisfactorily, the supply of a little green food will be found very advantageous to health,

a little sliced cabbage, or some turnip tops, or green turf to peck occasionally, being all that is required.

A variation in the diet will be found very conducive to an increased appetite, and therefore the occasional substitution of a feed of boiled barley for the staked oatmeal is desirable. Some feeders have a division in their trough, or, still better, a small extra trough, which always contains some grains for the fowls to peck at.

Should the birds be required very fat, some mutton suet or trimmings of the loins may be chopped up and scalded with the meal, or they may be boiled in milk or water, preparatory to its being poured over the food, and the fat of fowls so fattened will be found exceedingly firm.

An objection to this mode of fattening will probably be made—namely, that it is expensive owing to the cost of the oatmeal. In the yard of the writer this objection has been removed by the partial substitution of fine middlings for oatmeal. The plan adopted is to bake the middlings dry, and when made as hot as possible without burning, cold water is added, so as to make the whole a crumbly mass. When it is borne in mind that the constituents of fine middlings are nearly the same as those of oatmeal, its value as a fattening food must be admitted; and the writer, from long experience, can speak very decidedly as to its utility when used in conjunction with oatmeal.

In the course of about a fortnight to three weeks at the utmost, a fowl will have attained under this system of feeding the highest degree of fatness of which it is capable, and it must then be killed; for if the attempt be made to keep it any longer in that state, it becomes diseased from an inflammatory action being established, which renders the flesh hard and even unwholesome.

When the fowls have arrived at a state fit for killing, they should be kept for twelve hours without food or water, in order that the intestines may be as empty as possible, otherwise the birds turn green and useless in a short time; this is readily managed by killing the birds before feeding time in the morning.

The writer has never found it requisite to have recourse to the unnatural practice of cramming; but as a description of the process may be supposed to be essential to an essay on fattening fowls, an account is inserted.

In cramming, the usual plan is to mix the oatmeal rather solid with milk or water, and to roll it into small sausage-shaped masses the size of the finger, and about two inches long; half a dozen of these are taken, and having been dipped in some liquid, as milk, are placed one after the other in the back part of the mouth of the fowl, when the beak is closed, and the mass gently assisted down the throat by the latter being gently stroked by the hand before a second is inserted.

The birds are crammed in this way two or three times a day, care being taken to ascertain, by gentle handling, that the last meal has passed through the crop, should this not be the case more is not given, but some lukewarm water is poured into the mouth to loosen the hardened mass, and prevent the bird being crop bound.

an evil which would render it useless for the table.

The fattened Dorkings prepared for the London market by the plans above described are frequently termed capons, but incorrectly, as the operation of castrating has not been performed on them; in fact, it is not required if the birds are cooped before they arrive at maturity; and the extremely severe nature of the operation in fowls, as compared with the corresponding one on quadrupeds, renders it attended with so much risk and loss that it is very seldom practised in this country.

In conclusion, a few words may be said respecting fattening the other varieties of domestic poultry.

TURKEYS.—If well fed, scarcely require any fattening process. Should, however it be deemed requisite, they may be confined within a moderate range, and liberally supplied with meal and milk, with occasional green food, as recommended for fowls. Barley meal is usually employed, but its inferiority to oatmeal has already been insisted upon.

GEESE.—Geese are also, if well kept, usually in sufficient good condition for killing. Should it be required to fatten them, several together should be confined in a comfortable shed, kept very clean by the daily removal of the solid litter, and they may be fed for a fortnight on oats thrown into a pan of water; and should they be required still fatter, an additional ten days' feeding on scalded meal of middlings and meal will be found all that is requisite; a little green food and gravel being given at the same time.

When geese are killed very young they are usually termed green geese, and for this purpose it will be found more desirable to restrict them from the water than to allow them free access to it, as they fatten more readily, and attain a larger size at their early age.

DUCKS.—Ducks, from being not at all particular in their diet, require to be confined to clean food some days before they are killed. If they are shut up in a shed, or in a small enclosure, and liberally fed with whole oats in water, and meal slaked, they will be found in a fortnight to have become sufficiently fat for all useful purposes. It is not essential that they should have water to swim in during fattening—in fact, such exercise rather lessens than tends to increase the accumulation of fat.

The early ducklings that realise such high prices in the London markets are of the Aylesbury variety, distinguished by their great size, white plumage, and large, pale flesh-coloured bills. If fed with an unlimited supply of oats placed in a vessel of water, and not allowed much room to swim, the old birds will lay freely in winter; when the eggs should be hatched under hens, and the ducklings liberally fed with slaked oatmeal and fine middlings, and afterwards with oats in water. Under this treatment they may be made ready for the table in less than two months, and yield a very remunerative return. Ducklings invariably grow much more rapidly if kept from swimming than if allowed free access to a pond or river.—W. B. Tegetmeir's Prize Essay in the *Yorkshire Agricultural Society's Journal*.

COUNTY OF CHATEAUGUAY AGRICULTURAL EXHIBITION.

On Thursday, the 17th October, we had the pleasure of forming one of a party from Montreal to the Chateauguay basin, about a mile from which the Annual Agricultural Show was this year held. A more delightful trip we have seldom had to chronicle; for though, as the poet writes, "the melancholy days have come," the weather was lovely, and the trees shone in the sun in all the gorgeousness and beauty of their autumnal tints. Never, perhaps, did we more realize the truth and force of expression of Longfellow's sonnet upon Autumn:

There is a beautiful spirit breathing now
Its mellow richness on the clustered trees,
And, from a beaker full of richest dyes,
Pouring new glory on the autumn woods,
And dipping in warm light the pillar'd clouds.
Morn, on the mountain like a summer bird,
Lifts up the purple wing; and in the vales,
The gentle wind—a sweet and passionate wooer
Kisses the blushing leaf, and stirs up life
Within the solemn woods of ash deep crimsoned,
And silver beech, and maple yellow-leaved,—
Where Autumn, like a faint old man sits down
By the way-side a-weary.

Between Montreal and Lachine, though you get but a passing glance of it from the cars, the tinting of the leaves is most rich and varied. Of a fine morning it is worth one's while to take a ride out to that village before breakfast, for if they are admirers of the beauties of nature they will enjoy that meal with redoubled zest after having witnessed the change of the leaf which marks the closing of the autumn days. But to our mutons. The current of the St. Lawrence was strongly against us, and though our boatmen wielded powerful oars, it was late in the afternoon before we reached the Basin, and the show was over. But we learned on all sides that it was the most successful that had yet been held, and though this is but the first year of the Society's existence as an independent County Society, the stock exhibited, and the specimens of home manufacture, exceeded in number what used to be shown when the County of Beauharnois and the County of Chateauguay Society were merged in one. The following is the list of Prizes.

THE DINNER

Took place at the Boarding House of Mr. N. Vallette, and about eighty of the most respectable farmers of the County sat down. George W. Baker, Esq., the President of the Society, was in the chair, supported on either side by the Hon. L. Renaud, M.L.C. for the Division, Mr. Starnes, M.P.P. for the County, Mr. Browning, of Beauharnois, and Mr. James Bryson, J.P. The Vice-Presidents were John Macdonald, Esq., of Chateauguay, and G. A. Beaudry, Esq., of Ste. Martine. The spread was an excellent one, and ample justice was done to the good things. When the cloth was drawn, the President gave the usual loyal toasts, prefacing them with remarks upon the fineness of the show, which had been successful in every respect. He said the Agriculturists of Chateauguay would not be ashamed to compete with those of the

County of Montreal, and as to manufactures and home work, they beat the latter hollow. (Cheers.)

The health of the Hon. Mr. Renaud was next proposed, and that gentlemen responded. He had been through the show, and gave it as his opinion that the stock, produce, manufactures, and lady's work exhibited were decidedly superior to that shown last year. The improvement was most marked.

Mr. Starnes, M.P.P., on his health being proposed and enthusiastically received, returned his sincere thanks. It was not the first time his health had been drank in that County, it was not the first time he had been called on to respond to that toast, and meet so many friends. When in the County of Chateauguy he felt he was among his own people. (Cheers.) He had come among them a stranger to be welcomed and twice returned as their representative in Parliament, and naturally he would ever feel that honor, and must take a deep interest in all that concerned their material welfare and prosperity. He was proud to see so large an assemblage. It showed what interest the farmers took in the agriculture of the County. It seemed to him as if the little family quarrel which had for a while so disturbed their equanimity had done good. There was a story told of the man and wife, and the saying of the latter that she never liked her husband so well as after he had given her a good walloping. (Laughter.) Of course, he was only repeating the story as he had heard it—he had no personal experience in the matter. (Roars of laughter.) But it did seem to him that these little dissensions in the Society had done good—they had stirred up the energies of the farmers, and raised a spirit of competition among them which could not but produce the most beneficial results. It had shown them too the necessity for unanimity, and why a good feeling among the members of their own Society ought to subsist. With the agriculture of the country the prosperity of Canada was largely identified; and it was the interest of all Canadians, in whatever rank of society they moved, or to whatever class they belonged, to promote agriculture and manufactures. (Hear.) This county had no reason to be ashamed of its exhibition, but ought rather to be proud. He had had opportunities of seeing what Chateauguy could do, and he verily believed that not even Montreal could bid her defiance. (Hear.) He had come rather late in the afternoon to see the best of the exhibition, and critically examine it; but better late than never. He was not vain enough to think that his presence would have done them any great amount of good; but the facts of his coming, showed at least that he felt some interest in their progress, and that his sympathies were all enlisted in favor of the Society. (Cheers.) He was sorry to hear that the crops this year were not so good as usual, but sometimes this would happen, even where the greatest care and attention had been devoted to nurture the produce. Societies like this, were of great use in this respect, and it was their principal object to do all they could to ameliorate the difficulties in Agriculture. (Cheers.) The farmers would always have in

him a good friend, as far as it lay in his power. Though politics were out of the question, and must not be talked there, he might allude without impropriety to the expected successor of the present Governor General. This nobleman, if he had not ranked high, or been much known as a politician, was said to be a first-rate agriculturist; and as he would understand the necessities of the farmers, they would be sure to find him a staunch friend. He (Mr. Starnes) had read Lord Monck's admirable speech before the Royal Agricultural Society of Dublin at its recent meeting, and it looked to him like as embodying the knowledge and the experience of the practical farmer. (Cheers.) Mr. Starnes concluded, amidst much applause, by inviting all present to what was out of courtesy called the Starnes Ploughing Match, which takes place at Ste. Martine on Saturday week next.

The President and Directors of the Society were next toasted, and Mr. Beaudry responded on their behalf.

"The Judges," was acknowledged by Dr. Labege, of Ste. Philomene.

The health of Mr. Browning, Secretary-Treasurer of the Sister Society of Beauharnois, was duly honored, and that gentleman made some very good practical observations in reply, upon the duty of the farmers working together, and doing away with the absurd distinctions between French Canadian and British competitors, which at present existed.

"John Macdonald, Esquire, of Chateauguy" was the next toast, to which Mr. M. responded at length.

And "Mr. McEachern," "The Press," and "The Ladies," having been also honorably distinguished, the proceedings broke up, every one highly pleased and delighted.

THE CORN CROP.

We were under the impression that the past season was not favorable for the Corn crop in this District, owing to an excess of wet weather, and a temperature rather below the usual average. But it appears that if we were correct as a general rule, there have been some exceptions, and, as might well be supposed, these are not what farmers sometimes call lucky chances, but the result of skilful cultivation. We have just seen a few heads that were grown by Colonel Leclair, of St. Hyacinthe, and we must say that we have seldom seen a more perfect sample even in the most favorable seasons. The grains or berries were of a very unusual size. There were twelve rows on the head, and there was not a small or imperfect grain on the whole; while those on the very top were as perfect as those at the base. One head we measured was eight inches long, and seven in circumference at the base. The number of grains upon the head was three hundred and seventy-two; another contained three hun-

dred and ninety-two; and another four hundred and sixty-eight. It was not, however, the size of the heads, nor the number of kernels that struck us so much, as their uniform large size. We trust the worthy Colonel had a large space covered with corn of the same quality, and that his neighbours may benefit by his skilful, and, as we are informed, successful example.

THE WEATHER.

Compiled from the Records of the Observatory, Isle Jesus, August, 1861.

The weather during the month was peculiarly fitted for harvesting the crops—the meadows were not cut generally until the first and second week in August, which is much later than is usual in Lower Canada. As a general custom the whole of the hay crop is housed before the 1st of August, but the heavy rains of July, and low temperature, had retarded the process of ripening, and this remark applies generally to the grain crops in this vicinity.

No fall of rain of any amount fell during the first three weeks of the month. On the 22nd day it rained during 11 hours and 45 minutes, and 0.670 of an inch fell. In a few localities thunder and hail were frequent. On the 10th day a very heavy hailstorm passed over the Island of Montreal, doing considerable damage to the standing crops; its course was from the west.

The heavy rains of July, and the warm sun, contributed to the development of the potato rot; it was perceived in this neighbourhood the first week in August, but the dry weather that followed seemed, in some measure, to have arrested its progress, and it remains only as a partial failure in the crop. The month was remarkable for an unusual quantity of solar haloes—these appearances being produced by the formation of cirrous clouds, or those fleecy light clouds which are at a great altitude, occupying the regions of space, that is at a very low temperature. The mean temperature of the month was lower than the mean of last August (1860), and the barometer was somewhere higher than is usual for August; the amount of rain was 7.411 inches less than the amount of rain which fell last August. No frost was observed during the month, and the amount of solar heat was 2 degrees less than the intensity of solar heat of August, 1860.

Below is the record of the various instruments:—

Barometer..	{	Highest the 20th day..	30.190
		Lowest the 10th day..	29.420
		Monthly mean	29.851
		Monthly range.....	0.770
Thermometer	{	Highest the 1st day ..	90°0
		Lowest the 20th day..	46°7
		Monthly mean	66°84
		Monthly range.....	43°8

Greatest intensity of the sun's rays, 108°4.
 Lowest point of terrestrial radiation, 41°7.
 Amount of evaporation, 3.01 inches.
 Mean of humidity, .736 inches.

Rain fell in 11 days amounting to 1.950 inches; it was raining 12 hours and 31 minutes, and was accompanied by thunder 5 days.

- Most prevalent wind, S.S.W.
- Least prevalent wind, N.
- Most windy day, the 14th day.
- Mean miles per hour, 9.35.
- Least windy day, the 9th day.
- Aurora borealis visible on 4 nights.
- Solar haloes were seen on 3 days.

The first 20 days of September were very favourable for harvesting the grain crops, although rain fell on the 2nd, 6th, 10th, and 14th days, but in small quantities, and which caused but little hindrance to out-door work. The first frost of the autumn occurred on the morning of the 5th day, but it was so very slight in this neighbourhood as scarcely to affect the tender vines of the pumpkins or cucumbers; frost also occurred on the 16th and 30th days, but it was also so slight as scarcely to affect vegetation.

Heavy rain fell on the 21st and 27th days, and for the most part these heavy rains were followed by high winds, the *Equinoctial Gales*. The potato disease which had been in some measure arrested by the fine dry weather of August, was noticed to have increased during the heavy rains of the latter part of the month, and we are sorry to have to report that from all quarters the crop has suffered very much. A good many patches have not yet been dug up, but we fear that the disease has done more damage than for a few past years, and that the crop for the most part is a decided failure. Upon the whole the grain crop is somewhat light, although the amount of straw and hay far exceeds the yield of 1860.

In September, 1860, there fell upwards of 11½ inches of rain, which exceeded by 6 inches the amount which fell during the present month of September. Below is the record of the various instruments.

Barometer ...	{	Highest, the 30th day, 30.209 in.
		Lowest, the 28th day, 29.276 "
		Monthly Mean, 29.849 "
		Monthly Range, 1.023 "
Thermometer	{	Highest, the 18th day, 79°0.
		Lowest the 25th day, 35°0.
		Monthly Mean, 58°06.
		Monthly range, 44°6.

Greatest intensity of the Sun's rays, 97°8.
 Lowest point of terrestrial radiation, 32°0.

Mean of humidity, .804.
 Amount of evaporation, 1.83 inches.

Rain fell on 9 days, amounting to 4.816 inches. It was raining 63 hours, 50 minutes, and thunder was heard on 1 day.

- Most prevalent wind, S. S. E.
- Least prevalent wind, E.
- Most windy day, the 21st day; mean miles per hour, 21.60.
- Least windy day, the 17th day; mean miles per hour, 0.2.
- Aurora Borealis visible on 5 nights. On 2 nights the Magnetic disturbance was considerable during its apparition.

The Electrical state of the atmosphere has indicated feeble intensity.

Solar Haloes seen on 2 days.

MANUFACTURING REVIEW.

NOVEMBER.

THE GREAT EXHIBITION OF 1862.

[Translated from *Le Journal de Quebec.*]

The International Exhibition which is to take place at London in May, 1862, is one more opportunity for our young country to make known its resources, its products and its industry. His Excellency the Governor General has been pleased to acquiesce in the desire of the Boards of Agriculture and of Arts and Manufactures for the two sections of the Province, which asked for a Commission to represent the industry and resources of the Province at the great exhibition. The Governor has named this Commission. A sum has been set apart to cover the expenses of the Commission, and it will be ready to receive objects for exhibition in February next, at the different places of which notice will be given later. It is as a result of the Exhibitions of London in 1851, and of Paris in 1855, that the knowledge of our vast resources has been spread through all Europe. We do not hesitate to say that it is to these exhibitions that we owe the establishment of European Consulates in Canada. To what is due the credit which the Province now enjoys in Europe, the extension of our commerce, the ease with which she is enabled to borrow the immense sums invested in our Railway enterprises and the confidence of English capitalists, if not to these two International Exhibitions in which Canada was so well represented? Since the last exhibition, numerous and rich discoveries of minerals have been made; gold, copper, and coal oil, deserve an honourable place in this world's exhibition. It seems to us that it would be a wise policy to make known these new resources to the capitalists and industrial classes of Europe. We believe it our duty, therefore, to invite and encourage the farmers, mechanics, and generally all who can do so, to set to work for this object.

Half the space of the Great Exhibition is assigned to England and the Colonies. The applications from England were six times the allotted extent, and proportionate reduction has had to be made. About 800 men are now employed upon the erection. The building will require 18,000,000 tons of mortar, 500 tons of glass, 600 tons of paint, and 10,000 tons of iron. There will also be no fewer than 600 of planking from 7 to 9 inches wide, 108 miles of window sashing, and 600,000 square feet of felt.

We received a circular a few days since from Mr. A. Ramsay, of 21 Re collet St., describing a new and extraordinary invention, by which

a diamond is made to dress the face of millstones in one-fourth the time which is required with the pick. Incredulous as to the possibility of using a diamond for the above purpose as a permanent economical application, I was induced to call on Mr. Ramsay, who very kindly showed me a diamond set in a tool called a protector, which is worked between a double rule parallel guide. The construction of the tool and its simplicity of action, with few explanations, was soon made comprehensible to my mind, and readily convinced me that the invention was no "myth," but a practical improvement on the old mode of dressing millstones. By this improvement the most inexperienced miller can dress the face of a pair of burrs in one hour, after brief instruction, without fear of injuring the diamond. This dress will grind much faster, finer, and last much longer, than the dress produced by the pick, and yield four pounds of flour more to the bushel, consequently producing less middlings. In order to show the precise nature and value of this invention, it is necessary to compare it with the ordinary mode of dressing millstones. In the usual mode the pick being brought down upon the surface of the stone, produces a stellated fracture, thereby weakening or disintegrating the stone as far as the fracture extends. Thus the edges of the crack, weakened by the blow from the pick, soon crumble away, wearing the face of the stone, as the particles thus detached are thrown out. The line cut by the diamond upon a glossy surface, which has never been detonated or disintegrated by a blow from a pick, is clear and distinct, having its edges sharp, thereby insuring a sharp corner, or cutting edge, perfectly straight and equal. Stones dressed after this mode will, and have, run three times as long, and performed more than three times the amount of work, and will be more perfect as you get entirely below the bruises occasioned by the pick. There is no crushing contact of the stones with the wheat (the sharp edges of the cracks actually cutting or shaving up the grain) although brought very closely together—the stones running clear of each other, producing a clear whistling sound, differing from that obtained by any other mode of dress. "The flour comes from the stones with all its nutrition. There is no perceptible moisture generated in the operation of grinding, and much less power is required to produce a superior article of flour." Millers would do well to call on Mr. Ramsay, who is sole agent in Canada for Mr. J. Dickinson, the patentee of this improvement, which is designated a Mill-Stone Dressing Diamond, Protector and Guide.

COLONISATION REVIEW.

NOVEMBER.

We have received a copy of Mr. T. Boutilier's Report on the progress of the work of colonization in Lower Canada during the past year. From this we learn, that in 1860, 174½ additional miles of Colonization Road were opened, besides the completion of 143½ miles, previously commenced—making altogether, 1458 miles or 456 leagues in operation. During the same year 6640 feet of bridging, and 10¼ of causeway have been constructed. The sum paid for colonization works executed in 1860, was \$54,246.58; and the average cost of the roads has been \$304 per mile. Adverting to the neglect of the municipal authorities to maintain the roads, the Inspector observes, that possibly the last Municipal Act, which, as regards the greater part of the Eastern Townships, establishes a general assessment, will have the much to be desired effect of remedying this evil. The time, he says, has now arrived when a man is no longer justified in remaining blind to the urgent necessity which exists for having an efficient system of road laws, and keeping pace with the government and progress of colonization. We take the following extract from the report, to shew the advancement that has been made in settlement both north and south of the Saint Lawrence:—

COUNTY OF CHICOUTIMI.

More than one hundred families are now settled in the valley of Lake St. Jean, although the Kinogami Road, leading to this point so remote from the old settlements, is not yet completed. Already a parish has been erected beyond Metabetchouan, which is the terminus of the projected Kinogami Road. The lands on each side of the Road de l'Anse St. Jean, which was begun in 1859, are settled to within eight miles of the Saguenay, although the road, for a distance of five miles, is only opened as a winter road.

COUNTY OF SAGUENAY.

A large extent of excellent land has been discovered between the River Baude and the River St. Marguerite. Between these two points the line of the proposed road has only been traced, and already more than two hundred settlers have been there to take up land.

COUNTIES OF CHARLEVOIX AND CHICOUTIMI.

The lands recently surveyed on the lower Saguenay are now taken up, and a great number of settlers are taking up lands in rear.

COUNTY OF CHARLEVOIX.

On the Sterrington and de Salle Road, all the surveyed lands have been occupied since the opening of the road, between 1858 and 1860.

COUNTY OF QUEBEC.

In Stoneham the population has doubled since the opening of the road from Stoneham to Tewksbury in 1855 '59-'60.

COUNTY OF ST. MAURICE.

A number of Canadian families from the old Parishes, and a few Irish families from Montreal, settled last autumn in the Township of Chertsey, to which a colonization Road has been opened, traversing parts of Rawdson and Chertsey.

COUNTY OF GASPE.

On the Fox River Road, the land is taken up as fast as the road is opened.

COUNTY OF BONAVENTURE.

Colonization is making regular progress in the County of Bonaventure. Last autumn a large number of Acadian families, from Prince Edward's Island, settled in the Township of Metapedia, and others are to follow them next spring.

Last year settlers took up land two or three miles in advance of the Colonization Roads, which have been begun on the River Nouvelle, Escoumains and River du Loup.

COUNTY OF RIMOUSKI.

In the Township of Macnider, a large number of settlers have taken up lots on the 7th, 8th and 9th ranges, although the Sandy Bay Road has only been opened as far as the 4th range since last Spring.

COUNTY OF TEMISCOUATA.

In the Township of Begon colonization has progressed to such an extent that the population has increased three fold since 1857, when the road was commenced.

In the Township of Viger there has been considerable increase in the value of property. A settler who purchased a lot of land, one year and a half ago, for \$80, now refuses to take \$400 for the same lot.

COUNTY OF KAMOURASKA.

Forty lots have been bought up during the past year, in the Township of Painchaud, near the line which the Taché Road (yet unopened there,) is to take.

COUNTY OF L'ISLET.

All the lands bordering that portion of the Taché Road which lies East of the Elgin Road, have been taken up by settlers, and yet the opening of that section of the Taché Road was not commenced till 1860.

COUNTY OF BELLECHASSE.

On the Fortier Road, situated between the Taché Road and the Province Line, and crossing part of Mailloux, Proulx, Bellechasse and Daaquam, a distance of 24 miles, and opened only in the autumn of 1860, as a winter road, hundreds of lots have been purchased by settlers.

COUNTY OF ARTHABASKA.

Seventy-five new families have settled in East Chester within the last three years.

COUNTIES OF ARTHABASKA AND WOLFE.

On the Pacand Road, crossing Ham and part of Chester, which is about 18 miles in length, and has been three years open, all the lots on each side of the road are now occupied. *Two Parishes have been formed, and two Churches built.*

Almost all the lands bordering on the "Road from Ham to Tingwick," have been taken up and in part occupied, notwithstanding that it has only been open since last year, and is hardly passable for wheeled vehicles.

* Social Science: a Lecture on Land and Money, or Emigration and Colonisation the true Remedies for Social Evils. By John Crawford, author of "Philosophy of Wealth." Paisley: Robert Stewart.

Mr. Crawford has handled this subject in a masterly manner. The pamphlet before us proves the author to have thoroughly digested the main elements of our present political and social economy, and whilst we cannot agree with him in the whole of his conclusions, we nevertheless cordially recommend all interested in these questions to peruse this exceedingly interesting lecture. Although delivered in September of 1860, the lecture has only now been printed, and the learned writer takes the opportunity of closing his remarks with the following:

"The American union rent in twain and its citizens shedding each other's blood in civil warfare. No one can safely predict what social and political changes will result from this fratricidal strife. One thing, however, may be

affirmed; it will promote the prosperity of Canada and our other British North American possessions. It will tend to their colonisation. The junction of the St. Lawrence and the Fraser River—Canada and British Columbia—of the Atlantic and Pacific Oceans, by a great railway stretching across the continent by the head of the American lakes and through the gorges of the Rocky Mountains, is one of those great achievements we may look to see begun and in due time completed; opening up a great highway to Japan, China, and our East India Empire. Victoria in Vancouver Island and New Westminster in British Columbia would then become great seats of commerce. There are ominous signs of the future prosperity and greatness of Canada."

THE FRENCH ACADIANS.

There is one page in the history of British conquest of her present American Colonies, which most Britons have at one time or another blushed to read—which they have desired to see blotted out. We allude to the deportation of the poor Acadians. It was a very harsh act in its design—most cruel in the manner of its execution. Some of the remnants of those poor sundered families have still lingered on the shores of the Gulf of St. Lawrence. Some are resident now in Prince Edward's Island. These have desired to remove to the shores of the *Baie de Chaleurs* and the new settlements along the colonization roads on the south side of the Gulf of St. Lawrence, in order to rejoin again people of their own race and language. The Government has not been indisposed to sanction and encourage this movement, though they have not thought it right to devote any considerable sum to the purpose.

Private subscriptions are being taken up in Quebec to aid this immigration, and we believe a similar subscription will be started here. And thus the wrong done to their forefathers by the harshness of British rulers or generals, and the neglect of the French Government of that day, will be in some measure repaired by the Canadians of the present day. It is of very great moment that the strip of land lying between the lower St. Lawrence and the New Brunswick border, should be settled by a hardy and industrious people. And any movement to that end deserves encouragement, apart from any quasi-sentimental feeling about offering repatriation to the Acadians.

COMMERCIAL REVIEW.

NOVEMBER.

THE HARVEST AT HOME AND ABROAD.

Most painful intelligence comes from France as to the deficiency of the last harvest. It is estimated that forty millions sterling will have to be spent this year to make up the deficiency—an enormous sum, greater even than the failure of last year's harvest entailed upon England. The price of flour is rising through-

out France. Large quantities have already been shipped from Liverpool; and sixty millions of francs in gold have been sent to Russia to purchase grain. This sad accident will react upon the English market, and will affect, more or less seriously, all the grain markets of the world. The old proverb says—"Its an ill wind that blows nobody good." The impor-

ters of grain in this quarter of the world will now find a market for their surplus stock, and just in the nick of time.

"The wheat harvest in England is for the most part finished, and a finer has never been known. The grain is generally of the best quality and of unusual weight; from 66 to 69 lbs. per bushel being often spoken of as the weight of new wheat. This will in a degree compensate for a thin crop which unquestionably has been the most prevalent, although in some districts, as in Berkshire, around Windsor, we are told by competent judges that the wheat crop there, taken as a whole, will be an average one. We notice that the South Lincolnshire correspondent of the *Mark Lane Express* speaks of the wheat crop of that great wheat-growing district as "very varied," and as likely "to be defective in quality and yield." Some of the crops are stated to be affected with mildew, and the ears, though long, are said to be thinly set. We believe, however, that a more cheerful account is more generally applicable to the bulk of the wheat crop. That the land is foul, is not to be denied, but that will be remedied if we have a dry autumn. Barley is of first quality, but the quantity turns out to be less than was at one time expected. The crop which everywhere seems to have succeeded best is the oat crop, and with an abundant produce, the weight per bushel will universally prove much beyond an average. The grain markets continue steady, and as the breadth of wheat is certainly less than usual, no great reduction is looked for by the trade. It is in the farmers' favour that the intrinsic—flour-making—value of their wheat is high. Meadows and pastures are beginning to tell of dry weather, and in some places water is getting short. As yet, however, stock of all kinds have thriven, though the last ten days must have been trying to feeding beasts. The feeding pastures are very uneven. At one time the grass grew so rapidly that the stock could not consume it, consequently the animals selected the best portions, leaving a good deal of rough grass, which they will now never touch. This is always an untoward state of things for the grazier. The potato disease has not made much progress of late, and in many cases where a great loss was expected, the percentage of diseased tubers, when dug, turns out to be small. This crop, however, is very various. On the whole, the farmer will scarcely recover his losses of last year, but his produce of this year will be very good and saleable, while the dry and hot weather will go far to restore the land to a more healthy condition, and afford opportunities for clearing it. His prospect is at least hopeful as regards next year."

Respecting the wheat crop in the west, the *Chicago Tribune* of a late date furnishes the following information:—

During harvest time the report from nearly all sections of the great North-west with regard to the crop of spring wheat were more encouraging than we had reason to expect, taken into account the backward and unset-

tled weather during April and May. During the months of June and July it was said we would have scarcely half a crop; but as harvest drew near the prospects improved, and with the old wheat left over, it was generally estimated that there would be nearly, if not quite, an average.

Within the past ten or twelve days, however, it has been found that the crop does not thresh out anything like the amount expected. In the Northern part of the state especially is the yield deficient. Along the line of the Galena and Chicago Railroad and its branchet it will not yield on an average quite ten bushels to the acre; while last year the yield was fully thirty bushels. On the line of the Rock Island and Burlington roads the reports are not quite so gloomy; but the highest yield we have reported to us is twelve bushels to the acre on an average, while in some places it is as low as ten bushels.

From Minnesota and Northern Iowa the same gloomy reports come to hand. The Club wheat in the former state is almost a failure; but the "Fife wheat" is a fair crop.

In the Southern Wisconsin the reports are in substance similar to those of the Northern part of this state. In some places the quality is much poorer than last year.

These reports of a falling off in the yield of wheat are substantiated to some extent by a comparison of the receipts of wheat during the past month, this year and last. We give them below week by week:—

	1861. Bushels.	1860. Bushels.
Week ending Aug. 10.	10,797,551	536,146
Do.	17,551,020	938,208
Do.	24,762,142	822,705
Do.	31,637,613	896,446
	1,748,326	3,592,505

From the above table it will be seen that there is a falling off in the receipts of wheat during the past month, as compared with 1860, of nearly half a million bushels. But even these figures do not give an accurate view of the matter; for in the month of August, 1860, there was no old wheat in the country, and receipts were entirely of the new crop. This year, however, truly one half of the receipts in August were of the old crop. But, even with the surplus of the old and the new crop together, there is a serious deficiency—while in the natural order of things there ought to be an increase.

With regard to Winter wheat, the reports are highly favourable. In the central countries of the state, the yields is on an average fully twenty bushels to the acre; but the breadth sown was less than usual. In the southern counties the crop is also good, with the exception of some places where the army worm had lessened the yield.

CANADIAN WOOL.—The *Quebec Chronicle* says the crop of wool for this year has been principally purchased for exportation to Great Britain; heretofore it has been exported to the United States, to be there manufactured.

PRICES CURRENT.

GRAIN PER BUSHEL.

FOREIGN.	Wheat	Barley	Oats.	Corn	Rye.	Peas
	60lbs	48lbs	31lbs	56lbs	56lbs	60lbs
New-York	1.11	0.61	0.34	0.59	0.60	0.00
Chicago	0.75	0.00	0.16	0.23	0.26	0.00
Toronto	0.90	0.65	0.30	0.40	0.00	0.42
London	1.65	0.96	0.90	1.00	0.00	1.00
Paris	1.50	0.70	0.69	1.00	0.68	1.40

LOWER CANADA

Montreal	1.00	0.48	0.27	0.46	0.60	0.61
Quebec	0.00	0.00	0.30	0.00	0.00	0.86
Three Rivers	1.10	0.45	0.26	0.50	0.75	0.75
Sorel	1.10	0.50	0.26	0.75	0.00	0.70
Ottawa	1.05	0.60	0.29	0.45	0.55	0.45
St. Hyacinthe	1.20	0.40	0.27	0.76	0.00	0.77
Sherbrooke	0.00	0.00	0.00	0.00	0.00	0.00
St. Jean	1.10	0.46	0.25	0.70	0.00	0.62

FLOUR.—Montreal Market.

Double extra	5.75	Superfine No. 2	4.12
Extra	5.05	Fine	3.30
Fancy	4.72	In bags, 112 lbs.	2.40
Superfine No. 1	4.55		

BRAN.—Different Markets.

	qtls.	Three Rivers	qtls.
Montreal	0.70		0.00
Quebec	0.80	Sorel	0.00
Ottawa	0.00	Sherbrooke	0.00
St. Hyacinthe	0.00	Iberville	0.00

BUCKWHEAT.—Different Markets.

	qtls.	Sorel	qtls.
Montreal	0.55		0.55
Quebec	0.00	St. Hyacinthe	0.55
Three Rivers	0.45	Sherbrooke	0.00
Ottawa	0.00	St. Jean	0.50

CANADIAN BEANS.—Different Markets.

Montreal	1.50	Sorel	1.10
Quebec	0.00	Ottawa	1.10
Three Rivers	0.00		

POTATOES.—Different Markets.

Montreal	1/2 m'ot	0.70	Sorel	1/2 m'ot	0.61
Quebec	"	0.34	St. Hyacinthe	"	0.40
Trois-Rivieres	"	0.61	Sherbrooke	"	0.60
Ottawa	"	0.60	St. Jean	"	0.40

GREEN CROPS SEEDS.—Different Markets.

Red Clover	per lb.	0.08
Vermont Clover	"	0.15
Dutch or White Clover	"	0.25
Timothy	per bushel.	1.75
White Vetches	"	1.00
Black Vetches	"	1.00
Mangold's seed	"	0.45
Carrot's seed	"	0.45
Turnip seed	"	0.45

HAY AND STRAW.—Different Markets.

100 lbs. hay, straw.		100 lbs. hay, straw.			
Montreal	6.00	5.50	St. Hyacinthe	4.00	2.00
Quebec	7.00	6.00	Sorel	0.00	0.00
Three Rivers	5.00	3.00	Ottawa	6.00	4.00

MANURES.—Montreal Market.

Peruvian Guano	100 lbs.	3.80
American Guano	"	2.50
Animal black	"	1.50
Plaster	brl.	1.00

OIL-CAKES.—Montreal Market.

Linsed cake	cwt.	1.50
Linsed cake pulverised	"	2.00

MAPLE SUGAR.—Different Markets.

Quebec	lb.	0.07	Montreal	lb.	0.09
Three Rivers	"	0.07	Sorel	"	0.09

ANIMAL PRODUCTIONS.

MEATS.—Different Markets.

	Beef.		Veal.	Mutton.	Pork.
	lb.	qr.	qr.	lb.	lb.
Montreal	0.09	1.00	0.75	0.10	
Quebec	0.09	0.00	0.00	0.09	
Three Rivers	0.06	0.00	0.55	0.11	
Sorel	0.09	0.45	0.45	0.10	
Ottawa	0.10	0.00	0.00	0.10	
St. Hyacinthe	0.06	0.43	0.00	0.11	
Sherbrooke	0.00	0.00	0.00	0.00	
St. Jean	0.00	0.00	0.00	0.10	

CATTLE.—Different Markets.

	Montreal.	Quebec.	Three Rivers.	Sorel.
	Oxen per 100 lbs.	6.00	0.00	5.50
Milch cows	21.00	0.00	18.00	18.00
Calves per head	5.00	0.00	0.00	0.00
Sheep	4.50	0.00	0.00	0.00
Lambs	2.75	0.00	0.00	0.00
Hogs per 100 lbs.	5.00	0.00	7.00	8.00

BUTTER.—Montreal and Quebec Markets.

Fresh butter per lb.	0.20	0.18
Salt butter	0.11 1/2	0.15

CHEESE.—Montreal and Quebec Markets.

Raffin, per lb.	0.15	0.00
American	0.07	0.00

HIDES.—Different Markets.

Montreal	100 lbs.	5.50	Quebec	100 lbs.	6.00
Three Riv's	"	0.00	Sorel	"	0.00

HORSES.—Montreal Market.

Saddle and hack horses	\$120.00
Farm horses	80.00
Old horses	25.00
Horses sold at auction	30.00

WOOLS.—Different Markets.

Montreal	lb.	0.25	Quebec	lb.	0.00
Three Rivers	"	0.00	Sorel	"	0.00

EGGS.—Different Markets.

Montreal	0.14	Ottawa	0.00
Quebec	0.12	Sherbrooke	0.00
Sorel	0.11	St. Hyacinthe	0.09
Three Rivers	0.10	St. Jean	0.09

FISH.—Montreal Market.

The string of 4 lbs.		The pair.	
Carp	0.12	Eels	0.25
Perch	0.20	White fish	0.25
Bass	0.20	Pike	0.25
Dores	0.35	Sturgeon	0.22

POULTRY.—Montreal and Quebec Markets.

The pair.		The pair.	
Ducks	0.45	Pigeons	0.17
Geese	0.85	Fowls	0.40
Turkeys	0.90	Chickens	0.25

GAME.—Montreal and Quebec Markets.

The pair.		The dozen.	
Ducks	0.30	Wild pigeons	0.75
Plover	0.29	Fowls	0.12
Partridges	0.55	Hares	0.12

FRUIT.—Montreal Market.

The barrel.		The barrel.	
Apples famenes	3.00	Pears common	2.00
Apples grises	6.00	Pears per bushel	4.00
Apples American	3.00	Grapes per lb	0.80
Pears bons cretiens	12.00	Melons the piece	0.25