Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below.

L'Institut a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

- ☐ Coloured covers / Couverture de couleur
- ☐ Covers damaged / Couverture endommagée
- ☐ Covers restored and/or laminated / Couverture restaurée et/ou pelliculée
- ☐ Cover title missing / Le titre de couverture manque
- ☐ Coloured maps / Cartes géographiques en couleur
- ☐ Coloured ink (i.e. other than blue or black) / Encre de couleur (i.e. autre que bleue ou noire)
- ☐ Coloured plates and/or illustrations / Planches et/ou illustrations en couleur
- ☑ Bound with other material / Relié avec d'autres documents
- ☐ Only edition available / Seule édition disponible
- ☑ Tight binding may cause shadows or distortion along interior margin / La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure.

- ☐ Coloured pages / Pages de couleur
- ☐ Pages damaged / Pages endommagées
- ☐ Pages restored and/or laminated / Pages restaurées et/ou pelliculées
- ☑ Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées
- ☐ Pages detached / Pages détachées
- ☑ Showthrough / Transparence
- ☑ Quality of print varies / Qualité inégale de l'impression
- ☐ Includes supplementary materials / Comprend du matériel supplémentaire
- ☐ Blank leaves added during restorations may appear within the text. Whenever possible, these have been omitted from scanning / Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été numérisées.

☑ Additional comments / Commentaires supplémentaires: Continuous pagination.

CANADIAN

MERCHANTS' MAGAZINE

AND

COMMERCIAL REVIEW.

VOL. IV. APRIL, 1859. No 4.

THE FINANCIAL CONDITION OF CANADA.—PRESENT AND PROSPECTIVE.

(*Continued.*)

That the debt of Canada is not equally disastrous, arises from the fact that it is, comparatively speaking, of much smaller proportions. While the interest on the national debt of England exceeds *five dollars* per head of her population per annum, that of Canada does not much exceed *one dollar*. And further, while the debt of England has been mainly contracted to carry on expensive wars, that of Canada has been incurred to effect public improvements, which, besides being of immense advantage to the country, yield at least a small per centage on their cost.

The increase of our foreign debt must not, on that account, be less closely watched. Its dimensions are now of greater magnitude than the resources of the country will warrant, and until capital accummulates at home, and can be obtained from our own people, any increase in the amount of that debt will be injurious to the welfare and prosperity of Canada. It is not enough that the Inspector General is able, by an increase of duties, to collect the required revenue. While our debts are payable abroad our credit can only be sustained by depriving the country of its available capital. When therefore Mr. Galt has succeeded in collecting together the three millions of gold dollars or their equivalent, to send them abroad is to perform but a very doubtful act of patriotism after all. At the risk of being considered unpatriotic, we must therefore express the hope, as we most deliberately express the opinion, that the tariff of the Inspector General will not yield him the required amount of

revenue. That amount could not be raised without a large excess of importations over the requirements of the country, a state of things which would be in the last degree detrimental to the true interests of Canada. We do not ignore the fact that stocks are low in many departments and that an excess of imports over 1858 has become a necessity. We are equally well aware that many houses in Montreal are pushing their business in Western Canada much beyond the legitimate wants of the trade, while their more experienced competitors of Yonge Street are standing quietly bye and allowing their neighbours to fall into the trap in which they themselves were caught in 1856. Yet, admitting all this, we cannot believe that the imports of 1859 will, under any circumstances, exceed $34,000,000 while with a poor harvest they may not reach $32,000,000.

It cannot be doubted, however, that in any case a large amount of customs' duties will be collected during the present year, and that the transmission of nearly $3,000,000 to pay the interest on our foreign debt, will cause a severe pressure in the money market towards the close of the season. While it is important that a sufficient revenue should be raised to meet the demands on the public chest, it is of far more importance that the trade of the country should be kept in a sound condition. The welfare of the people is of greater importance than the "ways and means" of the Government, and we shall be none the less able to pay our taxes because we have exercised due caution in the purchase of foreign merchandize. The public creditor need not feel alarmed because our imports do not come up to the anticipations of the Finance Minister. The imports of a country form no just guage of its wealth or prosperity. Indeed it is evident that as our own powers of production increase, the demand for articles of foreign growth or manufacture must diminish. It is equally clear that so long as the actual requirements of the country are supplied, the smaller the amount of imports the better, as we will then be better able to spare the interest on the public debt; only it must be raised by other means. While however, prudence in the importation of foreign goods will greatly contribute to improve the financial condition of the country, it cannot be denied that much will depend upon the coming harvest, particularly in Western Canada. The failure of the crops in 1857–8, was clearly the great cause of the severe and protracted depression from which we are just slowly emerging. This is evident from the following statement of the exports of Agricultural products:

Year.	*Value.*
1855	£3,656,395
1856	4,384,083
1857	2,747,516
1858	2,591,791

With the above figures before us we cannot be surprised at the depression which has existed in Western Canada, depending as she does, almost entirely on her agricultural productions. Nor is it difficult in view of these facts to discover why public attention is so earnestly directed to the appearance of the growing crops.

The chief source of our prosperity being thus dependent upon circumstances beyond our control, we can form after all, but a very imperfect idea of our immediate future. If crops are good and our merchants exercise due caution in the purchase of stock, we may expect a speedy return of better times. If, on the other hand, another failure take place, the return of prosperity will be painful and slow, and only acquired by a fuller development of our agricultural and other resources. The risks to which the trade of this country is, and must continue to be exposed, so long as the same dependence is placed on a single crop, is of itself a subject well worthy of serious consideration. To be in doubt is to be in danger, and to feel that not only our prosperity, but even our individual and national credit is dependent upon the yield of a single crop, and that crop the most liable to failure, may well cause serious alarm.

We admit that Canada does not possess in an eminent degree the elements of national greatness, and that her people must follow such pursuits as they find remunerative, and cultivate such crops as will reward their industry. They must not, however, abandon themselves to the production of a single crop, simply because it is *sometimes* the most profitable, or because it is too much trouble to turn their attention to anything else. They must not abandon the raising of stock, because the winters are long, nor the cultivation of fruit because the young trees require to be protected. The machinery must not be allowed to rust because we have no coal, nor the water-wheel to stand still because we cannot grow cotton, or do not raise the finer kinds of wool.

The same dependence on the wheat crop which now characterises agricultural operations in Upper Canada, once obtained to an equal extent in the Lower Province. In spite of the warnings of such men as the late Joseph Bouchette, the people continued to depend upon their wheat crop alone, till the almost total failure of the crop compelled them to abandon its cultivation.

It is true the system of farming in the western section of the Province is superior to that which obtained in Lower Canada thirty years ago; but it cannot be denied that the same dependence upon the wheat crop still exists in many sections of the country. While, therefore, it is impossible to form

anything like a reliable estimate of the business of 1859, we may, judging from present appearances and past experience, conclude that there will be a considerable increase of imports over those of 1858, with a similar increase of exports as well. That the crops will entirely escape those diseases which of late years have proved so injurious, cannot for a moment be entertained. We cannot, therefore, under any circumstances, anticipate more than an ordinary yield, while the price will of course depend upon the political condition of Europe and the harvests of England and the United States.

Let us briefly recapitulate the views we have advanced. We believe that there will be a considerable amount of over importation during the present year, particularly by the merchants of Montreal. That the large drain of $3,000,000 to meet the interest on our foreign debt will cause a tight money market next fall and reduce considerably the Bank Note circulation. That the ravages on the wheat crop must continue more or less severe for years to come, and that we must turn our attention more to the raising of stock, the cultivation of fruit trees, and the growth of flax, hemp, broom-corn, Indian corn, tobacco, and hops. That those branches of manufacture for which we possess the natural facilities must be encouraged and built up. *That our Government debt ought not, under any circumstances be increased.* That the withdrawal of any increased amount in the shape of interest will prove most disastrous by deranging the whole monetary affairs of the Province. That to keep importations at the lowest point, and to supply their place as much as possible with home-made fabrics is the true policy of nations as of individuals. That one good average crop will not warrant large importations, as the farmers are deeply in debt, and *must and will* economise. That Canada does not possess in an eminent degree the elements of national wealth. That her people must depend upon their industry constant and unremitting to secure a comfortable independence, and that he who would enjoy his next Christmas dinner free from the harrassing cares of business, must buy with double caution and sell with equal circumspection.

That the whole commercial community will follow our advice we are not so sanguine as to believe, and therefore, looking towards the close of the present year we would say (as the Almanac has it) "Look out for squalls about this time." Not that we anticipate a continuance of such dull times as the present; far from it. Our danger lies in the temporary impetus that the revival of trade in the United States and the prospect of a good harvest here, will give to the trade of Canada. Rising as from a bed of sickness, our efforts will be greater than our strength, and a relapse will be the consequence. The trade of a country cannot be pushed beyond its natural limits

without causing a reaction; and any undue efforts to force that trade must result in loss and disappointment. While warning our commercial readers against the "dangers ahead" we do not fail to perceive a revival of trade in many important branches. The long night of adversity is we believe, nearly past, and to the prudent merchant the next few years will afford ample scope for the successful prosecution of his business.

POISONS AND POISONERS.

Hitherto Canada has gained but a small amount of that unenviable celebrity for her criminal cases and trials peculiar to other countries and colonies —the United States and Australia more especially. In the last few months, however, offences of the higher order have been unusually prolific in this country The last month closed with a double execution in Toronto in one day, and the conviction and committal for life of a third offender of the same class; and the present month opened with two other convictions for murders infinitely more atrocious than either of the former three.

John Mitchell and Dr. King present us with two distinct representative portraits of the murderers of the present day. The one, the low, brutal savage, drunken, uneducated butcher of the tap-room and the hovel; the other the refined, subtle, professional, cold-blooded assassin of the studio and the drug shop. The former are at once the least to be feared and the most to be pitied. They are the branded Cains of society that carry the mark upon their forehead, and are known for what they are. But the latter are the most dangerous and loathsome of all the scourges that afflict mankind. They are nature's hypocrites—the serpents of society, that spring up where they are least expected, and from whose deadly fangs neither the good nor the bad, the friend nor the foe are safe. It is impossible to be on guard against them, because it is one of the chief characteristics of their refined villainy, that they generally appear the very antipodes of what they are.

It is remarkable that among the individuals of this particular class there is an extraordinary sameness of character. They are invariably subtle, cautious, calculating, and almost without exception wanting in every species of sensibility. Rush, the Norfolk murderer, (who, although not a dealer in poisons, was of the same class,) was never observed to betray one solitary look or symptom of concern, or remorse, or uneasiness, or fear, from the first

moment of his arrest until the hangman's cap finally closed upon his features. Palmer, the prince of modern poisoners, was completely unconcerned and unruffled, as well through the prosecution of his atrocious villainy, as through every phase of his prison life, trial, and execution. He laughed at the absurdities of the witnesses in court and the jests of the counsel, as heartily as any of the spectators; he smiled upon the jailors, chatted with the execution officials up to the last moment, in the most complacent manner, and finally stepped up to the scaffold with a light and elastic step, adjusted his head to the noose with the utmost precision, and died without a struggle. Dr. King, of Brighton, is evidently one of precisely the same class. He administered the poisonous drugs to his poor helpless victim with smiles and caresses, and neither her intreaties nor her sufferings were of any avail in deterring him from his diabolical perseverance. When he had accomplished his end and found himself suspected, his presence of mind did not desert him for a moment. He had an object in view, and he was still prepared to carry it out suspected or not; and the emergency was only productive of a more barefaced expedient for the purpose of carrying his designs into execution. During the trial he was cool and collected, and seemed to enjoy its funny side as much as any one; and there can be no doubt that the same law of callousness and insensibility that marks this peculiar class of human beings, even in meeting the scaffold, will hold good in this present instance.

It is remarkable that, whatever may be the conduct of this class of murderers after detection, the sedulousness and dexterity with which they plan and execute their villainy, are invariably the most refined and complete. Poisons are therefore their common agent, and latterly, since science has surrounded them with so many dangers and pitfalls, the subtle vegetable poisons, and especially strychnine, have been enlisted into their service.

Poisoning is now becoming alarmingly prevalent in almost every country. In the U. States and England it has increased largely during the last few years, and there can be little doubt that the number of such cases brought to light, bears but an imperfect relation to the amount that actually exists. Cases are frequently transpiring in which the victim has been successfully disposed of and where detection is more the result of accident than of knowledge or systematic discovery. In the case of James Stephen, who was convicted at the New York Assizes, during the present month, of poisoning his wife by administering arsenic, the victim had lain quietly in her grave for a whole year before suspicion attached itself sufficiently to the murderer to warran

his arrest. The wife of Dr. King even had been successfully buried and but for the accidental finding of the portrait which excited the brother's suspicion, her murderer might have been at large at the present moment preparing his smiles and narcotics for another victim.

The fear of detection is no doubt one of the most powerful considerations in the minds of this higher order of criminals. A certainty of discovery would no doubt be the surest preventative to the crime. The science of Poisons, then, assumes a very important feature in the investigations of the present day, and it is receiving at the present moment a much larger share of the attention of scientific men than heretofore.

Although as a science, Toxicology may be somewhat abstruse and difficult, there is much connected with it that might be generally understood if a little attention were given to the subject. The physiological and pathological effects of the commoner kind of poisons; the symptoms accompanying them; and the most convenient and effectual antidotes to be administered in different cases, might all be included as a part of the commonest education. The proper dissemination of such information would prove invaluable in cases of accidental poisoning, now of such common occurrence, and would be one of the surest obstacles and preventatives, by detection at the outset, to poisoners of the Dr. King class.

The means at present at our disposal for the detection of prisoners may be included under four heads: the circumstances and movements of the parties, and the evidence of the purchase or possession of the poison administered; the symptoms preceding death; evidence presented by the body after death; and the analysis of the parts in which the poison should be found.

The first of these is entirely circumstantial, and is only of service as corroborative evidence. The rest are more or less positive, the last being almost infallible, although in some instances even this may fail. In the case of arsenic, it has been maintained by some, and is often argued in defence that all bodies contain it to a certain extent distributed through different parts of the system, and that therefore its production, in analysis of the corpse after death, is no conclusive evidence of poisoning by that mineral. This opinion was at one time entertained by some eminent Toxicologists, but it has of late years been ably refuted, and may now be regarded as an almost exploded theory. In some of the most virulent of the vegetable poisons, the tests are extremely difficult, and sometimes—as in the celebrated Palmer case above alluded to—entirely fail. While Dr. Taylor and others, however,

maintain that the vegetable alkalis, such as strychnia, brucia, &c., may not always be detected in the human system by analysis, there are other eminent chemists who assert that the minutest quantity is to be traced infallibly by certain tests, supporting their statements by a long series of practical experiments. A very short time, however, will no doubt effectually close up this loop-hole of escape. There is no reason why investigation should not render organic poison as amenable to test as any of the rest.

In judging of cases of poisoning by the symptoms exhibited during illness there are many serious difficulties to be encountered. Poisoning of all kinds and degrees is counterfeited by so many diseases incident to the human body, that however suspicions may be aroused, it is almost impossible for any one but an experienced practitioner to arrive at a certain and positive conclusion upon this evidence alone. Cholera, apoplexy, epilepsy, diseases of the heart, colic, spasms, violent inflammations, and so forth, are all accompanied by symptoms peculiar to poisoning of one kind or other. Apoplexy and poisoning by opium are almost precisely similar in their effect upon the system. Epilepsy is almost entirely analogous to poisoning by prussic acid and strychnia; and in both instances it is generally the case, in the post mortem examination, that no signs of disease can be found. The irritant poisons are much more readily detected by the symptoms of illness than the narcotic. But still, in the case of the most common of the irritant poisons—arsenic, there are several diseases whose effects are closely allied in their nature, Asiatic cholera more particularly.

Poisons are generally divided into three classes—irritants, narcotics, and narcotic-acrids—some add a fourth class, termed Putrifiants or Septics. Of the former the most common are:

Arsenic, Antimonial poisons, Lead poisons, Oxalic acid, Mineral acids, Mercurial compounds, Alkalis, Nitre, Ammonia and its salts, Vegetable acrids, Poison of serpents, Cantharides, &c.

Of the narcotic poisons the chief are,

Opium, All poisonous gases, and hydrocyanic (prussic) acid.

The narcotic-acrids include the vegetable alkalis, and the chief of the organic poisons such as,

Strychnia, Upas, Poisonous fungi, Tobacco, Hemlock, Nightshade, and Alcohol.

The characteristic symptoms of the Irritants are extreme nausea, vomiting, heat and spasmodic pains of the stomach and bowels, sense of heat and constriction about the mouth and throat, and sometimes ulceration of the tongue, fauses, &c. These are generally followed by violent purging, and excruciating pains, the skin turning cold and flabby, the pulse at first hard and quick, but gradually becoming irregular and feeble, and the countenance distorted and anxious. Cold sweats, the appearance of spots upon the skin, and convulsions, are also generally the harbingers of death. These symptoms are all peculiar to poisoning by arsenic, without exception, and more or less to all the other irritants above mentioned. One of the most unmistakable characteristics of death by this class of poisons is acute inflammation of the stomach, a symptom which is said to be peculiar to no known disease naturally incident to the human body.

The operation of the narcotics is essentially different from that of the irritants. The first charactistics are more especially affections of the brain, such as giddiness, vertigo, headache, obscurity of sight, stupor, followed by loss of power of the voluntary muscles, convulsions, paralysis, and at last complete coma. These symptoms, however, differ considerably under different circumstances and in different persons, and present many complicated difficulties in bringing them home to their proper source.

Of the narcotic-acrids, strychnia is at once the most virulent and the most common. Since its discovery, forty years ago, it has been made to do terrible service in the hands of the more refined class of poisoners. Its effects are confined to the ganglionic system of nerves and the spinal chord; it destroys life by exciting, what are termed, tetanic spasms, accompanied not unfrequently by lock-jaw, the intellect generally remaining, however, entirely unaffected. It constitutes the vicious principle of nearly all poisonous plants, such as ratsbane, Upas-poison, (the Upas tree of Java) urari—the poison plant of Guiana, &c. The latter is supposed to be that from which the American Indians prepared the poison for their arrows, it having the peculiar property of destroying life almost immediately when applied to a wound, although it may be taken into the stomach in considerable quantities without any immediate effects.

Strychnia has no doubt been found exceedingly convenient to poisoners, both from the difficulty of detection by analysis, and the very minute quantity required to cause death. Such is the virulency of this poison that death has been known to ensue from a woman's grating cheese with a file which

had been previously used to rasp the seeds from which it is produced. Its effects are first discernable in a difficulty and heaviness in the movement off the limbs, a gloominess and restlessness of mind, a peculiar sensitiveness to light and noise, and in many instances a sensation similar to that of a galvanic shock is felt in coming in contact with external objects. After this tetanus and asphyxia commence in single paroxysms, becoming gradually longer and more violent until death ensue. It is very seldom that the intellect is effected beyond the restlessness and mental depression referred to. The corpse is not unfrequently rigid and distorted after death.

Strychnia not being a cumulative, like arsenic, if once recovered from, its effect ceases. It is a colorless inodorous, crystalline powder, its chief characteristic being its exceedingly bitter taste. It is almost insoluble in water, and will therefore generally be administered either in the powder or in some solid form.

In the treatment of cases of poisoning, there are two fundamental principles, to one or other of which recourse must generally be had. The one is the immediate ejection of the poison by means of emetics or forced vomiting the other the decomposition of the poisonous compound by a chemical agent, whereby another inert or harmless substance is formed in its stead. Thus if the compound be oxalic acid—a virulent poison frequently taken in mistake for Epsom salts which it resembles in appearance—and carbonate of magnesia or lime be administered in time, the latter are at once decomposed by the acid, and oxalate of magnesia or lime, a comparatively harmless compound, is formed. Acetate of lead (a poisonous salt of lead employed in the adulteration of wines, loaf sugar, &c.) would be at once decomposed by sulphuric acid (to be used very dilute), sulphate of magnesia (Epsom salts), or sulphate of soda (Glauber's salts), by either of which it would be converted into the insoluble sulphate of lead, which is inert. Prussic acid is decomposed by chlorine, or the chlorides of soda or lime; the mineral acids by the carbonates, such as carbonate of lime, magnesia, soda, &c.; mercurial poisons, such as the corrosive sublimate, by the albumen in milk, white of eggs, &c.; strychnine is formed into insoluble salts by chlorine, bromine, or iodine, which are strongly recommended as antidotes if procurable immediately.

In almost all cases, however, the use of powerful emetics is most effectual, and should be generally resorted to. The emetics generally employed are sulphate of zinc, tartar emetic, epicacuanha, and antimony wine. Of these the sulphate of zinc is by far the most effective, and is generally recommended. Ten grains may be dissolved in a tumbler of warm water, and the

dose repeated ever fifteen minutes, until it operates freely. Vomiting may sometimes be promoted by tickling of the throat, in the absence of better means; but of all the appliances at our disposal, the stomach pump is unquestionably the most thoroughly effectual in its operations, and should be always employed when practicable. In all cases where emetics or vomiting by any process is resorted to, the stomach should be afterwards washed with mucilaginous or diluent drinks, of which the best are barley-water, gum-water, gruel, milk, or flax-seed tea

These remarks are equally applicable to cases of poisoning by either of the following compounds, and present, perhaps, the safest if not in all cases the most effectual mode of procedure:—

Arsenic, Strychnine, Prussic Acid, Lead Acetate, Opium, and nearly all poisons of plants.

In cases of poisoning by strychnia, apparent death from asphyxia not unfrequently ensues. In this event the patient should not be given up, but artificial respiration should be promoted by blowing into the nostrils, or by electricity or galvanism or some such agent. In poisoning by opium and its preparations, and the other narcotic drugs, it is recommended to dash quantities of cold water into the face, and sometimes it is necessary to counteract the disposition to torpor by forced exercise.

Witnessing, as we do, the daily atrocities that are committed through their subtle and destructive agency, the subject of the free sale of poisons becomes of vital consequence. That many of even the most virulent of the poisonous compounds are valuable if not wholly indispensable, to the medical practitioner, and that their agency is especially effective in many of the most stubborn and incurable diseases that attack the human body, are facts which are no doubt well established. But that this affords any excuse for allowing them to come readily into the hands of the inexperienced and vicious of all classes, or that the common excuse of rat or fox poisoning should be sufficient to procure their possession in unlimited quantities, we cannot for a moment allow. The subject is one worthy the attention of the Legislature of any and every country, and there can be no doubt that by the enactment of a proper restrictive measure, the spread of this, the foulest of all human crimes, might be considerably retarded, by robbing the murderer of the most subtle, deadly, and convenient weapon for his purpose.

OUR LITTLE BILL.

Eleven Million, Four Hundred and Three Thousand, Five Hundred and Eighty-seven Dollars and Forty-four cents! That is what it cost us in 1858, neither more nor less. That is the price per annum of working, regulating, manœuvring, repairing, and lubricating the social and political machinery of Young Canada. Out of this sum our railroads are provided with steam and sent screaming and snorting through the Province to the pride and admiration of our green ambition; canals and roads and bridges and light houses, are created and perpetuated to the glory of our names, albeit to the confusion of our pockets; literary institutions exists, hospitals live, and Penetentiaries flourish. Out of this, justice and order are maintained, to say nothing of *in*justice and chaos; by this the great world of officialdom, from the Assembly dwarf who does the messages on the floor of the House, to the high and mighty representative of loyalty itself, live, move and have their being, and very comfortable beings some of them are. In short, this is the price—eleven millions odd—of attendance, doctoring, medicine, and jobbing for the body-politic and social of Canada, for the term of one year. It is a long sum, no doubt; and we can fancy we see the countenance of Young Canada as he cons it over and mumbles despondingly to himself, and wonders where it can all go to. This is the question, and this is the enquiry we want to come to; so let us to it at once. Never mind where it comes or is to come from. That we can investigate as a secondary matter at our leisure. The old lady at home is amiable and rich—and there must be our refuge, prodigal though we be.

Whether the Inspector General in presenting us with our little account for the year, had it in his eye to horrify us at the outset, with a view to discouraging further investigation, we know not; but certain it is that the most ugly of all the ugly items of which the bill is composed, is thrust vexatiously forward in the very first line—a line which it were not difficult to distort into a *rope* for our extravagant young neck. Here it is: "Interest on Public Debt, $3,030.899," or considerably over one forth of the gross expenditure for the year. Sheridan with his tailor, and Canada with the brokers, are evidently analogous cases. It is obviously our "principle to pay the interest but not our interest to pay the principal." This item speaks so voluminously for itself that it is neither necessary to trace it to its source nor to follow it to its outlet. The former may be scanty and well-wrought, but the latter is a broad, open, hungry ocean that must be filled. Neither is this all. Not only the next, but the next *five* items are merely appendages of the first. The comet has a tail; and a trifle under three quarters of a

million of dollars is the length thereof. But as every evil has at least one redeeming point, so there is here a small modicum of redemption in the shape of "Debentures redeemed" to the amount of $204753.—Let us therefore make the most of a small blessing, and proceed to the next item. This is an interesting trifle of $394735, expenses of the Civil Government. By the way, why this motley compilation of unmitigated bores was ever designated *civil*, is a marvel. Not certainly from the habitual politeness of officialdom generally: we demur to the title. In these items is concentrated all the ephemeral vitality and greatness of the powers that be. Let us measure them as humanity is measured, by the length of their purse, and see what they amount to. In the sixteen offices and departments included under this head, there are about two hundred salaried officials, ranging from the Governor General himself, down to the smallest of the small fry who do the messages and carry the burdens of office in the shape of small parcels and brooms. These are distributed something in the following order, measuring by the infallible golden standard.

1st class or A	1	(Governor General)			at	$31,111 08
2nd "	9				"	5,000 00
3rd "	3				"	3,000 00
4th "	10	under	3,000	and at or over		2,500 00
5th "	8	"	2,500	"	"	2,000 00
6th "	23	"	2,000	"	"	1,500 00
7th "	70	"	1,500	"	"	1,000 00
8th "	26	"	1,000	"	"	800 00
9th "	29	"	800	"	"	500 00
10th " or small fry	19		under			500 00

Thus it will be seen that there are only fifty-four in all, over 1500 dollars, while under that there are a hundred and forty-four, the most numerous class hovering between one thousand and one thousand five hundred. There can, of course be no semblance of a doubt of our aggregate extravagance and prodigality; but after all it is surely not here. A thousand dollars—two hundred and fifty pounds! Deduct the small contingencies of a wife, family, house rent, (in Toronto,) gas, servants, and *official eclat*, and tell us the *remainder*. We defy you, be your imagination what it may.

In this item are included all "Contingencies of Public Offices," comprising among numerous other interesting articles, ice, (sherry cobblers not specified,) washing, (whitewashing,) and candles.

Following upon the heels of the Civil Government, is the Administration of Justice. This cost us in 1858, some three hundred and seventy thousand dollars in Upper, and two hundred and fifty in Lower Canada. Of this, for the Administration of Criminal Justice in Canada West was paid 97,256 dollars. For Criminal Prosecutions was paid, in Lower Canada, 6838, and in Upper Canada, 16,725 dollars; which, making all due allowance for extra population, is by no means complimentary to us of the upper section.

In respect of our criminals, it is remarkable to what an extent our vindictiveness gets the better of our philanthropy. While towards direct punishment we expend 53,400 dollars, only an odd trifle of some 8,200 is devoted to Reformatory Institutions. Of this latter, it is also remarkable—affording an interesting subject of investigation to phrenologists and others interested in the craniological development of races—that while our Gallic neighbors go the whole hog of reformation, to the satisfactory tune of eight thousand dollars, we, of the upper section, are content with the miserable dole of two hundred dollars worth, while, at the same time, we lay on the lash of double-edged justice, to the handsome amount of fifty thousand dollars. This subject, however, is just now receiving attention, and in future we may hope to witness the infusion of a little more of the reformatory principle into our criminal system.

Next in order after the criminals, come the Legislature. Whether this significant classification was designed by the Inspector General as a soft impeachment of his friends generally, or not, it is impossible to say: the fact of itself is, however, noticeable. Legislation then, in 1858, cost us, in round numbers, six hundred and eighty thousand dollars. Of this, the Election expenses, (general election 1857) amounted to fifty-four thousand; the expenses of the Legislative Assembly four hundred and seventy-four thonsand, and the Legislative Council ninety-five thousand. Take notice of the latter item! A House of Lords for a whole year for ninety-five thousand dollars! Cheap and economical dignity! Who would be without a House of Lords? even though they might be a trifle below par, and not exactly lords *par excellence.*

Between the cost of our Legislation and our Educational institutions there is a difference of a little over a hundred thousand dollars; the latter amounting to $526,365. This is perhaps one of the most satisfactory items. Put it to the whole country, individually and collectively, and you shall not hear even the ghost of a murmur against so much of it as the odd twenty cents which we have omitted from the total. Only give us the full value of our

five hundred thousand in grammar and arithmetic, and we care not whether it come out of our tea, sugar, molasses or soap—it shall be paid with benisons.

The next item is a little matter of $33,360, being the government grant to Literary and Scientific Institutions; in which are included 130 Mechanics' Institutes, 23 other literary and scientific associations and libraries, and 2 conservatories. This is a very wholesome item, provided these institutions are unable to support themselves, which in most of the smaller towns appears to be the case. Times are hard and money scarce, and it is just now if ever that a little wholesome support is needed, if these institutions are to be kept afloat; and therefore, divining with their wonted sagacity, it is just at this opportune moment that the government have discovered the beautiful theory, that "every tub should stand on its own bottom," and have deduced therefrom the propriety of withdrawing their support from these literary tubs generally, and allowing them to stand or fall upon their own resources. What have our mechanics to do with literature and science in times like these, when they have quite enough to do to satisfy their physical frailties with potatoes and pantaloons? For our part we can't for the life of us divine. If they wish to cultivate their minds and to revel in the arts, there are the newsvenders' windows big with literature, and radient with wood-cuts; if they desire to while away an evening, are not the saloons open to them?

Our Charities assume moderate dimensions, and evince no symptoms of prodigality, amounting to $194,988. This embraces twenty-three hospitals, ten orphan asylums, and two houses of industry. So that our provisions for disease and sickness would appear to be praiseworthy—for the fatherless and foundling satisfactory—but for industrious and healthy poverty contemptible. If this should meet the eye of any of the begging community, we would suggest to them as a new and telling plea to employ in their next expedition: sir, Canada supports but two Houses of Industry.

Next come the Geological survey $19,566—a contribution to science and future progress which few but anti-progressionist old ladies and marines will be disposed to cavil with; the militia $162,351—a national armed force for a hundred and sixty thousand dollars; Arts, Agriculture and Statistics, $24,616; and Agricultural Societies, $111,032; this latter sum affording aid to fifty-three societies in Canada West, and fifty-five in Canada East. Then we have emigration, $50,000; Pensions, $45,000—principally to judges, militia officers, and superanuated parliamentary officials; Indian annuities, $31,000; and public works, $720,000—comprising repairs and erections of custom houses, post offices, court-houses, bridges, canals, and the marine hospital at Quebec, which is rather a large item, amounting to over $23,000.

Following on these, are sundry minor matters, such as rents and repairs, ocean and river service, fisheries, culling timber, commutation with clergy, new coinage, &c., which bring us to the concluding items under the head of Collections of Revenue. The collection of customs amounts to $341,863, or about 10 per ct. on the revenue accruing therefrom; the excise to 16,290 being trifle over 10 per cent. The Post Office would appear to be by no means a paying institution *per se*. It is no doubt highly successful in carrying the burdens, moral, religious, political, civil and uncivil, of the country generally, but is evidently totally incapable of carrying its own. Its noble philanthropy is something startling; in fact it is the only thorough-going, whole-souled philanthropic institution within the whole range of governmental jurisdiction. Behold the figures. With a total revenue of only $295,395, it launches out boldly into an expenditure of $565,636, or an excess of expenditure over revenue of a round sum of two hundred and seventy thousand dollars: from this, however, should be deducted a hundred and fifty thousand paid on account of the preceding year. This deficit it appears is mainly attributable to the free transmission of newspapers. Not one cent of this, however, we would emphatically state, can be imputed to the *Merchant's Magazine*, since that periodical has hitherto paid its own travelling expenses, to the extent of the full postal charge. It is now proposed by the Postmaster General to place all other periodicals on a similar footing; and really if things have arrived at that pass when it is found expedient to withdraw the scanty assistance hitherto afforted to our literary and scientific institutions, agricultural societies, &c.; it seems scarcely unfair, however unpalatible, that these private concerns should be launched out upon the same sea and made to float upon their own bottoms.

The rest of the collections are, from Public Works, $270,572, Territorial, $221,316; Fines and Forfeitures, $11,887; Casual, $33; and Special Funds, $17,218.

Here then are the items that make up the sum total of our expenditure for the past year—the eleven millions odd, with which we attempted to arrest the attention and excite the admiration of the reader at the opening of this article. We can, of course, all of us see something wrong, and could all make magnificent corrections and amendments, if we only had the power, which, thank Providence, we have not. The most careless and prodigal will sometimes learn by experience, especially if it be dearly bought, and perhaps out of our eleven millions we may, at least, purchase a little of this wholesome commodity to serve us in future years, if nothing more substantial.

Of the means by which this large amount of money is all raised, a great deal might, no doubt, be said. But after all it is comparatively of small importance, since whatever be the means, the original source from which it must mostly be drawn, is pretty much the same. Whether it be raised by direct taxation or customs' duties, or whether those duties be levied on tea or soap, or dry goods or hardware, the great bulk will be derived from one and the same source—the sinews and pockets of the masses. An enumeration, then, of a few of the leading items, in which by far the majority of the revenue is included, may suffice.

The six principal sources of revenue are, Customs, Excise, Public Works, Territorial, Railways and new debentures. In 1858 the amount raised from customs' duties was $3,368,157, or a little over one third of the total revenue for the year. This is collected at twenty-six ports in Lower and sixty-two in Upper Canada. At twenty-five of these ports, the expenses exceeded the collection—nine being in the lower and sixteen in the upper section. These latter, however, it will be remembered, are all minor posts, at which the expense are proportionately small.

The four succeeding items amounted to nearly another million ; income from railways to a million and three quarters ; and the amount of debentures issued were, with premiums, a trifle over two millions; making in all from these six sources, in round numbers about eight millions out of the ten millions and a quarter raised.

The excess of expenditure for the year, was $1,132,396. This, the last sum, certainly makes the worst figure of all. It is a general opinion among business men, that the man who is unable to meet the first payment will pretty certainly fall through when he comes to face the first and second together. If we are unable to stave off our current demands, it is a matter of some speculation as to where arrears and current expenses are to come from together. However, such is our condition, and such is the difficulty that has to be met; and whatever may be the result, we must at least admire the courage of the Inspector General, who sets himself determinately to the task of meeting it. Success is possible, but certainly by no means *inevitable.*

In conclusion, we would remind our readers that where little is expected, the disappointment cannot be great. Our resources are extremely dry, our credit bare, and our coffers empty; and the old proverb says, that where nothing is we can expect nothing.

GEOLOGICAL SURVEYS—THEIR IMPORTANCE.

Some of the leading press of Canada, in the cry for economy in the public expenditure, complain that several hundred pounds have been expended in what they seem to regard as a very culpable, if not a ludicrous manner. We make the following extract:—

"In addition to the various amounts paid for salaries, etc., to those connected with the geological survey, a further expense is being incurred in the publication of works illustrating 'organic remains' of defunct bivalves, found in the rocks of some period antediluvian, pre-Adamite, or before the creation itself. It is no doubt, very proper to know the mineral wealth of a country, but there is little utility in devoting hundreds of pounds to printing accounts of Eyclocystodils,' 'Cystideæ,' or 'Enmostracla,' or wasting the public moneys in the exposition of fossil lobsters, and petrified clams and periwinkles."

We very much regret to find such oft repeated evidence as this, of the slowness, not of the general public only, but of the more learned among the community, in realizing the importance of, and the national advantages derivable from, the exercise and cultivation of the sciences.

It may appear at a thoughtless glance, almost to amount to a joke, that the public should be taxed for the illustration, or even the mention of such things as "organic remains of defunct bivalves, fossil lobsters, and petrified clams, and periwinkles." And so, indeed, it would be, were those illustrations for the same object that "Jack the Giant Killer," in all the glory of red, white, and blue, figures in the pages of our infant literature. When, however, we find them for the purpose of illuminating great truths, for developing and contributing to the greatest and broadest instruments of human progress, the sciences—then the jest will only be obvious to those incapable of looking beyond the frivolous, and unequal to the realization of the value of that which is definite and true.

If the grudging spirit manifested in our extract had been universal—if there had not been some whose estimate of the sciences and their components were more just,—what would have been the condition of the world at the present time? How scanty its history—how obscure the most transparent sources of our civilization! The worlds rolling along their everlasting paths, had been but the twinkling stars of our nursery rhymes; mathematics had been circumscribed by addition; chemistry at once the attribute and the reproach of the wizard; geology would have ended in the contempla-

tion of mountain, plain, and valley; geometry would have gone no further than the straight, the square, and the round; natural history accomplished no more than the division of nature into her obvious parts; and as a natural and necessary consequence, the arts and manufactures must have been proportionally stinted and diminished.

We will not go so far as to assert that the neglect of the advancement of the sciences would be productive of any immediate evil to Canada, it being obvious that they are already adequate to the wants of a nation further advanced than we are. It is not here that we recognize the evil. It consists rather in the exhibited disposition to underrate generally their intrinsic value. A country may be in a position that calls for the most rigid economy, but if she knows and studies her *true* interests, the last way in which she will seek this will be the discouragement of scientific progress, or the neglect of the arts and manufactures, as that is precisely the procedure which would raise an insurmountable barrier to her ever becoming rich.

There is a great tendency under the pressure of national difficulties, to raise a cry in the name of economy for an indiscriminate curtailment of the public expenditure, as if Governmental extravagance were the sole evil that could be productive of national distress; and in doing so, we lose sight of more primary influences. History does not contain a single instance in which a nation has suffered from a too profuse cultivation of the sciences, while it would not be difficult to fill volumes with the baneful consequences that have followed their neglect. We need not go back centuries to illustrate this; we have instances surrounding us. No matter their geographical position or extent—no matter their latitude or longitude—without their philosophers and their men of science, their national character cannot stand high; without the arts and manufactures they cannot possibly be rich.

Instead then, of continually crying for this sort of economy, which is more often the promoter of poverty than the remedy for it, let us give due consideration to those more deep-rooted and dangerous influences to this end. Let us consider if we should be more or less prosperous, and if that prosperity would be more or less lasting, if our men of science, instead of being less, were more active—if the number of our mechanics and artizans bore a greater relation to the number of our labourers—our manufacturers to our tradesmen, and even if some of us were to become philosophers. There would be a chain of influences connected with such a condition, in which, we think, would not be found the elements of poverty, even if its attainment absorbed a little extra amount from the public treasury. True economy does not consist in spending little, but in spending well! We may spend little and be poor! we may spend much and be rich!

This is amply borne out by the experience of our neighbours. We quote the following from a recent issue of the *Scientific Artizen*, Cincinnati. In referring to the value of State surveys, the writer says:

"We condense some thoughts from speeches made before the State Board of Agriculture in Maine, a few days since, upon the subject of State surveys, and we commend them to the consideration of those who are continually sneering at the results of science.

"It may cost us $5000 a year for a geological survey, but such an appropriation will be like a thriving farmer who sets out an apple tree that may cost 25 cents, but which in a few years will be worth 50 times as much.

"Massachusetts, New York, and other States, have seen and felt the true policy of developing their natural resources, and are now reaping an abundant harvest. New York alone has expended well nigh half a million of dollars to complete the survey of her territory; in this respect perhaps, she, as a State, stands the foremost in the world.

"There are many unsettled questions which geologists have referred to a complete survey of Maine for a solution. Every river from St. Croix to the Piscataguis, has it history to be recorded. Its soil, its muck-beds, its marine manures, its rocks, its minerals, its fossils, its mines, its quarries of slate, lime and marble, its ledges of rock, its forest lands—all need the scrutinizing eye of the mineralogist, the chemist, and the geologist. The quarries of marble and slate which are so valuable to Vermont, on recent investigation, are found to extend over into northern Maine. *Not a foot of soil on our Territory is unworthy the investigation of the man of science.* * *

"Massachusetts knows what she is about in developing her resources. Her surveys were made 20 or 30 years ago, and her greatness has been largely built up from these surveys. It has been too much the case with us to grumble, and cry—what is the use of all this? or about 20 years after Massachusetts has done a good act, then after all to follow in her long trailed wake and approve of it. Her men of capital early saw that knowledge is power, and they developed her hidden resources in a thousand ways."

This desire to contract and render less efficient the geological survey of Canada, is not only unworthy of us, but embodies a principle in an eminent degree dangerous to the development and advancement of this country. For to attempt to argue the insignificance of such things as Eyclocystodils, Cystideæ, lobsters or periwinkles, would only be exposing our ignorance of the com-

position of the sciences, whose sublimest truths are derived, not only from such things as clams and periwinkles, but from those far minuter atoms, of whose very existence, if left to the unaided evidence of our senses, we should be ignorant: such things, individually simple though they be, aggregate into mountain forms of more than Alpine magnitude, and have shaped the character of the world.

It is not for us to contract the steam flowing out of the treasury, so much, as to seek to enlarge and multiply the channels by which it may flow in. Our mineral wealth is lying unused and for the most part unsought; our water power and manufacturing facilities are lying dormant; our skilled workmen are few, and the country is only now beginning to be developed. We stand much in need therefore of scientific men; we stand in need of the manufacturer, the mechanic and the artisan. These combined form the rational alchemy that will convert our forests, minerals, earth, fire, water into gold. And that which denies us this, at whatever cost, is antipodal to our interests, and is not economy, but a dangerous and impoverishing parsimony.

C. C.

ELIHU BURRITT, THE LEARNED BLACKSMITH.

This remarkable man was born in New Britain, Connecticut, in December, 1811, and is consequently in his forty-eighth year. As the youngest son of the family, he was almost always at home, until he had attained his sixteenth year. Up to that period he had the benefit of only three months' schooling. When his father died, he apprenticed himself to a blacksmith. At this business he wrought until he was twenty-one, when, by the advice of an elder brother he laid down his tools; and with the view of qualifying himself as a Land Surveyor, became a student for one-half year. Knowing that he could earn a dollar and a half a day at his trade, he studied with unswerving assiduity; and when spring came, Burritt went back to his anvil. Having read Virgil in the original, grounded himself in Mathematics, and made considerable progress in French, (it is not in the nature of such a man as Burritt to do anything by halves); and once back at his forge, to make up for lost time, he engaged to do the work of two men, and receive double wages. To do this he had to work fourteen hours each day; but yet with such labour on his hands, he managed to read Virgil, or a few pages of French, morning or evening. Now, too, he began to look into Spanish, and during the same summer he procured a Greek grammer, and while standing by his furnace, waiting for his metal to fuse—(he was casting Cow-bells)—he would commit to memory part of a Greek verb.

In the autumn of this year he removed to New Haven—not to enter Yale College—he had not means to do that—but possibly with a vague idea that

he would there meet some congenial spirit, who, with the advantages of College instruction, might be able to assist him on in his more rugged path. This hope, if ever indulged, appears to have been disappointed; for we have in his own words, the course of study which he pursued during the following winter, and there certainly is nothing in it to indicate that assistance of any kind was enjoyed. Here is Burritt's account of how this winter was spent:—

"As soon as the man who attended to the fires had made one in the sitting room, which was at about half-past four in the morning, I arose and studied German till breakfast, at half-past seven. When the boarders were gone to their places of business, I sat down to Homer's Iliad, without note or comment to assist, and with a Greek and Latin lexicon. Before they came in to their dinner, I put away all my Greek and Latin, and began reading Italian, which was less calculated to attract the attention of the noisy men, who at that hour thronged the room. After dinner I sat down again to the Iliad . . . . . In the evening I read in the Spanish language until bed time. I followed this course for two or three months, at the end of which time I had read about the whole of the Iliad in Greek, and made considerable progress in French, Italian, German, and Spanish."

In the Spring he returned to his native town, intending to work at his trade, but he was by this time becoming known, and was offered the management of a grammar school, which he accepted. The sedentary nature of this employment, however, accorded but ill with his herculean frame, and at the end of a year he had to relinquish his charge.

Shortly after this, Mr. Burritt travelled for a New England Manufacturing Company. Railroads were but few in these days, and the greater part of his journeys were made on horseback. This occupation not only restored his health, but furnished new opportunities for the prosecution of his favourite studies. The study of Hebrew he began and pursued while travelling on horse back through some of the beautiful valleys of the Northern States.

It has been truly said by one to whom the subject of this sketch was familar that "Burritt is not a mind to stand still or to be satisfied with the attainment of the nearest goal; there is still always a goal beyond, and that must also be reached.' At the period to which we have brought down our outline of his life, Burritt had mastered, untaught, and not only unassisted, but in the face of all obstacles, Latin, Greek, Hebrew, Spanish, Italian, French and German, and yet he saw a goal beyond. But with him goals attained were but new starting points, and having at this period of his history mastered the languages of the West, Burritt's, with that instinct which has guided all great men from Alexander to Napoleon, turned to the East. Oriental literature was still to him a sealed book, and this seal Burritt determined to break. But the means—the books, he had not; and America could not furnish what he thought he required. Did this—[to a man of his means a serious obstacle] deter Burritt from the prosecution of his scheme? No!—But let us tell this part of the story in the words of the writer whose memoir of the Blacksmith we are, in this article trying to condense—"To overcome this difficulty he

resolved to make a voyage to Europe, working his way across the Atlantic as a common sailor, or in any other capacity in which he could receive wages for the work of his hands. These wages it was his intention to spend in the purchase of books at any port at which the ship might stop, and thus return to his own country with a little library. Boston was the nearest port, at a distance of a hundred and twenty miles, and to Boston he set out on foot. All his wordly wealth with him; his change of linen tied in a handkerchief, three dollars and an old silver watch in his pocket—which watch was of no use to him, as it did not go, and he could not afford to have it mended.

"Footsore and weary, after a travel of a hundred and twenty miles, he arrived in Boston to find that no vessel was sailing from that port. He learned, however, to his comfort, that an Antiquarian Library existed in the town of Worcester, which was forty miles distant, and to that place he now resolved on going, determined to take work as a journeyman, and to gain access to the library." To Worcester, then he went, and engaged himself to work for twelve dollars a month. But in a very short time he discovered that, owing to the hours during which the library was open being the same as those during which he *must work* at his anvil, the antiquarian collection of Worcester could be of no use to him. He wrought on, however, during the year 1837, working hard both bodily and mentally, until he seriously injured his health. To shew how this year was spent, let us give an extract from his dairy of one week's work as a specimen of the whole:—

"Monday, June 18—Headache; forty pages Cuvier's Theory of the Earth, sixty-four pages French, eleven hours forging. Tuesday—Sixty five lines of Hebrew, thirty pages of French, ten pages Cuvier's theory, eight lines Syriac, ten ditto Danish, ten ditto Bohemian, nine ditto Polish, fifteen names of stars, ten hours forging. Wednesday—Twenty-five lines Hebrew, fifty pages of astronmy, eleven hours forging. Thursday—Fifty-five lines Hebrew, eight ditto Syriac, eleven hours forging. Friday—Unwell; twelve hours forging. Saturday—Unwell; fifty pages Natural Philosophy, ten hours forging. Sunday—Lessons for Bible Class."

About this time Burritt apparently for no other reason than to try himself wrote after three months study, a letter to the President of the Antiquarian Society of Paris in the Celto-Breton tongue. We question whether there is one man in Canada who can appreciate the difficulties that had to be got over in order to do this. For the achievement he received honorable mention from the Society. "About the time of this remakable letter he began his studies of *the various languages* of the Scandinavian and Sclavonic field." Up till now, Burritt, notwithstanding all he had done and was doing, was comparatively obscure. At about this time thinking that he could add to his slender means by publishing translations, particularly from the German, he wrote to a gentleman who he thought could assist him—giving him a sketch of his life and then present views. This letter the gentleman sent to Governor Everett, and the first thing in the shape of an answer which Burritt saw, was an invitation from the Governor of the State to visit him at Boston.

Thither he went, and from then till now has, as he himself says, "laboured

under notoriety." The press became desirous of his name, and in the winter of 1842 and '43, he lectured in the principal cities of the Union no less than sixty eight times. In the spring following, he returned to Worcester and (working all the while at his trade) commenced the study of Ethiopic, Persian and Turkish. And thus passed several years. In 1844 he started a Paper called *The Christian Citizen.* To that he has sience added "The Olive Branch" "The Dove," and "The Peace Advocate."

To enlist the support of influential men to his views both on peace and postage, Mr. Burritt went to England about the year 1846, and whatever little progress the peace doctrines have made in England, are due in a large degree to the seeds which he then sowed.

JOURNAL OE MERCANTILE LAW.

QUEEN'S BENCH—HILARY TERM, 1859.

Right of Search of Public Records.

In re The Canada Trade Protection Society.

The Records of this Court are public, and such as any one has a right to search.

The Clerk may, upon payment of the usual fees, if he pleases, permit a general search of the books for a certain month, without naming any individual or individuals.

Semb'e, the regular business of the office must have precedence over that which appears to be for the purpose of private information, not connected the regular business.

Harrison made an application for the direction of the Court to the Clerk of the Crown and Pleas of this Court, to allow a person to inspect the docket books and other books of the Court containing entries of judgments for the month of December last, or to furnish the information for the said month upon the payment of the usual fees.

It was alleged upon affidavit that the clerk had declined to allow the searches to be made, or to furnish such general information.

The Court directed Mr. Harrison to give the Clerk of the Crown notice for some particular day of his application, in order that the Clerk of the Crown might be heard by Counsel, if he desired to do so.

Such notice was given, and the Clerk of the Crown informed the Court that he made no objection to allow the searches to be made, if the Court should consider that any person has a right to make a demand for such general information.

Eccles, Q.C., and with him Harrison, supported the application.

Burns, J., delivered the judgment of the Court.

The avowed object of seeking this information is that, if it be obtained, the parties intend to publish it, as they say, for the mutual protection of the members of the Society. At present we have nothing to do with any question *how far parties may or may not be liable to any individual for making* known to the world the extent of liability which the records in the office may show. No doubt the judgment books in the Crown office are to be allowed to be inspected by any one who pays the proper fees for the purpose; and the only question is, whether the wholesale or general search such as conconmplated be allowable.

We do not see upon what principle we can deny a person the right to make five hundred searches continually, any more than he could be denied five, or even one, if he asked to do so and offered the fees. It is not for the Clerk of the Crown to enquire the purpose for which the information is required. These books are public property, and required for the express purpose of affording public and general information.

In stating this, it must be understood that the Clerk of the Crown has also a right, in order to carry on the public business of the offices, to have the use of the books, and other persons have a right to make searches in those books, and the regular business of the office must have precedence over that which appears to be for the purpose of private information, not connected with the regular business. No person would be justified in claiming a right to be continually making searches, so that the regular business of the office would be interrupted or suspended.

As to the time when such general information may or can be afforded without such interruption, the Clerk of the Crown must judge. The internal economy of his office, so that the public business is efficiently carried on, is a matter for his consideration; and of course the Court will give no direction in the matter or interfere with him, unless an application be made by some matter of which any one has a right to complain, and of which the Court will take cognizance.

Subject to this duty, which we conceive is the first duty the Clerk of the Crown owes the public in the performance of the business of his office, we do not see that he can properly refuse the duty of giving or allowing such information as the public records afford, upon being paid the proper fees.

This should be governed by another principle also, which is this, if a person asks for a general search of the books for a particular month, without naming any individual or individuals, we apprehend the Clerk of the Crown may properly refuse to have his time and that of his Clerks to be taken up with giving that information. He may give the information if he pleases, but I think we should not hold him bound to do so. If the search be desired in respect of A. B., or C. D., or E. F., or five hundred persons, I apprehend the Clerk of the crown could not legally refuse to permit the searches to be made.

I think we are not called upon to make any order in the matter as it stands now.—*Law Journal.*

WARLOW *V.* HARRISON.

Auction—Sale without reserve—Duty of Auctioneer—Agent.

Where an article is to be sold by auction *without reserve*, and after a bidding is made, and before the hammer falls, the owner bids a higher sum, whereupon the article is bought in for him; the auctioneer is neither the agent of, nor is it his duty to the bidder to complete the contract on his behalf.

Lord Campbell C. J., in delivering judgment, said. The auctioneer is agent for the vendor only; but after the sale he may, at the request of the purchaser, or his representative (being present) sign a memorandum for the purchaser; he is then his agent, but for this purpose only. Further, a bidding at an auction is only an offer, not a conditional purchase; and until the hammer is knocked down, either party may retract; and as the article was never knocked down to him, the relation of principal and agent never existed between the plaintiff and defendant.

At the auction, the plaintiff bid 60 guineas for the article; the owner bid 61 guineas; and plaintiff who knew that the *owner* had bid over him, would bid no higher. The auctioneer knocked down to the owner, and said that the article was bought in. The plaintiff subsequently tendered the amount of his bid to the auctioneer and demanded the article, which was refused to be given up. The action was against the auctioneer for not completing the contract for the purchaser as alleged.

SEIZURE OF BORROWED MOVEABLES FOR RENT.

S.T. Pearce, *Plaintiff, vs.* The Corporation of Montreal, *Defendants.*—This was an action brought by the plaintiff to recover possession by *saisie revendication* of a parlor grand piano, valued at £175 currency, by him lent to one Elliot for the purposes of a concert given in the City Concert Hall, the property of the defendants. Elliot having neglected to pay the rent of the room in question, the Corporation refused to give the plaintiff his piano, unless he paid Elliot's rent; the pretension of the Corporation being that they had a legal privilege or lien upon the piano to secure the payment of the rent, and they did in fact exercise this pretended right by seizing the piano as belonging to Elliott by a writ of *saisie gagerie*. The plaintiff's pretensions, as set forth in his declaration, were simply that the piano was his property, that he had leased it to Elliott for one evening, and that the Corporation had no right to retain the piano or claim from him (the plaintiff) Elliott's unpaid rent. To this the defendants set up the usual proprietory privilage for rent, the legal existence of which the plaintiff denied. The case was heard before His Honor Mr. Justice Smith, who, by his judgment, decided that this was not a case which came within the provisions of the *Coutume de Paris*, which referred to the tenants of dwelling houses, that no

moveable effects were introduced into a concert hall *pour garnir*, which appears to be the test of the existence or non-existence of this privilege for rent

The action was therefore maintained and the defendants ordered to deliver up the piano, the whole with dsmages and cors.

This, and an almost analogueus case of Brown *vs.* Hogan *et al.*, settle the question, which is one of general importance.

JOURNAL OF BANKING, CURRENCY & FINANCE.

Monthly Averages of Canadian Banks.

Bank of British North America and Gore Bank not included.

Date. 1857.	Capital.	Discounts.	Specie.	Circulation	Deposits.
March 31.	16,119,187	33,927,218	2,025,715	11,338,376	8,306,435
April29.	16,295,597	33,232,219	2,145,249	10,859,571	8,507,157
May 31.	16,844,834	32,470,986	2,114,084	10,226,624	8,795,065
June 30.	17,246,140	32,307,199	2,210,933	10,511,876	9,650,326
July 31.	17,924.667	32,243,981	2,262,167	10,760,167	8,625,924
Aug. 31.	18,092,888	32,931,843	2,272,310	10,777,358	8,621,015
Sept. 30.	18,044.701	33,968,627	2,024,081	11,507,205	8,837,278
Oct. 31.	17,887,692	33,082,530	2,135,270	10,711,813	8,142,254
Nov. 30.	17,940,354	31,273,693	2,553,435	9,866,435	7,455,129
Dec. 31.	17,991,288	30,745,735	2,217,237	9,157,976	8,137,484
Jan. 31, 1858.	18,041,513	30,468,213	1,982,688	8,450,573	8,358,437
Feb'y 28.	18,057,669	30,758,657	2,042,757	8,477,114	7,251,386
Mar 31.	18,071,775	30,921,803	2,004,000	8,352 030	7.249,846
April 30.	18,132,587	30,713,550	1.929,948	8,348,410	7,793,577
May 31.	18,165,652	30,068,176	2,107.873	8,057,114	7,614,409
June 30.	18,326,020	30,279,684	2,152,236	8,188,288	9 159,327
July31.	17,757,635	30,300,069	2,075,230	8,438,313	8,616,399
August 31.	18,448,710	30,351.386	2,229,045	8,688,356	8,436,413
Sept. 30.	18,513,362	30,578,385	2,451,875	9,882,725	8,056,070
October 31.	18,607,010	31,365 829	2,469,191	10,571,047	8,880,820
Novem. 30.	18 639 446	31 474 245	2,496,732	10,104 005	9,434.112
Decem 31.	18,857,962	31,837,132	2,567,069	9,833,706	9 134,362
Jan. 1859.	19 025,334	33 020,906	2,652.451	9,679,391	10,204,00
Feb'y 1859	18,988,490	32,560 861	2,642,553	9,758,491	9,688,285
March 31	19,189,991	33,178,185	2,617,628	9,202,698	10,450,589

STATEMENT OF BANKS ACTING UNDER CHARTER

NAME OF BANK.	CAPITAL.		LIABILITIES.				
	Capital authorized by Act.	Capital paid up.	Promissory Notes in circulation not bearing interest.	Balance due to other Banks.	Cash Deposits not bearing interest.	Cash Deposits bearing interest
Quebec Bank.....	$ 1,000,000	$ 995,920	$ 610,063	$126,425 78	$ 282,781 06	$128,240 18
City Bank of Montreal.	1,200,000	1,196,440	469,828	47,450 88	306,256 54	252 694 41
Bank of Montreal....	6,000,000	5,928,786	2,492,315	120,512 61	1,578,888 51	1,117,318 99
Commercial Bank,....	4,000,000	4,000,000	1,455,677	343,669 69	1,029,552 88	258,469 82
Bank of Upper Canada.	4,000,000	3,126,950	2,275,025	339,293 06	2,613,498 68	1,189,901 53
Banque du Peuple....	1,200,000	1,073,950	300,895	40,372 73	248,327 66	246,732 45
Molson's Bank.....	1,000,000	911,910	385,206	26,321 57	231,342 52	106,882 99
Niagara District Bank.	1,000,000	251,734	192,332	17,932 62	26,965 17	22,388 92
Bank of Toronto	2,000,000	500,850	374,855	40,205 34	51,062 83	154,988 92
Ontario Bank	1,000,000	373,836	251,159	28,545 95	48,374 63	56,205 67
International Bank....	1,000,000	100,000	45,250	.....	6,350 00	.....
Total,.....	23,100,000	18,459,398	8,852,605	1,130,728,63	6,584,998 48	3,833,823 76

Statement of Assets and Liabilities of Banks issuing Notes under the Free

NAME OF BANK.	ASSETS.				
	Debentures deposited with the Receiver General.	Real Estate.	Furniture and other Assets	Debts due by other Banks, and Notes of other Banks.	Bills Discounted.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts
(*a*) Bank of British N. America..	478,833 33	.....	.....	.....	.....
(*b*) Niagara District Bank.....	11,670 00	.....	.....	.....	.....
Molson's Bank.....	.....	.....	.....	.....	.....
Provincial Bank.....	110,000 00	1,000 00	2,502 00	.....	31,573 48
Bank of the County of Elgin	100,000 00	.....	1,328 00	18,129 93	96,126 99
Total.....	730,503 33	1,000 00	3,830 00	18,129 93	127,700 47

(*a*) Issues $1 and $2 Notes only under the above Act.
(*b*) Withdrawing its circulation under this Act.

CHAS. CAMBIE, *Registrar.*
February, 1859.

FOR THE MONTH OF MARCH, 1859.

Total Liabilities.	ASSETS. Coin and Bullion.	Landed or other Property of the Bank.	Government securities.	Promissory Notes or Bills of other Banks.	Balance due from other Banks.	Notes & Bills discounted & other debts due to the Bank not included under the foregoing heads.	Total Assets
$1,147,510 32	$156 829 72	$14,985 40	.....	$27,236 08	36,267 66	2,074,104 64	2,309,422 50
1,136,229 83	163 211 64	34,000 00	196,638 35	84,307 34	74,533 89	1,966,774 13	2,517,865 35
5,309,031 51	693,663 69	359,997 36	602,264 00	183,366 48	322,983 65	10,118,052 52	12,280,327 70
3,087,369 39	488,899 27	205,024 17	400,000 00	137,124 82	468,905 28	6,113,587 33	7,813,540 87
6,717,717 27	679,974 73	233,139 62	1,001,34552	175,255 00	359,380 48	7,518,146 65	10,267,342 10
866,327 84	121,800 09	52,980 84	115,642 05	39,298 87	29,317 55	1,727,286 57	2,086,825 97
849,753 08	127,060 95	20,513 85	200,000 00	26,163 30	40,762 05	1,434,201 68	1,848,701 82
259,616 71	25,204 16	8,190 49	44,402 98	11,065 13	16,974 95	428,415 94	534,253 65
621,711 60	88,018 35	.....	102,100 60	11,037 32	62,880 66	916,369 66	1,180,705 99
384,285 50	38,164 59	6,716 98	43,475 00	8,154 00	17,979 16	662,936 40	777,426 13
51,600 00	21,100 00	.....	10,000 00	7,905 00	28,650 71	90,609 50	158,265 21
20,401,156 14	2,602,926 19	935,548 71	2,715567 90	711,013 34	1,758636 64	33,050,485 02	41,774,177 20

JOHN LANGTON, AUDITOR.

Banking Act, to March 31, 1859, (13th & 14th Vic., Chap. 21, &c., &c.)

Debts due by Individuals.	Specie in Vaults.	Total Assets	LIABILITIES. Notes in Circulation.	Deposits.	Debts due to other Banks.	Other Liabilities.	Total Liabilities.
$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$
.....	.....	478,833 33	159,192 00	.....	.....	.....	159,192 00
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	11,670 00	11,667 00	.....	.....	.....	11,667 00
.....	.....	.....	.....	.....	.....	.....	.....
95,735 63	5,803 49	279,614 06	138,614 00	1,000 00	.....	.....	139,614 00
3,866 04	8,896 74	228,348 30	40,620 00	31,778 43	11,239 00	39,052 82	122,690 25
192,601 67	14,700 23	998,465 63	350,093 00	32,778 43	11,239 00	39,052 82	433,163 25

JOHN LANGTON.
AUDITOR.

Business of Canadian Banks, 1859.

BANK OF UPPER CANADA.

	Capital.	Circulation.	Deposits.	Specie.	Discounts.
	$	$	$	$	$
Jan'y 31.	3,122,190	2,445,700	2 813,417	556.000	7 373,106
Feb. 28.	3,124,980	2,368,728	3,345,488	686,595	7.466,911
March 31.	3,126,050	2,275,025	4,103,399	679,974	7,518,146

QUEBEC BANK.

January 31.	991,530	560,776	523,442	204,574	1,954.596
February 28.	995,920	598 350	504,979	193,310	2,000,793
March 31.	995,920	610063	411,021	156,828	2,074,104

CITY BANK, MONTREAL.

January 31.	1,196,320	521.181	759,311	236,257	2,016,383
February 28.	1,196,320	599,974	686,147	205,824	1,985,684
March 31.	1,196,448	469,828	618,950	162,211	1,966,774

BANQUE DU PEUPLE, MONTREAL.

January 31.	968,700	332,737	580,430.	136,877	1,747,403
February 28.	973,330	323,516	533,150	113,471	1,721 424
March 31.	1,073,950	300,895	495,059	121,800	1,727,286

MOLSON'S BANK, MONTREAL.

January 31.	904.760	395 003	397,219	100,542	1,367 090
February.	909,690	399,098	484,244	88,985	1,441,962
March 31.	911,910	385,206	438,224	127,060	1,434,201

BANK OF TORONTO.

January 31.	473,610	447,888	260,072	81,411	998.022
February.	483,690	441,539	221,113	82,062	995,874
March 31.	500,850	374,855	206,630	88,018	916,369

COMMERCIAL BANK.

Jan'y 31.	4,000,000	1,544,506	1,305,237	463,994	6,130,183
Februr'y.	4,000,000	1,526,918	1,348,878	480,465	6,113.605
March 31.	4,000,000	1,455,677	1,288,021	488,899	6,113,587

BANK OF MONTREAL.

Jan'y 31.	5,927,260	2,660,331	2,896 691	775,148	9,825,511
Feb. 28.	5,928,060	2,635 361	2,804,630	715,714	10.037,477
March 31.	5,928,700	2,492,315	2,696,207	693,663	10,118,052

ONTARIO BANK, BOWMANVILLE.

January 31.	322.667	247,672	69,724	30,881	510,089
February 28.	331,744	289,564	73,295	32.067	620,558
March 31.	373,836	251,159	105,579	38,164	662,936

NIAGARA DISTRICT BANK, ST. CATHARINES.

January 31.	251,050	189,586	73,704	21,595	443,060
February 28.	251,100	170,957	55,366	22,349	428,145
March 31.	251,734	192,332	49,351	25,204	428,415

INTERNATIONAL BANK.

	$	$	$	$	$
January 31	100,000	30,000	9 027	16,262	78,873
February 28	100,000	36,156	9 368	17,050	84,080
March 31	100,000	45,250	6,360	21,100	90,609

CITY AND DISTRICT SAVINGS BANK IN MONTREAL.

The Annual General Meeting of the Patron and Honorary Directors of this Bank, was held at its office, No. 8, Great St. James Street, on Monday, the 4th day of April, for the purpose of receiving the Report of the Managing-Directors, and for the election of a new Board of Management for the ensuing year.

Alexis Laframboise, Esq, was called to the Chair, and Mr. Barbeau, the Actuary, requested to act as Secretary.

Before proceeding with his report, the Vice President read the following letter from his Lordship, the R. C. Bishop of Montreal, in answer to that addressed to him by the Actuary, inviting his Lordship to attend this meeting. The letter, which responds so generously to the sentiments of the meeting, was unanimously ordered to be printed along with the report, as forming part of the proceedings. It is as follows:—

BISHOPRIC OF MONTREAL,
April 2nd, 1859.

E. J. BARBEAU, Esq.,
Actuary, &c.,

SIR—In answer to your letter of the 30th March, inviting his Lordship, the Bishop of Montreal, to be present at the Annual Meeting of the City and District Savings Bank, to be held on the 4th April, I am instructed by his Lordship to convey his heartfelt thanks to the Directors for their courteous invitation, and to say that his Lordship will ever remember the considerate attention with which he has been honoured by the gentlemen forming the Board of Management. His Lordship has no doubt that the prosperity of the Bank is due entirely to the singularly good management which has constantly presided over its operations. The very passive part which he has been happy to take in its general welfare, can have contributed but little to so happy a result; but his Lordship would take this opportunity to assure the Managing-Directors that his sympathies, as well as any effort on his part, shall not be wanting to promote the interests of an Institution whose influence over the classes for which it is specially adapted, tends so much to foster those habits of order and economy which are ever essential to their welfare.

His Lordship regrets to be unable to respond by his presence, to the courteous invitation which he has received. He thinks that, in the interests of the Bank, (to which he is more than ever alive,) it were better for him to deny himself the pleasure which his Lordship knows he would feel, were he to be at such a meeting.

I have the honor to be,
Sir,
Your humble and obd't serv't.,
J. O. PARE,
Canon & Secretary.

Mr. Atwater then went on by reading the following

REPORT.

The Managing-Directors now submit the Thirteenth Annual Report of the affairs of this Institution, for the information of the Patron, Honorary Directors and Depositors, and have much pleasure in stating that continued prosperity has attended their operations during the past year.

The statement herewith submitted shows a handsome addition to the surplus fund, which is now above Sixty Thousand Dollars, after paying all current expenses of the Bank, and giving Two Thousand Dollars, in each of the last three years, to charitable institutions.

This large surplus, equal to ten per cent. on the Deposits, is ample security to depositors; but when combined with the strict adherence to the rules and regulations governing the management, which bind the Directors to invest only in first class Stocks and Bonds, and to make no loans without similar securities as collateral, in addition to good endorsed notes; and with a large amount of cash deposited at call in the chartered Banks, the security is beyond any contingent risk, which is most important to that class of the community for whose benefit Savings Banks are more particularly adapted.

The number of accounts standing open on the 31st December last, was 2244, closed as follows, viz:—

From $1 to $40	619		$400 to $600	143
40	80	383	600	800	63
80	100	136	800	1200	75
100	200	416	1200	1600	39
200	400	315	1600 and upwards		55

against 5054, last year.

It will be observed that the number of Depositors is gradually and largely increasing, (more than nine per cent. during the year) which is a good indication of the confidence the public have in the institution and its management.

In consideration of the prosperity of the Bank, and the desirability of its being made a more fixed and permanent Institution, the Directors have made arrangements to erect a building on the property acquired by them for that purpose from the estate Orr, on the corner of Place d'Armes and Great St. James Street; contracts have been given out and the building is to be ready for occupation before the 1st May, 1860. This will make a safe investment for a part of the surplus fund, and a much more convenient place of business for the Bank; and the building, in conjunction with that of the Liverpool and London Insurance company, (both buildings being on a uniform plan) will add much to the improvement of that part of the City where it is to be located.

The property previously purchased on the corner of Little St. James Street and Place d'Armes has been re-sold without loss.

It is much to be regretted that this Institution has lost a much and deservedly esteemed President by the death of the Hon. Joseph Bourret. His connection with the Bank dates from its establishment, and his efficiency has been highly appreciated.

The whole, nevertheless, submitted.

EDWIN ATWATER,
Vice-President.

City and District Savings Bank,
Montreal, 4th April, 1859.

CITY AND DISTRICT SAVINGS BANK.

Statement submitted at the Annual Meeting, 4th April, 1859.

DR.

To Balance due Depositors	$572,670 51
To Balance at credit of Interest, after paying all expenses,	60,576 21
	$633,246 87

CR.

By amount invested in Bank Stocks	$71,242 92	
By Public Debentures	319,865 96	
By Loans on Public Securities, with endorsed P omissory notes,	123,413 06	
By landed property belonging to the Bank	14,828 83	
By office furniture	500 00	
By cash in the City Bank and other Banks, bearing interest	103,395 95	$633,246 72

E. J. BARBEAU,
Actuary.

Montreal, 31st December, 1858.

It was then moved by Theodore Hart, Esq., seconded by Edward Murphy Esq., and unanimously resolved:—

That the Report now read and submitted, is very satisfactory, and that it be received adopted and published.

Moved by W. P. Bartley, Esq., seconded by Hubert Paré, Esq., and resolved unanimously.

That the thanks of this Meeting are justly due to the Managing Directors and Actuary, for their able management of the affairs of the Bank for the past year.

Messrs. Edward Murphy and A. Watson, having been requested to act as scrutineers, the election by ballot of the new Board, was proceeded with, when the following gentlemen were duly elected:—

Edwin Atwater, Henry Starnes, L. H. Holton, W. Nelson, M.D., A. M. Delisle, Henry Judah, Norb, Dumas, Henry Mulholland, A. Larocque, and W. P. Bartley.

A. Laframboise, Esq., the Chairman, having vacated the chair, W. P. Bartley, Esq., was called thereto, when it was moved by Wm. Bristow, Esq., seconded by A. M. Delisle, Esq, and unanimously resolved: That the thanks of this meeting be tendered to A. Laframboise, Esq, for his able conduct in the chair.

E. J. BARBEAU
Secretary

The newly elected Board having met the following day, Edwin Atwater, Esq., was elected President, and Alfred Larocque, Esq., Vice-President for the ensuing year.

STATEMENT Shewing the Amount of Original Debt of each Municipality Interest at 6 per cent. and of Sinking Fund at 2 per cent due thereon,

MUNICIPALITY.	Issued on account of Loan.	Interest from date of Loan.	
		Interest at 6 per cent.	Sink'g Fund at 2 per cent
	$	$ cts.	$ cts.
Stanstead ..... County	6800	1483 89	494 63
Shefford ..... "	100000	11059 73	4686 57
Terrebonne ..... "	94000	21150 00	7050 00
Ottawa (Division No. 2) ..... "	131600	29633 12	9874 70
Megantic (" No. 1) ..... "	5600	1176 00	392 00
Montreal ..... City	800000	122021 93	40673 97
Acton ..... Township	24000	3542 78	1180 92
St. Hyacinthe ..... Town	16000	2880 00	960 00
Sherbrooke ..... "	80000	14261 83	4753 94
Varennes ..... Village	2000	292 26	97 42
Huntingdon ..... "	7000	1050 00	350 00
Roxton ..... Township	30000	4196 69	1398 89
Lingwick ..... "	10000	1384 11	461 37
St. John ..... Village	20000	2962 19	987 39
Laprairie ..... "	4000	400 10	133 37
Tring ..... Township	20000	1610 10	533 70
St. Marie de Monnoir ..... "	4000	320 23	106 74
St. Romauld de Farnham ..... "	30000	2253 70	751 23
Shefford ..... "	57500	4319 58	1439 86
Three Rivers ..... Town	72000	3815 47	1271 82
St. Romuald d'Etchemin ..... Parish	20000	1502 46	500 82
Granby ..... Township	30000	1952 87	750 96
William Henry ..... Burrough	20000	1301 91	433 97
Ascott and Westbury ..... Township	8000	520 76	173 59
St. Jean, Isle d'Orleans ..... Parish	8000	437 27	145 75
Somerset North ..... Township	16000	719 33	239 77
St. Germain de Rimouski ..... Parish	50000	1894 50	631 50
St. Michel de Bellachasse ..... "	24000	662 78	220 92
Longueil ..... Village	12000	222 65	74 55
Basin of Chambly ..... "	10500	195 03	65 10
	1713000	239214 28	79738 36

City of Quebec ..... $50000—no interest as yet due.

NOTE.—No Contingencies or Interest on arrears are included in this Statement.

Receiver General's Office,
Toronto, 7th, April, 1859.

under the Consolidated Municipal Loan Fund of Lower Canada, the Amount of and the Amount paid in on account of same, up to 31st December, 1858.

Total at 8 per cent.	Amount paid in on account of Interest.		Total paid in up to Dec. 31st, 1858.	Difference of Interest at 8 per cent. due.	REMARKS.
	Interest at 6 per cent.	Sink'g Fund at 2 per cent			
$ cts.	$ cts	$ cts.	$ cts.	$ cts.	
1978 52	259 90	86 62	346 52	1632 00	
14746 30	923 02	307 67	1230 69	13515 61	
28200 00	.....	.....	.....	28200 00	
39510 82	.....	.....	.....	39510 82	
1568 00	.....	.....	.....	1568 00	
162695 90	62021 93	20673 97	82695 90	80000 00	
4723 70	.....	.....	.....	4723 70	
3840 00	.....	.....	.....	3850 00	
19015 77	667 13	222 37	889 50	18126 27	Paid since: $12477 50/100
389 68	111 65	37 22	148 87	240 81	
1400 00	.....	.....	.....	1400 00	
5595 58	.....	.....	.....	5595 58	
1845 48	.....	.....	.....	1845 48	
3949 58	562 20	187 38	749 58	3200 00	
533 47	160 10	53 37	213 47	320 00	169 60/100
2134 80	.....	.....	.....	2134 80	
426 97	.....	.....	.....	426 97	
3004 93	.....	.....	.....	3004 93	
5759 45	.....	.....	.....	5759 45	
5087 29	.....	.....	.....	5087 29	
2003 28	.....	.....	.....	2003 28	
2603 83	.....	.....	.....	2603 83	
1735 88	.....	.....	.....	1735 88	
694 35	.....	.....	.....	694 35	
583 02	.....	.....	.....	583 02	
959 10	.....	.....	.....	959 10	
2526 00	.....	.....	.....	2526 00	
883 70	.....	.....	.....	883 70	
297 20	.....	.....	.....	297 20	
260 04	.....	.....	.....	260 04	
318952 64	64705 93	21568 60	86274 53	232678 11	

T. D. HARINGTON,

D. R. G.

Upper Canada. MUNICIPALITY.	Loan.	Interest from date of loan	
		Interest at 6 per cent	Sinking Fund 2 per cent
	$ cts.	$ cts.	$ cts.
Port Hope.....Town.....	860000 00	223698 63	74566 20
Hope.....Township....	60000 00	21000 00	7000 00
Niagara.....Town.....	280000 00	76799 91	26266 30
Cobourg..... do	500000 00	151175 33	50391 78
Chippewa.....Village	26000 00	7680 33	2560 10
Grey.....County	16000 00	5351 01	1783 67
Bertie.....Township.....	40000 00	13699 73	4566 57
Brantford..... do	50000 00	17124 66	5708 21
Brantford.....Town.....	500000 00	139191 78	46397 25
Wainfleet.....Township.....	20000 00	6844 87	2288 28
Canborough..... do	8000 00	2738 91	914 31
Huron and Bruce .....Counties	308000 00	102717 46	34245 82
Perth .....County	88000 00	28394 28	9467 42
Perth ..... do	200000 00	67000 01	22333 33
Moulton & Sherbrooke..Township.....	20000 00	6465 87	2155 28
Paris.....Village	40000 00	13400 01	4466 66
Oxford ....County	20000 00	6226 86	2075 61
Ottawa.....City.....	200000 00	62498 63	20832 87
Prescott.....Town.....	100000 00	30909 18	10449 72
Lincoln.....County	48000 00	14504 67	5494 88
Lambton ..... do	16000 00	4847 4	1615 78
Middleton.....Township.....	5000 00	1289 59	429 86
St. Catharines .....Town.....	190000 00	50903 01	16967 66
Woodstock ..... do	100000 00	29580 83	9860 27
Stanley.....Towhship....	10000 00	3073 98	1024 65
Woodhouse ..... do	80000 00	23822 4	7940 84
Norwich..... do	200000 00	59556 17	19852 05
Cornwall .....Town.....	12000 00	3494 60	1161 53
Belleville ..... do	20000 00	5690 95	1896 98
Northumberl'd & Durham Counties.....	460000 00	89448 90	29816 30
Ops.....Township	80000 00	24216 99	8072 33
Elgin.....County	80000 00	22395 62	7465 20
London.....City.....	375400 00	86089 82	28699 93
Windham.....Township.....	100000 00	25956 17	86 2 05
Simcoe.....Town.....	100000 00	25956 17	8652 05
Lanark and Renfrew....County	800000 00	146320 00	48773 33
Brockville .....Town.....	400000 00	73160 00	24386 67
Elizabethtown .....Township	154000 00	20200 00	6733 33
Stratford.....Village	100000 00	26235 61	8745 20
Goderich .....Town.....	100000 00	26235 62	8745 20
Hastings.....County	157600 00	29504 22	9834 73
Essex ..... do	32000 00	7027 73	2342 57
Barrie.....Town.....	12000 00	2602 50	900 83
Chatham ..... do	100000 00	21 46	7082 26
Dundas..... do	52000 00	11108 07	3702 68
Guelph ..... do	80000 00	15872 89	5290 95
Peterboro'..... do	100000 00	6591 53	2197 50
Totals.....	7300000 00	1839838 42	6 99

Total Interest at 8 per cent	Amount paid in on account, Interest.		Total amount of Interest, 8 per cent p'd to 31st Dec., 1858.	Difference of Interest at 8 per cent due.	
	At 6 per cent.	Sinking fund 2 per cent.			
$ cts	$ cts	$ cts.	$ cts	$ cts	
298264 83	59038 65	19679 54	78718 19	219546 64	
28000 00	13563 95	4521 31	18085 26	9914 74	
103065 21	31573 29	10524 42	42097 71	60967 70	
201567 11	35850 90	11950 30	47801 20	153765 91	
10240 43	4849 09	1616 36	6465 45	3774 98	
7134 68	4871 01	1623 67	6494 68	640 00	Since paid.
18266 30	10526 15	3508 71	14034 86	4231 44	
22832 87	13611 95	4537 44	18149 39	4683 48	
185589 03	87611 48	29203 82	116815 30	68773 73	
9133 15	6844 87	2288 28	9133 15	.....	
3653 25	2499 93	833 32	3333 25	320 00	Since paid.
136963 28	93004 18	30041 39	123045 57	13917 71	
37861 70	28188 45	9342 81	37531 26	330 44	
89333 34	10357 44	3452 48	13809 92	75523 42	
8621 15	6465 87	2155 28	8621 15	.....	
17866 67	9302 77	3100 92	12403 69	5462 98	
8302 47	6256 86	2045 61	8302 47	.....	
83331 50	22425 37	7475 12	29900 49	53431 01	
41358 90	8137 41	2712 47	10849 88	30509 02	
19999 55	13569 67	4509 88	18079 55	1920 00	
6463 12	4367 34	1455 78	5823 12	640 00	
1719 45	1289 59	429 86	1719 45	.....	
67870 67	25421 68	8473 86	33895 54	33975 23	
39441 10	16438 89	5479 62	21918 51	17522 59	
4098 63	2463 93	821 30	3285 23	813 40	
31763 28	12465 17	4155 05	16620 22	15143 06	
79408 22	29948 99	9982 99	39931 98	39476 24	
4646 13	2784 50	928 16	3712 66	933 47	
7587 93	4552 69	1517 53	6070 15	1517 78	
119265 20	58490 87	19496 95	77987 82	41277 38	
32289 32	11472 94	3824 31	15297 25	16992 07	
29860 82	19995 62	6665 20	26660 82	3200 00	Since paid.
114789 75	48583 26	16194 94	64777 67	50012 08	
34608 22	11425 44	3808 48	15233 92	19374 30	
34608 24	10277 97	3425 99	13703 96	20904 26	
195093 33	61385 16	20461 72	81846 88	113246 45	
97546 67	15605 46	5201 81	20807 27	76739 40	
26933 33	8639 65	2879 88	11519 53	15413 80	
34980 81	4248 70	1416 23	5664 93	29315 88	
34980 82	15446 86	5112 28	20559 14	14421 68	
39338 95	17439 74	5813 24	23252 98	16085 97	
9370 30	6067 73	2022 57	8090 30	1280 00	
3503 33	2267 50	755 83	3023 33	480 00	
28328 77	10028 01	3342 66	13370 67	14958 10	
14810 75	5794 39	1931 46	7725 85	7084 90	
21163 84	6926 15	2308 81	9234 86	11928 88	
8789 03	751 47	250 47	1001 88	7787 15	
2454645 41	883098 67	293309 48	1176408 24	1278237 17	

STATEMENT of the Amounts due by the several Municipalities in Upper Canada on account of the Municipal Loan Fund, and of the amount which will be produced by a maximum rate of one shilling in the pound on the assessed annual value.

MUNICIPALITIES.	LOAN.	Arrears and Interest accrued thereon, with contingent expenses, to Dec. 31, 1858.	Interest and Sinking Fund on original loan, at 8 per cent.	Assessment.	Year.	Produce of rate, at one shilling in the £. Annual Value	REMARKS.
	$	$ cts	$	$ cts.		$	
Barrie.....Town.	12000	481 52	960	16921 20	1858	846	1s. in the £.
Belleville..... do.	20000	1654 56	1600	154497 00	1857	3254	Interest and Arrears.
Bertie.....Township.	40000	4382 06	3200	658760 00	1858	2058	1s. in the £.
Brantf rd..... do.	50000	4871 47	4000	1910904 00	1858	5971	"
Bra tford.....Town.	500000	74805 10	40000	182970 24	1858	9148	"
Brockville..... do.	400000	82286 65	32000	119170 00	1857	5958	"
Canborough .....Township.	8000	324 65	640	218256 00	1858	682	"
Chatham.....Town.	100000	15703 65	8000	75197 00	1858	3759	"
Chippewa.....Village.	26000	4000 03	2080	10593 00	1858	529	"
Cobourgh.....Town.	500000	171775 60	40000	141380 00	1857	7069	"
C rnwall..... do.	12000	1004 76	960	32092 00	1858	1604	"
Dundas..... do.	52000	7469 63	4160	85734 72	1858	4286	"
Elgin .....County.	80000	3210 12	6400	4683544 00	1858	9610	Interest and Arrears.
Elizabethtown.....Township.	154000	16145 31	12320	983638 00	1853	3074	1s. in the £.
Essex .....County.	32000	1286 36	2560	2126014 00	1858	3846	Interest and Arrears.
God rich .....Town.	100000	16324 44	8000	75100 07	1857	3755	1s. in the £
Grey.....County	16000	643 63	1280	3149800 00	1857	1923	Interest and Arrears.
Guelph.....Town	80000	12678 89	6400	78052 00	1855	3902	1s. in the £.
Has ings .....County	157600	17652 52	12608	5135892 00	1857	16049	"
Hope .....Township.	60000	12413 31	4800	1157028 00	1857	3614	"
Huron and Bruce.....U. Counties.	308000	14283 11	24640	6780994 00	1857	21190	"
ambton .....County.	16000	642 03	1280	3904305 00	1858	1922	Interest and Arrears.

Lanark and Renfrew.....Counties.	800000	121685 76	64000	3279240 00	1857	10247	Interest and Arrears.
Lincoln.....County.	48000	1963 62	3840	5135888 00	1857	5803	1s. in the £.
London.....City	375400	52772 93	30033	496507 20	1858	24825	Interest and Arrears.
Moulton and Sherbrooke.....Townships.	16800	2 23	1344	480612 00	1858	1344	1s. in the £.
Middleton..... do	3000	.....	240	....	.....	240	Interest and Arrears.
Niagara.....Town.	280000	65897 06	22400	54429 00	1857	2721	1s. in the £.
Northumberland and Durham...Counties	460000	42927 48	36800	16400000 00	1856	51250	"
Norwich.....Township.	200000	43231 61	16000	1370344 00	1850	4282	"
Ops ..... do	80000	18551 54	6400	380064 00	1858	1187	"
Ottawa.....City	200000	60126 27	16000	162458 28	1858	8122	"
Oxford.....County	20000	11 13	1600	8918684 00	1858	1611	Interest and Arrears.
Paris.....Village	40000	5746 33	3200	65505 32	1858	3275	1s. in the £.
Perth .....County.	288000	86245 73	23040	4857751 00	1858	15180	"
Peterborough .....Town	100000	8231 30	8000	74658 00	1858	3732	"
Port Hope..... do	860000	238625 52	68800	146642 00	1857	7332	"
Prescott..... do.	100000	34276 32	8000	49324 00	1857	2466	"
St. Catherines..... do.	190000	36248 34	15200	159989 10	1855	8000	"
Simcoe..... do.	100000	22868 89	8000	56657 00	1857	2832	"
Stanley.....Township.	10000	879 06	800	299143 00	1853	934	"
Stratford .....Town.	100000	22445 67	8000	37314 00	1856	1865	"
Wainfleet.....Township.	20000	15 38	1600	573480 00	1858	1615	Interest and Arrears.
Windham..... do.	100000	21232 32	8000	628130 00	1854	1963	1s. in the £.
Woodhouse..... do	80000	16564 88	6400	996256 00	1857	3113	"
Woodstock.....Town.	100000	19203 59	8000	79314 00	1858	3965	"
						281953	

T. D. HARINGTON,
D. R. G.

Receiver General's Office,
Toronto, 7th April, 1859.

(Signed,) JOHN LANGTON,
Auditor.

TRADE AND NAVIGATION.

REPORT OF THE COUNCIL OF THE MONTREAL BOARD OF TRADE FOR THE YEAR ENDING THE 31st OF MARCH, 1859.

The Council of the Board of Trade beg to submit the following Report of their proceedings during the past year :—

The Board having resolved at the last Annual Meeting, "that it be an instruction to the incoming Council to obtain information on the subject of the movement now going on throughout the Province, in favor of Protection to home manufactures, and to confer and co-operate, if possible with the Committee appointed in this city for promoting that important object, with a view to the completion of such legislative measures as may foster native industry without unduly restricting commercial enterprise," the Council took the earliest possible opportunity, after their appointment to office, of placing themselves in communication with the Tariff Reform Committee. Several conferences were held, and the following resolutions were adopted by the Council, and communicated to the committee, by whom it is believed they were deemed satisfactory :

1st. "That the Council of the Board of Trade concur in the opinion, so frequently expressed by their predecessors during the past three years, that all customs duties should be *ad valorem*, believing that system to be at once more equitable to the consumer, and better calculated to promote trade through our own channels than the system of Specific Duties.

2nd. "That the duties on articles consumed by rich and poor alike, such as Tea, Coffee, Sugar, and Molasses, should be reduced to the lowest point compatible with the exigencies of the Revenue, with the view of approximately apportioning the burden of taxation according to the ability of the subject to bear it.

3rd. "That, in the opinion of the Council, sound policy requires that raw materials shall be admitted free, or at a nominal duty, and that in framing a tariff for Revenue purposes, founded on just principles of taxation, regard should be had to the encouragement of such branches of manufacture as can be advantageously prosecuted in this country."

Contrary to the expectation founded on declarations in Parliament, referred to in the last Annual Report, the amendments to the Tariff proposed by the Government in the session of 1858, did not provide for the extension of the *ad valorem* principle to articles then subject to specific duties, and the motion of one of our city representatives to effect that important change of commercial policy, was rejected. In January last a letter was received

from the Hon. Inspector General, stating that it was the intention of the Government to recommend to the consideration of Parliament at its next Session, certain modifications of the Tariff, and requesting communication of the views of the Board on the subject. The Council replied by communicating a copy of the above recited resolutions, as indicating the general principles which this Corporation has "contended should regulate the imposition of Customs duties, so as to place the commerce of the country on a permanently satisfactory footing, and most effectually promote the interests of the entire community;" offering, at the same time, some suggestions which they thought worthy of the consideration of the Inspector General in framing his proposed measure. The Council were gratified to find that in the measure subsequently brought down by the Inspector General, and which has since become law, the *ad valorem* principle was fully recognized, and while there are many provisions in the new Tariff which they consider objectionable, they think they may fairly congratulate the members of this Board on the attainment of an object for which they have uniformly striven since the initiation of Mr. Cayley's retrograde policy in 1854—to wit, the application of the *ad valorem* principle to the entire imports of the country.

The Government of the United States having discontinued the practice that had obtained, of admitting flour ground in Canada from American wheat, as Canadian, under the Reciprocity Treaty, the Council lost no time in bringing the subject under the notice of the Provincial Government, whose exertions to procure a redress of the grievance complained of, have hitherto proved unavailing.

Complaints having been submitted to the Council of the inconvenience resulting from the length of time allowed by law to Consignees to enter their goods before they can be landed and warehoused, the Council endeavored last session to have the time reduced from five to two days—and they have recently renewed their efforts to that end.

It having been found that some of the provisions of the Act regulating the inspection of flour and meal were defective, especially those concerning the renewal of standard samples, and the adjustment of disputes between the owner and inspector, the Council, after corresponding with the several Boards of Trade throughout the Province, procured the introduction of a bill containing the requisite amendments, which became law.

At an adjourned Special General meeting of the Board, held on the 28th of April last, the following Resolutions were passed:—

1. "That this Board hereby tender their thanks to the Harbour Commissioners for their prompt attention to the important subject of a survey of the various localities, with the view of providing increased accommodation at this port, as suggested in the resolutions of this Board on the 7th July last; and after a careful examination of the Report of Messrs. Childe, McAlpin, and Kirkwood, on that part of the subject, this Board concur in opinion with the Harbour Commissioners, that the best site for the improvements alluded to is that part of the River lying between the foot of the Canal and the Victoria Bridge.

2. " That it be an instruction to the Council of this Board to request a conference with the Harbour Commissioners, to consider and decide upon the best course to pursue in bringing the subject of River and Harbour improvement before the Government."

In pursuance of these resolutions, a conference with the Harbour Commissioners was held, and a joint deputation, consisting of the Hon. John Young, on the part of the Commissioners, and of Messrs. Galt and Starnes, and the President, on the part of the Board of Trade, was appointed to wait upon the members of the Government, for the purpose of urging them to propose to Parliament the acceptance by the Province of the Lake St. Peter debt, and of obtaining their sanction to the introduction of a measure conferring on the Harbor Commissioners the requisite powers to undertake the improvements projected by them and approved by the Board of Trade. In the interview with the members of the Government, with which the deputation was honored, no explicit declaration of policy touching the assumption of the Lake debt, was elicited, though the impression was conveyed that something definite would be speedily decided upon. With regard to the new powers sought by the Harbour Commissioners, the Government preferred that the Bill for that purpose should be brought in by a private member. The bill was accordingly so introduced; but owing to the advanced stage of the Session, and the strong local opposition it excited, but little progress was made with it. The Council are still without any official intimation of the intentions of the Government with reference to the Lake debt, though they have reason to hope that some action will be taken during the present session of Parliament.

Mr. Cayley, then Inspector General, having introduced a resolution to impose a duty of ten cents per ton on all vessels coming from sea, the Council promptly petitioned against it.

A Special General Meeting was held on the 11th of June, to consider the scheme of City Taxation contained in a Bill then before Parliament, and resolutions were passed, instructing the Council to petition Parliament against the passage of that part of the Bill, and appointing a Committee "to confer with such Committee as might be appointed by the Corporation, with the view of acting with them in devising the best system of raising the necessary revenue for the City." The petition ordered by the Board was duly forwarded, and the Committee then appointed have recently submitted their report to a general meeting of the Board.

An Act having been passed to provide for the inspection of Leather, and the appointment of an Inspector, it became the duty of the Council to appoint examiners to examine candidates for the office. The requisite certificate was given to Mr Hawkins, who was favorably reported upon by the examiners, and has been since appointed by the Government.

The English Mails, under the Winter arrangements, being closed at an earlier hour than suited the convenience of those having letters to despatch, than seemed necessary to ensure their arrival at the seaboard in time for

the steamers, the Post Office authorities were communicated with, and a postponement, though not to the extent demanded, of the hour of closing was obtained.

In December last, a communication was addressed to the Grand Trunk Railway Company, enquiring whether it was the intention of that Company to bring a tract into the city, and to construct the necessary station accommodation. An answer was received, which induced the hope that steps would be speedily taken to meet the requirements of the trade of the city in this important matter; but observing that no progress had been made, the Council recently felt it to be their duty again to address the Company, and on receipt of an answer that the subject was under the consideration of the Directors, to appoint a Committee to wait upon the Managing Director, with the view of urging the matter more pointedly on his attention. That gentleman's absence from the city has rendered it impossible for the Committee to execute their mission in time to embody the result in this Report.

Considering the Bill introduced by Mr. McMicken, "to authorize the Banks to redeem their circulating notes to a limited extent in the silver coins of this Province," to be most objectionable in principle, the Council have petitioned Parliament against its passage.

The Council have to express their thanks to the Hon. John Young, for having, while recently in England, made arrangements whereby this Board will be regularly furnished with the Annual Trade and Navigation Returns published by the Imperial Government, documents of great value for the purpose of reference, and hitherto inaccessible in this country, except in the Parliamentary Library.

L. H. HOLTON,
President.

JOHN G. DINNING,
Secretary.

EXPORTS FROM CANADA IN 1856-7-8.

	1856.	1857.	1858.
	$	$	$
Produce of the Mine	165 648	286 469	314,823
" " Fisheries	456,347	540,113	718,296
" " Forest	10.019 883	11,730 387	9,447 727
Animals and their Products	2,564,059	2,107 240	2 462.765
Agricultural "	14 972.276	8.8 2 825	6 904,400
Manufactures	373 628	398,821	325,376
Other Articles	43,198	121,120	112 538
	28,595 039	24 066,975	21,285 925
Value of Ships built, Quebec	1,213.078	1,383.444	743.640
Estimated Short Returns	2,238 900	1,556 205	1,443,044
Total Value	$32,047,017	$27,006,624	$23,472,609

IMPORTS AND EXPORTS AT THE PRINCIPAL CANADIAN PORTS IN 1857–8.

	IMPORTS.		EXPORTS.	
	1857.	1858.	1857.	1858.
Belleville	$203 515	$169,428	$265,616	$592,239
Brantford	382 073	235 467		
Burwell	76,081	42,922	370 904	670,706
Bytown	283,538	320 165	36,336	88,592
Clifton	409 543	272 813	502,645	332,109
Coaticoke	146,798	183,986	1,844,902	1,184'634
Cobourg	285,692	181 867	267,098	170,005
Hamilton	3 693,091	2 100 801	1,1 5,547	962,576
Kingston	2,852,464	1.794 754	366 610	378,071
London	842 281.	589.954	196,171	289.911
Montreal	15 524.528	12,254,071	2,917.340	3 422,940
Prescott	476 422	471.062	410,300	149,134
Quebec	3,689.633	2,783 150	9,452.316	6 252,184
St. John's	75 938	66.139	1,059.415	1.327,393
Toronto	5,085 459	3,768.934	653 667	637,178
Whitby	62,550	27,559	293,482	176,422

COMMERCIAL REGULATIONS.

COLONIAL PRODUCTS AND THE BRITISH CUSTOMS' DUTIES.

The following are Resolutions moved by the Hon. Mr Rose on the important question effecting Colonial produce passing out through American ports:

1. That the geographical position of Canada, and the want of communication in winter through British territory to the ocean combine to render this Province for more than five months in the year, dependent for her trade on the ports of the United States That the construction of a line of railway through British territory to a colonial port, accessible in winter from the the ocean, is an enterprise beyond Provincial means, and that the Imperial Government, while fully admitting the importance of such communication in a national point of view, have, for the present, declined giving any pecuniary aid towards it.

2. That the city of Portland in the state of Maine, is now the winter terminus of the great line of Canadian railways which extend from the westerly boundary of the Province to the eastern frontier.

3. That the Province of Canada, in order to develop its trade and resources—to render remunerative the extensive public works already constructed, and to facilitate direct postal communication with England has by an annual payment of £55,000, subsidised a line of steamers which make weekly trips in summer to Quebec, and to Portland in winter. That in this

service Canada has to contend against subsidies granted by the Imperial Government of £200,000 to the Cunard line which plies only to New York and Boston, and further, as is apprehended, against another subsidy to the Galway Line running to the same ports.

That these subsidies operate strongly against Canada and as a bonus in favour of the cities of New York and Boston, and the United States railways leading hither.

4. That Canadian steamers and sailing vessels resorting to Portland, are dependent for return cargoes to England on the export of timber, deals and the agricultural produce of Canada, which are conveyed over Canadian railways to Portland; but that such productions though Canadian, and though shipped in British vessels, are, by the fact of their shipment from an American port, charged with the same high rate of duty at an English port as if they were the produce of the United States.

5. That this regulation operates, not only to the prejudicially to the agricultural and commercial intrests of Canada, and the Colonial railways, but so injuriously to the Canadian Line of Steamers (which, from receiving so small a subsidy, is necessarily more dependent on its freight returns than the lines subsidised by the imperial Government,) that grave doubts exist whether the Canadian service can be continued against a subsidy so disproportionate, and in the face of such impediments to obtaining cargoes of Colonial produce.

6. That an humble address be presented to Her Majesty, praying that she may cause such a change to be made either in the Law or the Custom's regulations, as will enable Colonial timber, deals, and agricultural produce of every description shipped from an American port to be admitted into English ports on the same terms and rate of duty as if shipped direct from a Colonial port.

MONEY ORDER ON ENGLAND.

We are happy to be enabled to inform our readers that by an arrangment which the Postmaster General has been fortunate enough to make with the post office authorities in England, after a lengthy correspondence, the money-order system of the two countries has been so far combined that any sum of money, from and after the 1st June next, may be transmitted by money-order obtained at any money-order office in Canada upon any money-order office in Great Britain and Ireland. At the same time the number of money-order offices in Canada will be increased.

The advantages which all who may have connections in the old country will derive from this arrangement, are obvious enough, as they will thus have the opportunity of remitting a few shillings at a time with perfect safety, to relieve distress or to discharge indebtedness, to pay premiumns on policies of assurance, and a thousand other equally desirable purposes.

For general uses, also, the purchase of books, perhaps, or plants, seeds, and similar small matters, the money-order system thus extended will be immediately available; and we have no doubt that the transmission of small sums through this convenient medium will be an important means of keeping up an interchange of benefits, social and commercial to a much greater extent than at first sight would seem possible.— Colonist.

NEW MAIL ROUTE BETWEEN ENGLAND AND CHINA.

A plan is on foot for shortening the present mail route between England and China and Japan, via India, by means of a ship canal across the Isthmus of Kraw, on the Malayan Peninsula. The necessity of circumnavigating this Peninsula, in making the voyage from Calcutta to the China sea, passing the Straits of Malacca and Singapore, is to be avoided by the proposed canal, and distance of nearly 1200 miles thus saved. The Peninsula lies between 98 and 104 deg. E. longitude, and is at least 750 miles long, with a width varying from 60 to 180 miles. The Isthmus of Kraw, the narrowest part of the Peninsula, is fortunately at its most northern extremity; and it is said, although we doubt whether any accurate survey has been made, to afford peculiar facilities for transit by means of a Canal. From the river Tavasserim, which is in British Territory, emptying into the Bay of Bengal, to another river, with but tails or rapids, emptying into the Gulf of Siam, it is said there is but a portage of 12 miles. The whole width of the Isthmus at this point is only about 50 miles.

If it be true that the transit of this Isthmus can be so readily and easily made by canal, it is surprising that the extensive commerce of those seas has not demanded the improvements ere this. There is already, we believe a commercial road across the Peninsula, somewhere near the Isthmus of Kraw, and aside from foreign commerce between India, China, and Japan, there must be considerable local trade. The Peninsula is partly governed by Malay sovereigns, but is mainly subject to the King of Siam. She Siamese occupy the Isthmus of Kraw and districts to the north of it.

This project is regarded with favour in England, and particularly in British India, as a means of accelerating the transit to China and Japan, to both of which countries all the commerce of the world is now looking hopefully. The ascendency of the British in India, and the acquisitions in China, and even in Japan, to which England is perhaps looking hopefully in the future, can only be preserved and realized though the presence of a military force, which circumstances will require to be augmented from time to time and changed from place to place. Under an emergency such as that which has recently occurred in India, the importance of saving time in the transportation of troops would render the proposed canal of great value. In a commercial point of view, the transit of the Isthmus of Kraw would conduce materially to British interests; but it may not be possible, by any means, to secure to England the commercial supremacy of the East. Whatever power or commercial in-

fluence she may retain in India, China and Japan are inviting the enterprise of other nations; and already Russia, as well as our own county, have shown a disposition to secure a due share. The French also, as we see, are striving for such a foothold of the advantages in Cochin China as will even threaten the integrity of British dominion in India.

England is more jealous of Russian than of America influence in the East. Already, Rusia has an overland route to China, which on an occasion, as our readers will remember, revealed what the London *Times* called the "ugly fact" that St. Petersburg was a month nearer to Pekin than London was, even by the Suez route. Alarmed by this fact, John Bull at once conceived the idea of paying out his lines of telegraphic wire across the Red Sea, the Bay of Bengal, the Straits of Malacca, and the China Sea, to the Celestial Empire. Even this, however, would not supersede or countervail the vigilant Czar, who, even now, as we learn recently, has on foot the construction of an overland telegraph to the Southern frontier of Siberia, and even into Nothern China, to the very wall, and it may be to the Capital itself. Our facilities of commerce with China and Japan, from our Pacific ports, will not justify us in looking with indifference upon the movements of other nations in that direction.—*Boston Courier.*

JOURNAL OF MANUFACTURES.

THE WESTERN LUMBER TRADE.

The following account of the Western Lumber Trade, from the Chicago *Press*, including the logging of the past winter, quantity of lumber cut, stocks of lumber in the west, lumbering on the Upper Mississippi, sales, freights, shipments, &c., cannot fail to be of interest both to the trade and the public generally:—

THE MANUFACTURE OF LUMBER.

SAGINAW.—At this point the manufacturers are sorely disappointed. Owing to the unusual demand last fall, and after the close of navigation, by Albany merchants, they made every arrangement to get out a full supply of logs—about 100,000,000 feet—and employed extra men, teams, and supplies for this purpose; but the entire absence of snow during the early part of the winter, and its scarcity all through the winter months, prevented them from getting out more than 60,000,000 feet—some say forty-five to fifty millions. Of course there is always more or less uncertainty with regard to the rafting of the logs down the rivers— as much depends on the water this season; but it is expected that all or nearly all the logs cut will be got down, if human energy and enterprise can effect it. There were no old logs left over last year—a circumstance that does not happen more than once in five or six years. There were, however, about, 7,000,000 to 9,000,000

feet of lumber left out on the docks at the close of navigation, which will be shipped this season, so that the shipments of lumber from Saginaw this year may be estimated at nearly, if not quite, 60,000,000 feet. How much of this sixty million will come to Chicago and other Lake Michigan ports, is a matter of mere conjecture at present. Some place it as high as 25,000,000, feet, and others—the majorty of dealers— do not place it above 10,000,000 feet. One thing is certain ; Albany, Boston, and other Eastern dealers have, during the winter, been making contracts at prices which cannot in all probability pay this season. Up to two weeks ago, the amount contracted for in this way was about 20,000,000 feet. One contract was made at $3 for culls; $6 50 for common ; $10 for third clear ; $15 for second clear ; and $22 for first clear. Another contract we know of was made at $3, $6, $13 and $19 ; while the lowest contract made, and that was only for one million feet, was at $3, $6, $12 and $18—made early in the winter. A large quantity of dry clear lumber (the three qualities) was sold about two weeks ago to a Boston dealer at $22; and another lot was sold to go up the River at $21. The manufacturers too, are all aiming to cut their lumber so as to suit the eastern markets. With such prices, of course, it is needless to expect that we will receive any of the upper qualities at this port. Some idea may be formed of the Saginaw trade this season, from the fact that one banker there had on deposit $25,000 currency, and there was not $1,000 of this amount Western bills—while usually, the great bulk of the currency at Saginaw has been Illinoise and Wisconsin money.

Green Bay.—With regard to the amount of lumber to be shipped from Green Bay this season, there are a variety of opinions—some placing it as high as 80,000,000 ft., and others as low as 50,000 000. From the facts which have come to our knowledge, however, we do not estimate the cutting over last year's yield—69,000,000 feet. Several mills which ran last year are stopped entirely ; while, from the want of snow, those mills which set out to get a full stock of logs, have been disappointed.

St. Clair River, Lake Huron, &c.—The manufacturers on the St. Clair River and Lake Huron set out at the beginning of winter to get about half the usual quanaity of logs, but they did not get more than one-forth. On Black River there was very little snow. One manufacturer in this region intended to get 6 000 logs, but he could not get over 500. At Point au Barques, the snow was deeper, and those mills which are to run have fair supplies. At Thunder Bay, there are two mills, which have got out logs sufficient for three million feet ; but they will not commence running until June.

How much of this lumber will come to Lake Michigan we cannot estimate, but it is reasonable to suppose that. with the present high prices paid by eastern and Ohio River dealers, the stock which usually comes to Lake Michigan will be very much curtailed. We know of but one contract, (for two million feet) from St. Clair River for this market, and the most recent news—that common lumber on the St. Clair River was selling at $9,00 per thousand renders it highly probable that no more contracts will oe made till the prices improve here. At Tawas, it was calculated to get about 2,500,000 ft.; but they did not get half that.

CANADA—GEORGIAN BAY, PORT BURWELL, WELLAND CANAL, &c.—In the Georgian Bay region, Collingwood, Nottawassaga, Barrie, &c., there are about fourteen mills; but on account of heavy lossess last season, a large proportion of these will stand idle this year. Among these are Harrison and Smith's mill, J. McWatt & Co's two mills, Steers & Co's mills, and two or three others, whose owners have not been named to us. But in all, it is estimated that the manufacture of this region will not exceed 25,000,000 feet, against 42,000,000 feet last year. Very little of this will come to Lake Michigan, as those who are to manufacture this year, usually sell in the Albany market.

On the north shore of Lake Erie, there was very little snow last winter, and comparatively few logs were got out. At Port Burwell, and along the Welland Canal, there were about 10,000,000 feet sent to this market last year; but this year, they will not according to all accounts, be more than 5,000,000 feet. There will be no lumber sent from Lake Ontario this season, to this market.

RECAPITULATION.—The following facts we have gleaned from reliable sources, and although in some instances they are mere estimates, yet they are generally made by men whose experience enable them to form pretty correct ideas on the subject, based on general facts. Below we give a recapitulation of the whole supply, as enumerated above:—

Saginaw	15,000,000
Green Bay	70,000,000
Mainstee	30,000,000
Manitowoc	12,000,000
Grand Traverse	8,000,000
Muskegon	45,000,000
Grand River	20,000,000
Two Rivers	5,000,000
Point Sauble and adjacent mills	10,000,000
White Lake	9,000,000
St. Joseph	8,000,000
Kalamazoo	8,000,000
St. Clair River	8,000,000
Canada	7,000,000
Total	255,000,000
To supply Milwaukee and other ports	65,000,000
Total supply for Chicago	$190,000,000

In connection with the above, however, our readers must bear in mind that the manufacture of the above amount of lumber, depends much on the state of the rivers this spring and summer, and on the prices in this market. Should the streams be low, all the logs will not be got down; and should prices only be low as last summer, many mills which are provided with logs will only run on part time. On the other hand, should prices advance so as

to make it an object to manufacturers, the amount cut may exceed the above figures. Many mills have facilities for getting logs in the summer months as well as in winter, and if there is a prospect of a good profit, they will not fail to do so.

LUMBERING ON THE UPPER MISSISSIPPI.

From all the accounts we can gather, the manufacture of lumber on the Upper Mississippi and its feeders, will be much less than usual. The "hard times" have been felt more severely there than in the region of the Lakes, and it is probable that not more than one half the usual amount will come down the river.

STOCKS OF LUMBER.

The stock of Lumber all through the West is small. At Milwaukie there is only about 12,000,000 feet against 40,000,000 a year ago. There is little or none in Racine and Kenosha, against several millions a year ago. In all the interior towns of this State the stocks are reduced to their lowest point. In St. Louis there is an unusually small amount of lumber on hand, and they do not expect to get much from the Upper Mississippi. All along the Missouri river, and in Kansas, there is but little lumber, and with the opening of business, a good demand will take place from that section. It is estimated that there are 100,000,000 feet less throughout the interior of this State than there was a year ago.

FREIGHTS—LAKE AND CANAL.

LAKE.—The freights by Lake will, in all probability, be fully as low as they were last year. We hear of no engagements; but the large number of vessels on the Lakes, with the small amount of freight to come up, renders it highly probable that freights will be low.

CANAL—The Bondholders' Trustees of the Illinois and Michigan Canal, without regard to the interest at stake, have advanced the tolls this season, 24c per thousand. This is a direct tax on the lumber dealers and consumers, and we trust the petitions now pouring in from all parts of the Illinois river, will have the effect to reduce the toll. Canal freights to St. Louis have opened at $5.00. This is supposed to be about the figure that will rule during the season, unless the tolls are reduced.

SALES OF LUMBER—SHIPMENTS THIS YEAR.

The sales of lumber in this market last year will be seen from the following table:

On hand, Dec. 10, 1857	173,474,073
Received during 1868	278,943,506
Stock of 1858	452,417,559
On hand, Dec. 15, 1858	128,456,000
Sales in this market	323,961,679
Add to this 100,000,000 sold throughout the State during the year, from the Stock on hand in January, 1859	100,000,000
Total sales in Chicago and points supplied by it	423,961,570

This shows the sales of 1858. It is conceded on all hands that the demand from the country west of us, during the present year will at least be as great as in 1858, and the probability is that the sales will be heavier. The following shows how much we will have to supply our customers:

On hand, Dec. 15, 1858	128,456,000
Probable supply this year by Lake	190,000,000
" " " Rail way	4,000,000
Total supply	322,456,000

Unless, therefore, we have a larger supply than the figures set down—190,000,000 feet—there is a prospect of a scarcity of lumber before the close of the season—provided the sales in Chicago alone amount to as much as last year. Should that be the case, however, we cannot fail to have an advance in prices—which will encourage heavier shipments from Lake Huron, St. Clair River, and other distant points, and also stimulate manufactures on Lake Michigan.

Below will be found the shipments of lumber from this city by Railways from the first of January last, up to the present date, compared with the shipments up to the 1st of April last year:

SHIPMENTS OF LUMBER FROM JAN. 1, TO MARCH 19, 1859.

	Lumber Feet.	Shingles No.	Lath No.
By Galena and Chicago Railway	6676570	3000000	677000
By Illinois Central Railway	5491255	4185000	663000
By Chicago, Burlington and Quincy Railway	4353305	2911000	469000
By Chicago, Pittsburgh, and F. Wayne	263,470		2500
By Chicago and Alton, and St. Louis Railway	1960700	894000	85000
By Chicago, St. Paul's, and F. Du Lac	606173	319000	73000
By Michigan Central Railway	162514	10000	2000
By Chicago and Milwaukie Railway	193906	147000	58000
By Rock Island Railway	1501640	2785000	220000
By Illinois and Michigan Canal	221169		
Total	21434702	14251000	2249500
From Jan. 1, to April 1, 1858	19525837	10730500	3386250

SHINGLES.

The "crop of shingles" this year will be unusually large. At nearly all the lumbering points there were collected more hands than could be employed at logging, on account of the light fall of snow; and many were thus engaged in the manufacture of shingles, which, in some places, has swelled the stock much larger than usual.

TOTAL RECEIPTS—The total receipts of shingles for the season is variously estimated at from 150,000 to 175,000,000, and some place the figures much higher. All, however, concede that the amount cannot fail to exceed last year's supply.

VALUABLE PROCESS FOR MANUFACTURING STEEL.

In a paper recently read before the Institution of Mechanical Engineers, London, the Uchatius process of manufacturing steel was described, and very high results were claimed for it. The cast-iron is first run in a molten state, from a cupola furnace, and allowed to drop in thin streams in a tub containing cold water. This operation reduces it to a granulated state, having a very extensive surface, to adapt it for decarbonization. After this, it is placed in crucibles of any requisite size and about twenty per cent. of calcined ground hematite, or oxide of iron, and five per cent. of soda or of custic lime added. The crucibles are then introduced into the furnace, and their contents gradually brought up to the melting point, and the heat increased toward the end of the operation, which lasts about three hours. During this period the scoria is frequently skimmed from the surface, and the molten metal, when ready, is poured into ingot molds. Good cast steel is made from cast iron—so it is positively asserted—by this process, and it is also stated that a bar of it one inch square—the same price as a bar of iron of the same dimensions—is three times stronger. As cast-iron contains too much carbon and other impurities, these have to be removed in converting it into cast steel.

NEW APPLICATION OF THE PROPERTIES OF HEMLOCK BARK FOR TANNING.

We have before us a phamphlet by Mr. Thomas Steers, on the subject of the patent obtained by his brother. Mr. Abraham Steers, for the Province of Canada, for producing the extract of astringent salts from hemlock bark for the use of tanners, and by its condensation, enabling the tanning principle inherent in one and half cords of hemlock bark to be contained by a forty-gallon cask, thereby making it an article of commercial export. From the certificates of practical and scientific men who have examined the process, and which are contained in the appendix, it appears that all the value is extracted without injury to the tanning principle. We cannot but consider this a most valuable discovery, if it be the means of adding an export to the wheat and timber trade, the only exports of magnitude in which the Province can confide to balance her exchanges, and especially at the present crisis, when fears may reasonably be entertained of the wheat, however promising, through the ravages of the fly—for this product is not dependent on either the season or the midge—the crop is always matured, and is the growth of almost the entire Province: the market ready and unfluctuating, and nothing wanting to mature the export; but industry, capital, and economy. The consumption is extensive beyond the conception of those who are ignorant of the tanning trade in Europe and the United States. That it bids fair to be profitable, will be manifest on consideration, that bark, the raw material, in this Province costs about $2 per cord of 2,000 lbs., while in England it ranges from £7 to £12 sterling per ton of 2240 lbs., and if Mr. Steers' calculation be correct, the hemlock bark of this Province is equal in value to

the Spanish bark imported into Great Britain, which is there worth about £7 sterling per ton. The object of Mr. Steers in placing this discovery before the public, is to raise capital to commence the operation of manufacturing the extract, and by a joint stock company, under the provisions of the Provincial Statutes of 13th and 14th Vic., chap. 27th and 28th, and of 16th Vic., chap. 172. We trust he may be successful, for we can perceive no cause why the manufacture may not become of great public value and private emolument.—*Leader.*

STATISTICS OF AGRICULTURE.

CULTURE OF BROOM-CORN.

The production of broom-corn might be rendered a very important item in the agriculture of Canada, if our farmers would devote a little attention to its cultivation. It is already produced to some considerable extent, and has invariably proved highly remunerative to those who have hitherto engaged in its production. Like many other profitable products, however, the best method of cultivation is not generally understood in this country, and we therefore commend the following description of its culture on an American farm, from an American pen, to the perusal of all those interested in the subject:

The seed is sown with a seed-barrow or drill, as early in spring as the state of the ground will admit, in rows 3½ feet apart. As soon as the corn is above ground, it is hoed, and soon after thinned, so as to leave the stalks 2 or 3 inches apart. It is only hoed in the row, in order to get out the weeds that are close to the plants, the remaining space being left for harrow and cultivator, which are run so frequently as to keep down the weeds. The cultivation is finished by running a small, double mould-board plough, rather shallow, between the rows.

"The broom-corn is not left to ripen, as formerly, but is cut while it is quite green, and the seed not much past the milk. It was formerly the practice to lop down the tops of the corn, and let it hang for some time, that the brush might become straightened in one direction. Now, the tops are not lopped till the brush is ready to cut, which, as before stated, is while the corn is green. A set of hands goes forward, and lops or bends the tops to one side, and another set follows immediately, and cuts off the tops at the place at which they are bent, and a third set gathers the cut tops into carts or wagons which take them to the factory. Here they are first sorted over, and parcelled out into small bunches, each bunch being made up into brush of equal length. The seed is then taken off by an apparatus with teeth, like a

hatchel. The machine is worked by six horses, and cleans the brush very rapidly. It is then spread thin to dry, on racks put up in buildings designed for the purpose. In about a week, with ordinary weather, it becomes so dry that it will bear to be packed closely.

"The stalks of the corn, after the tops have been cut off, are five or six feet high, and they are left on the ground, and ploughed in the next spring. It is found that this keeps up the fertility of the soil, so that the crop is continued for several years without apparent diminution. It should be observed however, that the ground is overflowed every winter or spring, and a considerable deposit left on the surface, which is undoubtedly equivalent to a dressing of manure.

"This may be inferred from the fact that some flats have been in corn every year for forty or fifty years, without manure, and with good cultivation, have seldom produced less than sixty bushels per acre, and with extra cultivation, from eighty to ninety bushels have been obtained.

"In case of need, the stalks would furnish a large amount of good food for cattle. They are full of leaves which are very nutritrive, and whether cut and dried for winter, or eaten green by stock turned on the ground where they grow, would be very valuable in case of deficiency of grass.

PLOUGH HORSES AND THEIR TREATMENT.

The treatment of the farm horse at this season of the year requires great attention, patience and labor. His work is connected either with the plow or the cart—if with the former, his legs and belly are not so much exposod to damp and mud of a sticky nature as when performing his work in the cart in a very soft and wet road. The operation of cleaning and drying cannot be attended to. here are, however, many of our farm servants who undertake the duty of driving our horses in the wagon and plough who are quite unconscious of the evils which arise from inattention to scraping and cleaning their horses after work in wet weather. The scraping knife generally used in the farm-stable is a piece of iron hoop, which will answer the purpose if properly applied, in the absence of a wooden instrument. In the case of a team having been exposed to a great deal of rain, the scraping instrument will be found exactly suited to remove the wet mud, the rain, and perspiration. The operation need not be confied to the belly of the horse, but to the neck and sides also, and other parts to which the knife may be applied. Drying is necessary before cleaning. Cart horses bave generally a large quantity of long hair attached to their heels. Where the horse, with very long hair growing from the back and hollow of the pastern is daily exposed to wet feet, the plan of partially reducing the hair will be found to hasten the process of drying, which ought to be the great object of the farm servant when engaged in whisking the horse. The following we quote from good authority: "When the horse is carefully

tended after his work is over, his legs quickly and completely dried, the less hair he has about them the better." It is the cold produced by evaporation that does all the mischief; and if there be no moisture to create evaporation there can be no cold, no loss of heat save that which is taken from the air. If there were more hair about the heels, they could not be so soon nor so easily dried. In some horses, the hollow of the pastern is very apt to crack; the unctious secretion is not sufficiently plentiful to keep the skin from cracking. This evil, with others of a more serious description, may be numbered in the train of diseases which are to be traced to bad grooming. We do not recommend that the mane and the tail of the draught-horse should be often thinned, but that they be daily combed and brushed. Heavy draught horses are very subject to colic, brought on by water after liberal feed, by exertion with a full stomach, and by a sudden change of food from hay to grass, or from oats to barley. The treament to be used in case of colic is recommended as follows, in "Stewart's Stable Economy" (where draught horses are kept, this remedy should be always at hand): "Take a quart of brandy; add to it 4 oz. of sweet spirit of nitre, 3 oz. of whole ginger, and 3 oz. of cloves. In eight days this mixture or tincture is ready for use; the cloves and ginger may still remain in the bottle, but they are not to be given. Set the bottles past, and put a label upon it: call it 'colic mixture.' The dose is 6 oz., to be given in a quart of milk or warm water every fifteen or twenty minutes, till the horses be cured. Keep his head straight and not too high when it is given. Rub the belly with a soft wisp, walk the horse about very slowly, or give him a good bed and room to roll.

"In eighty cases out of ninety this treatment will succeed, provided the medicine be got over the horse's throat before his bowels become inflamed, or strangulated, or burst. The delay of half an hour may be fatal." A disease called the *Stomach of Grass Staggers*, has been lately brought before the public by Professor Dick, of the Veterinary college, Edinburgh. The Professor describes the symptoms of the disease in a horse he had been called to see. He found his head was pressed into a corner of a loose box in which he was placed, and with difficulty could he be moved from this position. The animal appears quite unconscious; his pulse was about forty, full and strong; he would take nothing, and his bowels were inactive. He was therefore bled freely, a dose of lyxative medicine given; glysters were administered and cold water constantly applied to his head. The horse got worse during the night, and died next morning. This disease appeared as an epizootic since the summer of 1846; the season of the year, as well as the nature of the food, being concurrent with the cause. Farm horses are more liable than any others, but neither carriage nor stable horses are exempt. Rough, course grasses, which spring up luxuriantly on moist ground in hot and dry seasons, when taken into the stomach, after using hay or another kind of feed, produce staggers, from inflammation of the stomach. The principal symptom described by the Professor is that of paralysis, or want of power to direct its motions. The same disease is stated to be common also amongst cattle, but in its effects more fatal, the symptoms and causes of which we shall refer to at another time.—*Agriculturist.*

ON SOWING PLASTER.

A correspondent of the *Agriculturist* describing this process says: When your land is tolerably free from obstructions, not too hilly, and dry enough in spring for a wheel carriage to pass over it without damaging the clover; rise with the sun, or a little before it on a still morning, take a cart (as it is better to turn than a waggon,) put a barrel of plaster in the fore end of it and a shovel to fill with; fix a box or tub close by the tail board of the cart, about the height of your knees, and an old chair or seat in front of it. Fill your tub, take your seat, tell your boy to drive on, and commence sowing over the tail of the cart with both hands, just as you would do if walking and carrying the article, the difference being, that instead of walking into the dust, you are riding away from it, and by being elevated, can sow a wider cast; instead of having to go across an acre several times, while sowing it, to get your mouth, nose, and eyes, filled with dust, you may be as clean as when you began, except a little scattered upon your trousers; when the wind rises, quit, and you will do more in one morning, than in half a day by the old method.

CULTURE OF ROOT CROPS.*

The real value and importance of the culture of roots as food for stock is but little understood by American farmers. It is only within a few years, since the ravages of the potato disease have directed public attention towards finding a substitute for this valuable esculent, that the field culture of carrots, beets, turnips, and ruta-bagas, has attracted much notice in this country. The value of these roots for keeping stock through the winter, and for fattening cattle, is now beginning to be appreciated by our farmers; and a few remarks on the mode of culture and land adapted to each, as well as their relative value compared with potatoes, for which they are often substituted, may be interesting and profitable.

Turnips and Ruta-bagas—In England and Scotland turnip culture, or "green cropping," forms a very important feature in the system of farming. In no other country is the culture of turnips so thoroughly studied and so well understood. As fertilizers of this crop, they use lime, guano, and bone-dust; and the yield per acre ranges from 1000 to 15000 bushels. For all root crops a deep, well-drained soil is necessary, which should be completely pulverized and rendered mellow by the frequent use of the plough and harrow. Turnips may be grown to advantage on a heavier soil than is adapted to carrots or parsnips. Of the common varieties, the white Norfolk, succeeds best on low lands, and the Globe, or Green-top, on high and dry soils. To insure a large crop, they should be sown in drills from 16 to 20 inches apart. Turnips have an advantage over all other roots, that they can be sown so late, on ground where other crops have failed. In England large quantities are grown with early peas, being drilled in between the rows before the pea-vines are removed. For no kind of stock are turnips more val-

From the United States Reports of the Commissioners of Patents.

uable than for sheep. The unpleasant flavor they impart to butter is a serious objection to feeding them to milch cows. The cost of culture depends upon the price of labor, &c., and of course will vary in different sections of the country. The following statement of Mr. Geo. W. Wood, of Middleborough, Mass., as to the cost and product of ½ an acre of turnips, is about a fair estimate.

Soil, clayey loam; sown in drills 18 inches apart.	
Expense of ploughing 75 cents, harrowing 50 cents	$1.25
Ploughing and harrowing $1.00, 5 days' work planting, $5	6.00
100 bushels of ashes $12.10, carting the same, $3	15.10
Cultivating, hoeing and weeding	5.50
6 days' work harvesting, $6, seed 50 cents	6.50
Total	$34.35

Product, 435½ bushels; cost per bushel, about 8 cents.

MANGEL-WURTZEL AND SUGAR-BEET—The culture necessary for the beet is essentially the same as that required by the turnip. The land should be ploughed deep, using if practicable the sub-soil plough, and well manured. Common salt has been used as a fertilizer on land where wurtzels were to be grown, and the effect was to very much increase the crop. This is readily accounted for by the following statement One ton of each of these yields. of common salt, the following proportions:

	ROOTS.	TOPS.
Mangel-wurtzels - - -	5.29	12.82
Carrots - - - -	1.42	11.25
Turnips - - - -	1.49	6.15

In one instance the application of three cwt. of salt to an acre, not with the intention of benefiting the crop, but to destroy the grub-worm, resulted in an increase of the yield from twenty-six to forty tons, thus showing the necessity of supplying to plants those mineral elements essential to their growth, and which exist in the soil in minute proportions.

As the seed of the beet is inclosed in a large rough shell, it should be steeped for at least 48 hours before sowing. This is especially necessary when the ground is dry; otherwise the seed will lie a considerable time before sprouting, if it grows at all. The rows should be from 24 to 30 inches apart, so as to leave sufficient room for a horse-hoe or small plough to pass between. About 4 lbs. of seed are required to the acre. Beets are more exhausting to the land than turnips or carrots, and do not leave the ground in as good a condition for the succeeding crop. They contain more nutritive matter than turnips, and as food for milch cows, and for fattening cattle and hogs they are very valuable. The skillful fattener of stock always feeds cut hay, straw, bran, or some other dry food, along with wurtzels, turnips, and carrots, as the former contain a considerable per centage of oily matter, which contributes towards fattening the animal, and they also counteract the loosening tendency of the roots. When fed to hogs, they should

be cut fine, steamed, or boiled, and mixed with a little corn-meal or bran. In this way they will go nearly as far as the same weight of potatoes. Even supposing the nutritive power of these roots but two-thirds that of potatoes, when we take into account the difference in the average yield per acre, the balance is decidedly in favor of the roots.

Carrots and Parsnips.—Of all the root crops, carrots are decidedly the most popular in this country for field culture, and they certainly possess some advantages over all others. They are easily raised, and on suitable land yield abundantly. They grow well on light soil, where neither beets nor turnips would succeed, and, if properly managed, require no more labour in their cultivation than other roots. Almost all domestic animals eat them with avidity, and horses especially are extremely fond of them. When not very hard worked, they thrive well if fed wholly or in part on this root, and they can thus be kept through the winter in one-half the expense of feeding oats. As a winter feed for milch cows, both carrots and parsnips are unsurpassed for the quantity as well as quality of the milk and butter produced. Indeed, carrots are more generally valuable than any other roots, except the potato; and for feeding to stock, are the best substitute for this which has yet been tried.

In France, where the carrot and sugar-beet are extensively grown, the land is usually ploughed twice in the fall, and about half the manure then applied which is intended for the whole crop. It remains in this condition until spring; and then, as early as the weather will permit, it is again ploughed, after spreading on the remaining half of the manure. It is then levelled off and frequently harrowed until the soil is rendered light and friable. For carrots and parsnips, the soil should always be deep, with a sub soil through which the root can easily penetrate. As they run deep into the ground, they derive most of their nourishment from below, and do not much exhaust the organic and mineral elements in the surface soil. The seed should be sown in drills at about the same distance as turnips. The plan adopted by some is to make the rows alternately 12 and 25 inches apart, so that they can run through every second row a horse cultivator or corn-plough—and this method is found to save much labor in their cultivation. The labor and expense saved in sowing a single acre would nearly pay the cost of the drill. The next important point is to keep them free from weeds; and this is the part of their culture most dreaded by the farmer. Indeed, the fear that weeding them out will constitute too severe a tax upon their time and labor, deters many from cultivating extensively this, or any other root crop. The seed should not be sown until late in the spring, when the ground has become sufficiently warm to cause it to grow at once. They will thus get the start, and keep ahead of the weeds, and require less care. The first time they are weeded out, let them be thinned so as to stand three or four inches apart in the rows. One thorough weeding is usually sufficient, except on very foul land, which should never be cultivated in this crop. Afterwards an occasional use of the horse-hoe or cultivator is all that is necessary.

They should be allowed to remain in the ground late in the fall, as they become in some measure hardened to the cold, and keep better than if har-

vested early. They can either be piled up in the field and covered with straw and then with a thin coating of earth, or stored away in the cellar for winter use. The parsnip does not require to be taken up and stored in winter. But when the frost is coming out of the ground in spring, at a time "between hay and grass," when all kinds of fodder are getting scarce, they can be ploughed out and fed to stock, and will then be found exceedingly valuable.

RAILWAY RETURNS.

OTTAWA AND PRESCOTT RAILWAY.

CHANGE OF TIME AND REDUCTION OF FARES AND FREIGHTS.

Important alterations have been made in the running arrangements of this road. On and after Monday next, two Trains will leave each end of the line, daily. Hereafter, the Express Train will remain over night at Prescott, and the Accommodation Train at this city. This is just the reverse of previous arrangements.

The morning train, which leaves this City at 6 a. m., connects at 9. 20 with a train on the Grand Trunk, for Montreal, whose passengers arrive at 5. 15, p.m., in time to take the steamer for Quebec. It also connects with the express train going West, by which passengers arrive in Toronto at 9.30 p. m. It also connects with trains on the Ogdensburgh Road and during the season of navigation, with the St. Lawrence and Lake steamers. Passengers who wish to go down the St. Lawrence, will arrive in Montreal the same night.

The train that leaves at 2. 45 p. m., connects at 5 p. m. with the Grand Trunk express train going East, by which the passengers arrive in Montreal at 9. 30, being only six hours and three quarters going through. It connects with the Grand Trunk mail and accommodation trains going West. It takes passengers from the Upper Ottawa, an arrangement having been completed with the Ottawa steamers for that purpose.

A train leaves Prescott at 11.45, a. m., on arrival of the Grand Trunk train from Montreal, and arrives in Ottawa at 2.05, bringing passengers through from Montreal in seven hours. — It also brings passengers from East and West by the Steamers.

A second train leaves Prescott at 5 p. m., on arrival of the Grand Trunk express train from Toronto, and arrives in Ottawa at 8.40, bringing passengers through from Toronto in thirteen hours.

The fare between Montreal and Ottawa has been reduced to four dollars for first class, and two dollars for second class.

The rates of freight have been reduced to 22½ cts. for Dry Goods ; 20 cents for Groceries and general goods, and 17½ cents for Iron and heavy goods. By the new arrangements freight will be brought from Montreal in 35 hours. — *Ottawa Citzen.*

THE GRAND TRUNK RAILWAY COMPANY OF CANADA.

(Continued.)

The Western section of the line runs through a very fine country rapidly settling, but still passing for the most part through woods of oak and hard wood. The results, so far, of the working of the section from Toronto to Stratford, have been of a very satisfactory character, the produce of the land contiguous to the line, being in all cases sent by railway. But inasmuch as at Stratford the railway terminated in a wood, it was not to be expected that any but a local traffic could be obtained on that section. Now, however, that the extention to London is opened, the business over this section, not only local but through, ought to show a very considerable and important increase, for we shall have a direct connection with the Great Western Railway at that point. The advantages that this route will then offer to emigrants arriving by the St. Lawrence or at Portland, will be very great.

The middle portion of the line, viz., between Toronto and Montreal, is of a less satisfactory character, for reasons I shall presently assign. A glance at the map will show that this section of the line runs parallel with the lake and river navigation, without, as before remarked, any direct access having been made thereto, and consequently for five months in the year we are in active competition with the steam and other vessels plying between the lake ports and Montreal. How long this competition will last it is at present impossible to say, but I have strong faith in the accomodation and despatch we shall shortly be able to give to western produce destined for the Atlantic or European markets. For the remaining portion of the year the Railway is, of course, without competition; but even during the summer months it has been found that it is invariably used in preference to the steamers by business men, not only on the "up," but also on the "down" trip, and this description of traffic, particularly by the night trains, is continually increasing.

The lower sections of the line, from Montreal to Point Levi, St. Thomas, and Portland, may be said to call for no special remarks, excepting their want of connection by means of the Victoria Bridge with the western section. This link is so essential that no correct estimate of the through traffic can be formed until it is completed, and without it we shall never be able fully to take advantage of the great facilities which will be offered to Quebec shipping on the completion of the Point Levi Docks, to load and unload western goods and products. These extensive works, together with the wharves of Messrs. Forsyth & Co., and the additional accommodation, we are affording the ocean steamers at our own wharves, will undoubtedly be the means of securing to us the western-bound traffic which at present finds its way up the St. Lawrence to Montreal, so soon as our freight trains can cross the river at Montreal without break of gauge or bulk.

Since my arrival in Canada, we have resolved that Montreal, Prescott, Cobourg, and Port Hope stations, should all have direct access to the shipping on the river and lake as the case may be. That both at Portland and Quebec additional wharf accommodation should be made for the use of the Ocean steamers, as required for their weekly trips—and that such further

accommodation as was required for the Boston steamers and the craft at Portland, should be afforded. At Kingston and Port Hope the works are in a great state of forwardness. As regards the latter place, at which we connect with the Port Hope and Lindsay Railway, we shall find, no doubt, our junction of a very valuable character, as the back country for fifty miles becomes opened up to us by this feeder. The branch into Kingston will also no doubt, prove exceedingly remunerative, as it was scarcely to be supposed that we could compete with the water rates, when three miles of cartage had to be performed between the station and the business parts of the city. At Toronto the arrangements so far, have been of a temporary and tentative character, that, as much as practicable, we might ascertain by experience, what was required, before proceeding with any further large expenditure in permanent buildings. A temporary wooden building has, therefore, been erected as the general station in that city, and even this has been made a "Union Depot;" for the Great Western and Northern Railways use it with ourselves for the arrival and departure of their several trains, paying, of course, their proportion of the expenses. By the adoption of this newly-opened station, we shall soon be able to dispense with one of the two locomotive establishments formerly required in that city, and a reduction *pro tanto* in the staff formerly engaged at the Don and Queen's Wharf Stations. The completion of the Toronto Esplanade—on the centre of which the Union Station referred to stands—removes a chief obstacle formerly existing in the conveyance of through freight, as breaking of bulk in passing through the city is now happily avoided.

With regard to the more important link westward to Lake Huron from Stratford, arrangements have been concluded with Messrs Gzowski & Co., to progress at a rate which ensure its completion in time for the fall trade of 1859. Here at Sarnia, however, as before remarked, the terminus being on the shore, without any appliances for the reception of traffic, although the natural advantages possessed by Sarnia are all that could be desired—it soon became evident that still further sums of money would have to be expended at that terminal point, if we hoped to obtain any of that western traffic upon which our sources of revenue so much depended. Judicious arrangements at Sarnia, with the necessary accommodation in wharves, grainaries and elevators, none of which were provided for in the original contracts, would secure a very large share of the traffic flowing past that port during navigation, but the question soon presented itself, by what was the road to be fed during the period of closed navigation? It was evident that another independent and certain connection at all seasons of the year, with the great commercial centres and emporia of the West, had to be secured, apart altogether from our junction with the Great Western on the one side, and the Buffalo and Lake Huron on the other; and I have confidence in stating that this necessity will be best met by the construction of the proposed extension of Sarnia to Detroit, by which, according to present plans, the Grand Trunk Railway will be placed at Detroit in immediate connection with the Michigan Central, Southern and Milwaukie roads, for the western trade, and with the Northern, Indiana and Toledo roads for the Southern Cincinnati trade.

This extension is 57 miles long, and will be constructed by a distinct company; and it is proposed that the Grand Trunk shall work it at the rate of

50 per cent. of the receipts, by which the company will for ever secure an independent connection with the vast producing districts of the West.

I have already referred to the Victoria Bridge and the important bearing it has upon the whole of this undertaking as a commercial success. Its absolute necessity is becoming day by day more palpable, and it is to be hoped that the recent arrangement entered into with Messrs. Peto & Co. for its completion by the end of next year, will be found to be susceptible of accomplishment, not only on account of its direct importance to the traffic of the line, but also as regards the large sum annually added to the capital by reason of the interest payable by the company until its completion. And on this subject I cannot too strongly congratulate the directors on the vigorous exertions now being made for the execution of the contract for completing this all-important link, by which the whole railway system of the Province will be completed at least eighteen months earlier than intended.

Thus, then, it may be hoped, that at the close of the year 1859, the Grand Trunk system bids fair to be a continuous railway from Detroit to Portland and Rivièr du Loup, upwards of 100 miles below Quebec, the total cost of which, as before said, will be as nearly as can now be estimated, capitalising the rent of the Portland section, about £10,700,000, or about £10,000 per mile, including the Victoria Bridge. The total mileage will be increased by the Detroit Extension to 1,114 miles.

It has been already shown that, from want of a continuity in the link, and the absence of the necessary facilitses for conducting a large traffic, no estimate can be fairly formed from past receipts of the future business of the railway, but as £20 per mile per week will, after deduction of working expenses, provide for the lease of the Portland Road, and the interest on the bonded debt, any surplus will be applicable to a dividend on the share capital of the company.

Our best energies are now directed to reduction in expenditure, and to show that progress is being made in the right direction, I may mention, that a diminution at the rate of £80,000 per annum, has been made in the last half-year—the actual working expenses amounting to £11 4s. 6d per mile, per week, for half-year ending 31st December, 1857, whilst for half-year ending 30th June, 1858—by far the more expensive half-year of the two—the expenses were reduced to £9 18s per mile, as appear by the half-yearly accounts just published. On this point I beg to refer you to the report of Mr. Trevithick, the Locomotive Superintendent, who has most usefully devoted his energies to economy in his department: and I would further refer you to an extract from the general report of Mr. Shanly, Chief Engineer and General Manager, in reference to the future prospects of the line.

The daily improving resources of the eastern Townships of Canada, and of the eastern States of the Union, afford prospects of a ladge interchange of business being done over the Grand Trunk Railway, between the western cities and the Atlantic ports, by which we shall secure a back loading for our cars bearing to the Atlantic ports the produce of the West. The development too which has yet to take place in the working of the minerals, slates, and marbles, with which Canada abounds, cannot fail to be productive of a large

increase to our local business, whenever it is commenced. The great drawback hitherto experienced in our through traffic, has been the fact that the cars had to be returned empty from the seaboard to our western terminus; but the business likely to be done in the slate and other produce, will give us articles for back freight, and thus enable us the more easily to compete with the water craft—so long as such competition exists—for the western traffic.

In speaking, however, of the western traffic being brought *via* the Grand Trunk, it must not be forgotten that in the long established ports of New York and Boston we have the greatest competitors, as neither Montreal, Quebec, nor Portland, can at present offer the facilities and accommodation; but the saving in time, however, effected by the Grand Trunk route, must attract attention to Montreal and Quebec, and doubtless ere long, these cities will become the great granaries of North America during the winter months.

The recent reports of a commission, composed of three most distinguished engineers in the United States, on the harbour of Montreal, as the point of interchange of ocean and inland traffic, conclusively show that the St. Lawrence valley is destined to become the highway of the commerce passing between the two hemispheres, as beyond all question it possesses the best railway and water communication between the east and the west; and it is clear that Montreal and Quebec enjoy geographical advantages not possessed by any other ports for the delivery of western produce for European markets, and for the consumption of the eastern States of the Union. In the reports referred to, I find the following interesting observations bearing on this subject:—

"The trade of the port of New York has been long well matured. For a great length of time no burthensome restrictions have existed to discourage her commerce. She has been to all the nations of the world a free port, and her position, as regards the inland trade of the lake basins, which her canals have controlled since 1830, aided by a harbor of easy access, has made her familiarly known to the ships of all nations. Her connections with the interior are equally well developed, and a long experience has systematised her forwarding facilities and reduced the cost and charges of transportation from the interior to a minimum. Vessels coming to the port from sea are sure of a cargo of some kind home or coastwise to other ports. In the same way steam vessels and canal barges from the interior lakes and rivers, as well as coastwise, can always count on a return of freight more or less, from that accumulation of foreign merchandise which is delivered at New York to meet the consumption of the Western States, of the State of New York, and of a considerable portion of the Province of Canada. At the Port of New York every facility, growing out of a long and large experience in both the interior and the ocean trade, is thus well understood. The Port of Montreal, on the contrary, is thus very far deficient in similar advantages. It is but nine years since the restrictive laws of Great Britain, as regards foreign shipping entering the Gulf of St. Lawrence, were removed. Previous to that time no foreign vessel entered that port. The trade was entirely carried on in British bottoms, and was hampered with conditions, which cramped and depressed it, increased the costs of foreign stuffs, and, so far as any commercial regulation can produce such effects, suppressed the commercial capabilities of the

Provinces, and discouraged mercantile enterprise. This exclusion of all foreign vessels kept that large portion of the commercial marine, including all United States' ships, ignorant of the navigation of the Gulf.

"The entire absence of lights until very recently, gave to the imperial policy a tendency to discourage a wide knowledge of its waters, and gave to the navigation a bad name which it was the interest of the few ships that monopolised its trade to increase. In 1851 there was not one light-house on the North Shore between Quebec and Belle Isle, a distance of eight hundred miles; add to this that the canal improvements on the St. Lawrence have been but recently completed, and that Montreal could not command an interior trade of any consequence until these were, not merely in regular operation, but well known to shippers on the lakes, and the resources and convenience of the port will be sufficiently understood. The railway communication between Montreal and the interior has been open scarcely two years, while from New York it has been open from ten to fifteen years. Above Montreal the canals around the rapids are on a scale now to pass steam vessels of 800 tons burthen. Below Montreal the river has been deepened within the last four years, from eleven feet of water on the bars to eighteen feet of water. Ten lights are now established between Quebec and the mouth of the Gulf, and others are about being constructed, rendering that navigation now comparatively safe. Steam-tugs, established by Government, are stationed at Quebec, and operate below that city, affording facilities equal to any other port, to vessels navigating the Gulf waters."

I must not conclude the subject of traffic without congratulating the Directors on the great regularity with which all the trains of the Company have been run, and the happy immunity from accidents that we have experienced.

Nor must I omit to mention the progress which has been made in an accelerated communication between Canada and England. The Provincial Government, alive to the important of forming an independent regular line of steamers to England, the shortest route between the two continents being admittedly *via* the St. Lawrence, (Quebec being 400 miles nearer to Liverpool than any other Atlantic port,) has granted a subsidy of £50,000 per annum, for a weekly line between Liverpool and Quebec and Portland, which will commence next year. The possession of this independent oceanic line affords the Grand Trunk Railway the most direct and expeditious route between New Orleans and Chicago, and Liverpool. This is essentially a foreign traffic, and time will be required to change it from its present channels; but in our local traffic a much more rapid development may fairly be expected from the numerous manufactories springing up alongside of the railway, and the Directors in Canada, fully alive to the importance of the support of native industry, have wisely determined, whenever practicable, to patronise home manufactures, and to hold out every inducement for manufacturers in all trades to settle along the line of railway.

Already we have succeeded in obtaining, near Toronto, a branch establishment of a large New York firm for the manufacture of a patent oil now in general use on American railways, and which we consume in very large quan-

tities. The same may be also said as regards the manufacture of railway wheels, as the districts of Three Rivers and Marmora, abound in the richest iron ore.

In the preceding remarks I have addressed myself more particularly to those branches of the subject which concern our present returns and prospects, or which are embraced in the consideration of the extensions to the westward now under contract. But it should be borne in mind, that while we have every reason to expect that increased facilities, and a more thorough appreciation of the advantages which railroads in all parts of the continent offer to the public in their rapid and assured mode of communication, will result in a more general use of the Grand Trunk than is at present resorted to:—we have the certainty before us that large portions of the still unoccupied land which the road skirts at intervals, in its course from east to west, and the vast untouhced tracts to the north, to which through its numerous feeders and connections it may be said to lead, will rapidly fill up and furnish their quota of support to what must constitutute in all time to come, their main business communication. It were needless to hazard a conjecture as to the precise period when these anticipations will be realised, but which under no circumstances can be remote, if we may argue of the future from the progress which Canada has exhibited since the union of the two Provinces. Nor can we doubt that the throwing open the Red River and Sascatchewan Valleys, and the territory still further to the west, will give accelerated action to the settlement of the lands lying between them and the Atlantic. The population of Canada, referring to documents which have been laid before the Provincial Parliament, appears to have increased in the ratio of 75 per cent. in each period of eight years since the union, and may be now estimated at little short of three millions of people. In other words, equal to the population of England in the time of Henry VII., or that of the United States at the period of the War of Independence.

During the same period the imports of the Province have nearly quadrupled, and the exports have increased from £1,570,000 and £1,603,000 in 1842 and 1843, to £8,011,000 and £6,752,000 in 1856 and 1857, or upwards of fourfold, while the revenue of the Province has grown from £365,000 to an average taken from the last five years of £1,180,000.

It may be said that the grand railway system completed by the Grand Trunk Company, was projected a little in advance of the times as they then were in Canada, but every day is now affording conclusive proof that nothing in her history has so tended to her advancement as the possession of this highway, extending as it does from her eastern to her western extremities, and affording a means of inter-communication between her citizens so essentially necessary to her prosperity. And on the completion of the line, I have not a doubt but that as a commercial enterprise, time is alone required to work out the complete success of the undertaking.

One thing is certain, and it is that the proprietors have a line of a character in point of durability and finish of works, quite unexampled on the American

Continent, whilst its continuity, coupled with its great length, being under one management, will afford facilities for the transport of psssengers and freight, possessed by no other line in America. The bridges, stations, and structures, generally are built of masonry and wrought iron, wooden erections being with us the exception instead of the rule, as with our American neighbors. As regards the permanent character of the plant, it is of most approved description and in the best working order; and arrangements are now perfected for the conveyance of all freight likely to be offered, whilst the breaks remain at Montreal and between Sarnia and Detroit. To complete these links and otherwise make additional arrangements for securing the western traffic, it is necessary that the unissued capital should in some way be realised.

In conclusion, I beg to call attention to the very satisfactory report of our locomotive superintendent, appended hereto, as also the extract from the report of our traffic manager referred to, and I have the honor to be,

Gentlemen,

Your obedient servant,

T. E. BLACKWELL.

London, 30th September, 1858.

GRAND TRUNK RAILWAY RETURNS.

	1858	1859.
Week ending March 26	$50,383 11	$51,664 54
" April 2	46,304 35½	51,544 10½
" " 9	47,839 08½	49,068 19
" " 16	49,356 39	46,963 46

GREAT WESTERN RAILWAY RETURNS.

	1858.	1859.
Week ending April 1	$57,064 73	$40,538 94
" " 8	58,336 80½	40,868 14
" " 15	53,483 34	36,930 40
" " 22	50,460 88	37,126 65½

BANK NOTE REPORTER.

BANK OF BRITISH NORTH AMERICA

HEAD OFFICE—London, England. Charles NcMab, *Secretary.*
Head Office in the Colonies—Montreal. T. Paton, *Gen. Manager.*

			DISCOUNT IN Montreal.	Toronto.
BRANCH at	Montreal.	Robert Cassels, Manager	par	par
" "	Brantford.	James C. Geddes, Mang'r	½	par
" "	Halifax, N. S.	S. N. Binney, Mang'r	5	5
" "	Hamilton.	Geo. Taylor, Mang'r	½	par
" "	Kingston.	Samuel Taylor, Mang'r	½	par
" "	London, C.W.	Walter Watson	½	par
" "	Quebec.	C. F. Smith. Acting Manager	par	par
" "	St. John, N. B.	Thomas Christian	5	5
" "	Toronto.	W. G. Cassels, Mang'r	½	par
Agency at	Dundas.	W. Lash, Agent	½	par
" "	Ottawa.	A. C. Kelty, Ag't	½	par
Agents in	NewYork.	R. C. Ferguson, F. H. Grain.		
" "	Scotland.	National Bank of Scotland, and Branches.		
" "	Ireland.	Provincial Bank of Ireland, and Branches.		
" "	West Indies.	Colonial Bank.		
" "	Australia.	Union Bank, and Branches.		
" "	Vancouver	Bank B. N. A.		

BANK OF THE COUNTY OF ELGIN.

(Notes secured by deposit of Government Securities.)
Head Office—St. Thomas, C.W. Edward Ermatinger, *Mang'r* ½
All Foreign business transacted through the Commercial Bank of Canada.

BANK OF MONTREAL.

			DISCOUNT IN Montreal.	Toronto.
Head Office—Montreal.		Hon. P. McGill, *President.* D. Davidson, *Cashier*	par	par
Branch at	Montreal.	E. H. King,	par	par
Branch at	Quebec.	J. Stevenson, Manager	par	par
" "	Toronto.	R. Milroy, Mang'r	½	par
" "	Hamilton.	G. Dyett, Mang'r	½	par
" "	London, C.W.	Wm. Dunn,	½	par
" "	Brockville.	F. M. Holmes, Mang'r	½	par
" "	Kingston.	A. Drummond, Mang'r	½	par
" "	Cobourg.	C. H. Morgan, Mang'r	½	par
" "	Belleville.	Q. Macnider, Mang'r	½	par
" "	Bowmanville.	W. R. Dean, Mang'r	½	par
" "	Brantford.	A. Greer, Mang'r	½	par
" "	St. Thomas.	E. M. Yarwood, Mang'r	½	par
" "	Ottawa (late Bytown).	P. P. Harris, Mang'r	½	par
Agency at	Woodstock	W. J. Buchanan, Agent	½	par
" "	Cornwall,	W. Mattice, Agent.	½	par
" "	Whitby.	Thos. Dow, Ag't	½	par
" "	Peterboro.	John Travers, Ag't	½	par
" "	Goderich.	H. McCutcheon,	½	par
" "	Simcoe.	S. Read, Ag't	½	par
" "	Port Hope.	R. Richarson, Ag't	½	par
" "	Picton.	J. Gray, Ag't	½	par

BANK OF MONTREAL (CONTINUED.)

				DISCOUNT IN Montreal.	Toronto.
Agency at	Guelph,	R. H. Moore,	.....	¼	par
" "	Lindsay,	Hartley Dunsford,	.....	¼	par
" "	Perth	M. Stevenson	.....	½	par
" "	Windsor,	A. Macnider	.....	½	par

Agents in London—The Union Bank of London
" " Liverpool—The Bank of Liverpool.
" " Edinburgh—The British Linen Company, and Branches.
" " Glasgow— Do. do. do. do.
" " New York—R. Bell and J. Rae.
" " Boston—The Merchants' Bank.

BANK DU PEUPLE.

			DISCOUNT IN Montreal.	Toronto.
Head Office—Montreal.	J. DeWitt, *President.*			
	B. H. Lemoine, *Cashier*.....	.....	par	par
Agents at	Toronto,	E. F. Whittemore & Co.		
" "	Quebec,	Quebec Bank.		
" "	Bowmanville,	John Simpson.		
" "	London, Eng.,	Glynn, Mills, & Co.		
" "	New York,	Bank of the Republic.		

This Bank issues no notes at its Agencies.

BANK OF UPPER CANADA.

				DISCOUNT IN Montreal.	Toronto.
Head Office—Toronto, C. W.		Wm. Proudfoot, *President.*			
		T. G. Ridout, *Cashier*.....	.....	½	par
Branch at	Brockville ...	R. F. Church, "	.....	½	par
" "	Hamilton ...	Alfred Stow, "	.....	½	par
" "	Chatham ...	C. P. Issen, "	.....	½	par
" "	Kingston ...	W. G. Hinds, "	.....	½	par
" "	London ...	Jas. Hamilton, "	.....	½	par
" "	St. Catharines	H. C. Barwick, "	.....	½	par
" "	Montreal ...	E. T. Taylor, Manager	.....	par	par
" "	Quebec ...	R. S. Cassels, "	.....	par	par
Agency at	Barrie ...	E. Lally, Agent,	.....		
" "	Belleville ...	E. Holden, "	.....	½	par
" "	Clifton ...	James Macklam "			
" "	Goderich ...	John McDonald "			
" "	Lindsay ...	J. F. Hopkins "			
" "	Niagara ...	T. McCormick "			
" "	Ottawa ...	Thomas Gem.			
" "	Port Hope ...	J. Smart "			
" "	Sarnia ...	Alex. Vidal "			
" "	Stratford ...	J. C. W. Daly "			
" "	Three Rivers, C. E.	P. D. Dumoulin "			
" "	Windsor, C. W.	Thos. E. Trew "			
" "	Picton,	D. Barker "			

BANK OF UPPER CANADA (CONTINUED.)

			DISCOUNT IN Montreal.	Toronto
Agents at	Albany, N. Y...	Bank of the Interior.		
" "	Boston ...	Blake Howe & Co.		
" "	Edinburgh ...	British Linen Company.		
" "	London, Eng...	Glyn, Mills & Co.		
" "	" "	Coutts & Co.		
" "	" "	Barclay, Bevan, Tritton & Co.		
" "	" "	Bank of London.		

BANK OF TORONTO.

			DISCOUNT IN Montreal.	Toronto.
Head Office—Toronto ...		J. G. Chewett, *President.*		
		Angus Cameron, *Cashier*	½	par
Agency at	Barrie ...	Angus Russell, Agent.....		
" "	Cobourg ...	J. S. Wallace, "		
" "	Newcastle ...	Alexander Smith, "		
" "	Peterboro ...	Alexander Monro "		
" "	Oakville ...	John T. M. Burnside "		
Agents at	London, Eng...	City Bank.		
" "	New York, U.S.	Bank of Commerce.		

CITY BANK, MONTREAL.

			DISCOUNT IN Montreal.	Toronto.
Head Office—Montreal.		Wm. Workman, *President.*		
		F. Macculloch, *Cashier*	par	par
Branch at	Toronto ...	Thomas Woodside, Manager.....	½	par
" "	Quebec ...	Daniel McGee, "	par	par
" "	Sherbrooke ...	W. Ritchie, "	no issues	
Agent at	Dublin ...	National Bank of Ireland.		
" "	London, Eng...	Glyn, Mills & Co.		
"	New York ...	Bank of the Republic.		

INTERNATIONAL BANK.

Capital, $1 000,000.

Head Office—Toron'o. Wm. Fitch, *President.* J. H. Markell, *Cashier*.....½ par
Agents at New York, Metropolitan Bank.

COLONIAL BANK OF CANADA.

Authorized Capital, $2,000,000.

Head Office—Toronto. A. M. Clark, *President.* ———, *Cashier.*
This Bank is not yet in operation.

COMMERCIAL BANK OF CANADA.

(*Formerly Commercial Bank of the Midland District.*)

			DISCOUNT IN Montreal.	Toronto.
Head Office—Kingston.		Hon. John Hamilton, *President.* C. S. Ross, *Cashier*	½	par
Branch at	Belleville ...	Andrew Thompson, Manager	½	par
" "	Brockville ...	James Bancroft "	½	par
" "	Galt ...	William Cooke, "	½	par
" "	Hamilton ...	W. H. Park, "	½	par
" "	London ...	J. G. Harper, "	½	par

		DISCOUNT IN	
		Montreal.	Toronto
Branch at Montreal,	Thomas Kirby,	par	par
" "	Port Hope, W. F. Harper	½	par
" "	Toronto, C. J. Campbell	½	par
Agency "	Chatham, Thomas McCrae		
" "	Ingersoll, W. Sage		
" "	Perth, James Bell		
" "	Peterboro, Wm. Cluxton		
" "	Port Stanley, E. C. Warren		
" "	Prescott, John Patton		
" "	Stratford, George C. Small		
Agents "	Albany, Bank of the Interior		
" "	Boston, Merchants Bank		
"	Dublin—Ireland; Boyle, Low, Pim & Co		
" "	Edinburgh—Scotland; Commercial Bank of Scotland.		
" "	Glasgow " Clydesdale Banking Company.		
" "	London—England; London Joint Stock Bank.		
" "	New York, Merchants Bank.		
" "	Windsor, G. W. Macdonald.		

GORE BANK.

		DISCOUNT IN	
		Montreal.	Toronto.
Head office, Hamilton, A. Stevens, *President.* W. G. Crawford, *Cashier.*		½	par
Agency at Chatham, C. Warteriss,	Agent		
" " Galt,	" John Davidson "		
" " Guelph,	" T. Sandilands "		
" " London,	" "		
" " Paris	" James Nimmo "		
" " Simcoe,	" D. Campbell "		
" " Woodstock,	" James Ingersoll "		
Agents " Albany, N. Y.; New York State Bank			
" " Edinburgh, Scotland,—Union Bank and Branches.			
" " London, England,—Glyn, Mills & Co			
" " New York, Ward & Co., and Merchants Bank			

MOLSON'S BANK.

	DISCOUNT IN	
	Montreal.	Toronto.
Head Office—Montreal, Wm. Molson, *President*; W. Sache, *Cashier.*	par	par
Agency at Toronto, John Glass, *Agent*	½	par
Agents at Boston, U. S.; J. E. Thayer & Brother.		
" " New York, Mechanics Bank.		
" " London, England; Glyn, Mills & Co.		

NIAGARA DISTRICT BANK.

Head office—St. Catharines. Hon. W. H. Merritt, *President.* C. M. Arnold *Cashier.*

Agency at Ingersoll, C. E. Chadwick, *Agent.*

Agents.—London, England,.....Bosanquet, Franks & Co.,
New York.....Bank of the Manhattan Co.

This Bank was established under the Free Banking Law of Canada, in 1854, but was incorporated by Act of Parliament in 1855, and is now one of the chartered Institutions of the country.

ONTARIO BANK.

		DISCOUNT IN	
		Montreal.	Toronto.
Head Office—Bowmanville ...	Hon. John Simpson, *President.*		
	D. Fisher, *Cashier*	½	par
Agent at New York ...	Bank of the Republic.		
" " London, Eng. ...	Glyn, Mill & Co.		

PROVINCIAL BANK—STANSTEAD.

(*Notes secured by deposit of Provincial Securities.*)

	DISCOUNT IN	
	Montreal.	Toronto
Head Office—Stanstead, C. E.,—W. Stevens, *President*,.....	½	5
J. W. Peterson *Cashier*.....		
Agents in Montreal.....J. D. Nutter & Co.		
" New York.....		
" Boston.....		

The notes of the Provincial Bank are not taken in deposit by any of the other Banks or Branches—the Brokers in Montreal redeem them at one-half per cent. discount. In Toronto and other western cities they are bought in large sums at two and one-half, and, in smaller amounts, at five per cent. discount.

QUEBEC BANK.

	DISCOUNT IN	
	Montreal.	Toronto.
Head Office—Quebec, James Gibb, *President*—C. Gethings, *Cashier*	par	par
Branch at Toronto, W. W. Ransom, Manager..	½	par
Agency at Montreal, Banque du Peuple, Agents		
" Ottawa, H. V. Noel, "		
" Three Rivers, John McDougall, "		
Agents at Fredericton, N.B. ; Central Bank, "		
" London, England ; Glyn, Mills, & Co., "		
" New York, U. S. ; Maitland, Phelps, & Co.		
" St. John, N. B. ; Commercial Bank, New Brunswick ...		

ZIMMERMAN BANK.

Head Office—Clifton, C. W.—Jos. A. Woodruff, *President.*
J. W. Dunklee, *Cashier.* ½
Agents in New York, Atlantic Bank.

PRIVATE BANKERS AND EXCHANGE BROKERS.

MONTREAL.—C. Dorwin & Co., St. Francois Xavier Street.
" J. D. Nutter & Co., Place D'Armes, Publishers of C. M's Bank Note Reporter.
" Geo. W. Warner, St. Francois Xavier street.
" D. Fisher & Co.,
" J. E. Malhiot.

COMMERCIAL SUMMARY AND REVIEW.

REVIEW OF THE TORONTO MARKETS.

Toronto, April 30th, 1859.

We continue to have very dull times in the city. Business in merchandise is limited, and the spring purchases fall much short of the usual amount, consequent upon the scarcity of money in the country, and the determination of dealers to sell only to the best men. In produce the business is very light. The attendance of farmers on the market is very small for the season of the year, and will now be less as they are busy in their plowing and sowing. The reports from all parts of the country concerning the growing crop of wheat is very cheering. From almost every locality we hear of favourable news, and Farmers begin to congratulate themselves that the most critical period for the growing crop is past without damages.

WHEAT remains much as last month. The quantity brought in is insufficient to cause any anxiety on the market and there is little or no competition. The demand is very steady and not at all affected by the movements in other markets. For very prime wheat $1 60 (8s) has been paid freely but the relative quantity of prime sample brought in this week is much smaller than usual, and the average is therefore lower, say $1 57 (7s 10d) per bushel—medium and common lots have brought from 7s 3d to 7s 9d per bushel, inferior 6s 6d to 7s. The receipts of the whole of the present week do not exceed one thousand bushels, and the market closes very dull.

SPRING WHEAT is in very active request, and for samples fit for seed 7s a 7s 6d has been paid ranging from that to 6s 9d. Scotch Fife Wheat is much enquired for from dealers at 8s a 8s 9d but it is very scarce and cannot be had except when a load is brought in by a farmer.

FLOUR is dull, and from the absence of sales in large lots is a most unquotable. The accumulation here, about 15,000 barrels, has not materially diminished by shipments till Spring and as yet we have no sales for export, to report. The present wholesale quotations are therefore nominal at $6 a $6 25 for Superfine, and some held as high as $6 50 per barrel; Fancy $6 50 a $6 75; Extra $6 75 a $7 per barrel.

OATS are firmer, and 3s per bushel has been paid in several instances to farmers, the price most current ranging from that down to 2s 10d per bushel.

PEAS are more active, and 4s a 4s 6d is the frequent rate for the best samples.

BARLEY and RYE are both in very poor supply at 3s 6d to 4s per bushel.

TIMOTHY SEED is not so firm and purchases of the best varieties could be made at $1 75 a $2 20 per bushel.

CLOVER SEED is in good demand and is held firmly at $1 50 a $6 per bushel, the first being the wholesale price.

POTATOES are more plentiful, and very good varieties only bring 3s 6d a 3s 9d per bushel. Common kinds are worth 3s a 3s 3d per bushel.

APPLES remain scarce at $5 per barrel. ORANGES $4¼ to $5 per box. LEMONS $4 per box.

MEAL remains as before. Oatmeal is scarce at $7 25 a $7 50 wholesale, and $8 retail, per barrel.

FAMILY FLOUR moves as freely as usual at $7 per brl, for good Family brands; and $7 50 for the best Extras.

BUTTER.—Fresh butter continues scarce at 1s 3d to 1s 5d per lb for the best. Tub butter of No. 1 quality is worth 20c (1s) per lb. Of No. 2 there is a large stock in the market which is dull of sale at 12½c per lb.

CHEESE.—Prime American cheese is now held at $12 to $12 50 per 100 lbs.

EGGS are plentiful at 9c to 10c per dozen wholesale, and 10c to 12½c retail.

POULTRY is more freely brought in, and finds moderate sale at 2s to 2s 6d per pair.

PORK.—Smoked hams per 100 lbs, $11 50 to $12 50 cured do, $9 to $10; sides, $8 to $9; mess pork, per barrel, $17 to $18; prime mess, $14 to $15; prime, $12 to $13. The inside figures are the wholesale rates. There is not much doing, the stock on hand being about equivalent to the year's consumption.

BEEF.—For the best qualities of cattle there has been an active demand for the Eastern market, and from $8 to $9 per 100 lbs has been paid for the best beasts. For ordinarycattle $7 to $7 50 per 100 are the rates.

CALVES plentiful, and good ones have been boughta t from $3 to $5 each.

HAY is scarce at $20 a $26 for the best, and $15 a $19 for common per ton.

REVIEW OF THE MONTREAL MARKETS.

BOARD OF EXCHANGE, April 29, 1859.

FLOUR.—Very little good Superfine to be had. With inferior the market is overstocked. Canadian is in demand. Our quotations remain without alteration, except for Fancy, which is 25 cents lower.

Considerable transactions have been made for delivery at rates not allowed to transpire.

WHEAT.—Not much in market—a cargo of U. C. Spring is held at $1 50, which is beyond the views of buyers.

CORN.—A sale of Michigan Corn, to arrive, is noted at 82½ cents; for a better article 85 cents has been received.

BARLEY AND OATS.—Nothing doing, the tendency in price being altogether in favour of buyers.

RYE.—None.

PEAS.—Small sales at $1—not much doing.

PROVISIONS.—Prices nominal—market regular.

ASHES.—Both descriptions are firm, whilst the inquiry is more for Pots.

PRICE OF PRODUCE.

ASHES—Pot	℔ cwt.	$6 25	to	$6 30
Pearl		6 45	to	6 50
FLOUR—Canada Fine	℔ bbl. 196 lbs.	5 00	to	5 25
Superfine No. 2		5 75	to	6 00
Superfine No 1 United States		6 25	to	6 60
Superfine No. 1 Canadian		6 25	to	6 65
Fancy		6 75	to	7 00
Extra Super		7 00	to	7 50
Double Extra		7 50	to	8 00
Rye Flour		5 00	to	5 25
INDIAN MEAL	℔ 196 lbs.	None.		

WHEAT—℔ 60 lb.			
Wheat [U. C. and U. S. White]	0 00	to	0 00
U. C. Spring	0 00	to	0 00
Red Winter	0 00	to	0 00
Milwaukie Club	1 35	to	0 00
Chicago Spring	1 10	to	0 00
BARLEY ℔ minot	0 85	to	0 00
OATS ℔ minot	0 55	to	0 00
PEAS—White ℔ minot	0 97	to	1 02½
INDIAN CORN ℔ 56 lbs	None.		
PROVISIONS—Beef, Mess ℔ bbl	0 00	to	0 00
Prime Mess	11 00	to	11 50
Prime	9 00	to	0 00
Cargo	None.		
PORK—Mess ℔ bbl	18 50	to	19 00
Prime Mess	14 00	to	14 50
Prime	13 00	to	00 00
Cargo	None.		
BUTTER—Inspected No. 1 ℔ lb	None.		
Inspected No. 2	None.		
Uninspected	0 17½	to	0 22½

NEW YORK MARKETS.

April 29th 1859.

Flour active, 5c to 10c better: sales 10,000 brls. at $5 to $6 40 for superfine State; $5 90 to $6 25 for extra State; $5 90 to $6 40 for common to good round-hoop Ohio. Canadian flour continues dull and nominal at $6 30 to $7 40 for extras. Rye flour quiet, at $3 60 to $4 40,

Grain—Wheat firmer; sales 25,000 bus. at 91½c to 95c for Chicago Spring; $1 20 to $1 25 for Milwaukee Club; $1 69 for white do. Rye lower; sales 10,000 bus. at 84c. Barley dull and unchanged. Corn steady; sales 10,000 bus. to 83c to 83½c for mixed western. Oats quiet, at 53c to 58c for state, western and Canadian.

PROVISIONS.—Pork lower and dull; sales 300 brls. at $16 45 for new mess; $16 50 for old mess; $12 85 to $13 for prime. Beef firm and unchanged. Beef-hams dull. Bacon quiet and unchanged. Butter quiet, at 8½c to 12c for Ohio; 15c to 24c for State. Cheese dull, at 9c to 10c as to quality.

WHISKEY dull and nominal, at 25c.

STOCKS.—The changes are unimportant this morning, but the market is generally dull. Money on call—Rates are heavy at 4 per cent, and short first-class paper is done at 5 to 6 per cent. Reading 51¼. Penn Coal, 80⅝. Cleveland and Toledo, 25. Galena and Chicago, 65¼. Harlem preferred. 38¾. Delaware and Hudson, 96. Pacific Mail, 88¼. Mich. C. New Loan, 95¼. Hudson 2nd Bonds, 79. N. Y. C. 6's 94⅛.

MONTREAL STOCK MARKET—PREPARED BY THE BOARD OF BROKERS,

BOARD ROOM, EXCHANGE, MONTREAL, March 26th, 1859.

DESCRIPTION.	Shares.	Paid Up.	Dividend Last Six Months.	Buyers.	Sellers.
Bank of Montreal	$200 00	whole.	4 per cent.	118½	118¾
Bank of Montreal, New Stock	....	....	.....	....	....
Commercial Bank of Canada	100 00	do	4 per cent.	112¾	113¼
City Bank	80 00	do	4 per cent.	112	112½
City Bank, New Stock	....	....	.....	....	....
Bank of Upper Canada	50 00	whole.	4 per cent.	88	None.
People's Bank	50 00	do	4 per cent.	107½	108½
Molson's Bank	50 00	40 per cent.	4 per cent.	109½	$109½
Montreal Mining Company's Consols	20 00	$15 10	None.	$2 25	2 50
Quebec and Lake Superior Mining Company	8 00	4 10	.....	None.	None.
Lake Huron Silver and Copper Mining Company	5 00	0 75	.....	None.	None.
Canada Mining Company	5 00	0 90	....	None.	None.
Huron Copper Bay Mining Company	4 00	0 25	....	0.15	0 25
Champlain and St. Lawrence Railroad Company	200 00	whole.	None.	16	16¼
Grand Trunk Railroad Company	100 00	whole.	6 per cent. per annum.	30	None.
Great Western of Canada	100 00	whole.	3½per cent., per annum.	None.	None.
Montreal Telegraph Company	40 00	whole.	4 per cent., 6 mos.	115	116½
Montreal City Gas Company	40 00	whole.	4 per cent., 6 mos.	109	119
Government Debentures, 20 years	...	...	6 per cent. per annum.	103	None.
Con. M. L. F. Debentures	...	...	6 per cent. per annum.	94	95
Champlain and St. Lawrence Railroad Bonds	...	...	7 per cent. per annum.	80	80
Montreal Exchange	400 00	whole.	6 per cent. per annum	75	80
Montreal Harbour Bonds	...	...	8 per cent. per annum.	107	107
Do Water Works Bonds	...	...	6 per cent. per annum.	93½	94½

STOCKS.

BANK OF MONTREAL.—Scarce and in good demand at 118½ a 11¾.

BANK OF MONTREAL NEW STOCK.—None in market.

BANK OF BRITISH NORTH AMERICA.—None in market.

COMMERCIAL BANK OF CANADA.—Sales at 112½ a 112¾, at which there are to-day buyers but no sellers.

CITY BANK.—Nominally as quoted—but without any sales of importance.

BANK OF UPPER CANADA.—No sales during the past week. Quotations nominal.

PEOPLE'S BANK.—Buyers at 108—which is refused.

MOLSON'S BANK.—Latest sales at 109½.

MONTREAL MINING CO. CONSOLS.—But little Stock offering. Buyers at $2 25.

CHAMPLAIN & ST. LAWRENCE RAILROAD.—Stock in demand. Sales during the week at 16¼ a 15¾, and latterly 16¼. Tendency being still upwards.

GRAND TRUNK RAILROAD.—Buyers, but no sellers, at 30.

GREAT WESTERN OF CANADA—No Stock offered in this market for many weeks past, and there are, consequently, no transactions upon which to base a quotation.

MONTREAL TELEGRAPH COMPANY STOCK.—Heavy at 115.

MONTREAL CITY GAS COMPANY—In very limited demand at 107½. Sellers asking 109 which was the last transaction.

GOVERNMENT DEBENTURES—None in market.

CONSOLIDATED MUNICIPAL LOAN FUND DEBENTURES—Heavy. Quotations nominal.

IN OTHER STOCKS—Nothing doing.

EXCHANGE.—As quoted, with but little doing.

MISCELLANEOUS.

THE FORMATION OF COAL.

Few people have any conception of the process by which those immense deposits of combustible matter were prepared, from which the fuel of the world in all coming time, so long as fuel shall be required, is to be supplied—nor of the peculiar condition of the earth and its surroundings during the long period occupied by that mighty chemical elaboration. The thought that during the slow lapse of these uncounted years, and indeed during the almost inconceivable ages that had preceded them, no living voice broke upon the stillness of eternity, and no "moving thing that had life" existed above the surface of the waters, is one of peculiar interest and grandeur. Yet that such was the fact, is made evident by the unerring record of the great Architect himself upon his work.

In coal beds traces of peculiar vegetation have been found more luxuriant than any which now exists upon the earth.

This peculiarity, with the fact that no air breathing animals existed previous to the formation of coal beds, led to the belief that carbon existed in the atmosphere in the form of carbonic acid gas, in such quantities as to prevent the existence of animals breathing air. How solitary must have been the earth during the period of coal formation! No birds fluttered from branch to branch amid the dense foliage, and no living creature traversed its plains or thread its lonely forests. Verdure flourished, and beauty shone upon the surface, but the essential charms of life were wanting. Silence, too, reigned throughout the world, broken only by the hoarse thunders of the earthquake, as the pent up fires vainly endeavored to burst through the bonds that confined them.

But this gigantic race of vegetation absorbed the carbon from the air. As fast as those plants died and fell to the earth, they were succeeded by others, which in their turn died, and fell to the earth; and in this manner an immense mass of vegetable substance was accumulated, which, upon subsequent fermentation, was changed into a mass of coal. The calling into existence of this race of plants was the great purifying process of the world. They were not of a nature to sustain animal life, but after they had succeeded in absorbing the poison in the atmosphere, and rendering the earth fit for the habitation of air breataing creatures, such plants were produced.

The vegetation of the coal period differed from that of the present day, in the fact that nearly all of the plants grew on the inside; whereas nine-

tenths grow on the outside. They were somewhat analagous to the fern, etc., of our tropics. All the plants found as low as the coal strata, were of orders which induced the belief that throughout our planet generally, even as far north as Melville Island, coal is to be found; and that in searching for it, it may be proper to dig or bore; and when at last we find the beds of coal, they will be found to be regularly arranged between a roof and floor of coal, slate or shale.

But it by no means follows, that beds of shale and slate necessarily indicate coal; those of the primary series would scarcely contain any combustible, unless it were plumbago, or possibly a little anthracite.

The geological laws of Coal are very strict, and a thorough acquaintance with them is the only safe guard against fruitless enterprises.—*Professor Silliman, in Winter's Wonders of Geology.*

EATING GUANO.

The varied appetites and tastes of man have brought out many dishes which other generations have strictly forbidden, and although rats, and mice, and snakes, and frogs have, in many places, come into popular favor, we were not prepaired for the announcement that Peruvian guano must soon become an edible luxury. Stranger things have, however, happened, and for the benefit of those who may wish to enjoy this new and healthy strengthening dish,we will give the method of prepairing it, reminding them at the same time that the process has been patented in England, by a Mr. Wm. Clark, the inventor of the process, and discoverer of its uses, as here set forth.

Put two and a half pounds of guano, of the Isles of Peru, with three quarts of water in an enameled stew-pan, boil it for three or four hours, then let it cool; after standing some-time, separate the clear liquid, and about a quart of this *healthy* extract is obtained. Now, it is proved by the opinion of learned men, that the more aliments are azotised, the more they are strengthened, and hence the inventor infers, that as guano is composed of matters the most so, it is, and must be, peculiarly adapted for all classes of society, and especially for those who have much exertion and have not the means of buying meat. Mr. Clark sets forth, in his specification, that two or three tablespoonsful of this extract distributed in the food of one who lives on vegetables, is equal to at least two pounds of meat, and would give him as much strength as good meat at discretion, with the advantage. that this extract gives to the vegetables a very agreeable taste! Of course too much should not be used, or it will be as repugnant as pepper or vinegar, but if used with proper discretion, it is said to be remarkably stengthening.

By its use, too, certain maladies sometimes almost incurable, are said to be easily removed, and phthisis, etc., are prevented by use of a small portion daily. There are other marvelous properties in this new extract which we must now mention. Every one knows that good tools are the soul of industry, and that they must be produced before great manufacturing wealth can exist. The art of working steel in ancient times was in such high perfection that they were able to give this metal the softness and pliancy of silk, and the excellence of the Damascus blade which no nation has since been able to more than imitate. Their method of manufacture has been lost, and all efforts of modern times have proved futile in its resuciation. Mr. Clark, however, the discoverer of this extract, claims, without fear of being contradicted, that he has reproduced this secret lost for centuries.

His extract of guano hardens iron, and gives it the properties of steel; while to steel it gives the fineness, sharpness, and softness of the Damascus manufacture. This, too, is the formula, which is very simple. Temper the steel and iron in the extract of guano, at eight degrees of strength, as indicated by Baume, and it will produce these marvellous results. The more they are tempered anew the better they become, qualities contrary to the ordinary tempering. We have here presented some of the ideas given in the specifications of Mr. Clark's improvements, though we have not been minute, as we shall refer to it again.

A Chinese Gentleman's House.—The following description of a Chinese gentleman's house, by Albert Smith, will be read with interest. He says the Chinese gentleman first took him to his country house, now uninhabited. It was a perfect residence of a Chinese gentleman. There was a very large garden, with bamboo hedges and large fish tanks, edged with wall of blue bricks and perforated tiles. His pigs were in admirable condition, and as beautifully kept as the Prince Consort's at Windsor. About the grounds were nutmegs, mangostans, plantains, cocoa nuts, dariens, and small creepers trained with baskets and pagodas. Inside the house the drawing-room had doors sliding across circular openings. He then went into this good gentleman's private residence, entering by a Chinese triumphal gate. There were six miles of carriage road round his estate. It is on a fine undulating tract of land reclaimed from the jungle, and laid out with rare taste. In the outposts a tiger killed a man the other day. In his garden he found Jocko living in a cane cage next door to a porcupine; there were also some rare birds. There were all sorts of beautiful flowers placed about in enormous China vases. Here he first saw the tea-plant growing. It is of the camelia tribe three or four feet high, perhaps, and bears a small white flower, like the open day rose; also he has shown the moon flower a kind of rounded convolvulus that only opens at night. There was a bower of monkey cups, the pitcher flower which collects water, and from which Jacko refreshes himself in the jungle. The fair palm, a beautiful tree on the lacon, produced water of clear cold quality by being pierced with a pen-knife. Several minute creepers were trained over wire forms to imitate dragons with egg-shells for their eyes; and there were many of the celebrated dwarf-trees, the first I had seen, like oaks and elms, about 18 inches high, like small withered men. The house here was superbly furnished in the English style, but with lamps all

about it. At 6 o'clock the guests arrived, mostly English, all dressed in short white jackets and trousers. The dinner was admirably served in good London style, and all the appointments as regarded plate, glass, wines, and dishes, perfect. The quiet, attentive waiting of the little Chinese boys deserved all praise. After dinner the guests wandered through the rooms decorated with English prints of the Royal statuettes "curios" from every part of the world, and rare objects in jade stone and crachle china, and also a portrait of our host's son, who is being educated in Edinburgh. He was in an English dress.

EMIGRATION TO AUSTRALIA.—"Truth," in a letter to the London *Times*, dated Melbourne, September 28, says:—"We are inundated here with 'respectable people,' who come out to starve. Within the last fortnight I have been favored by English friends with letters to introduce five different families. The first was a gentleman farmer, wife, and child, whose object is to farm on a grand scale with a capital of £500! Of this he will probably spend at a boarding house £100 before he hears of anything to suit him. With the residue he may possibly purchase a fourth share in a broken-down station that may support him for six months, and then gazette him for relief from his partner's debts. The second was a professional man, with a wife and half a dozen children. He arrived with a trifle more than £100 in his pocket; at the end of ten days it was reduced to £40; and he has, very wisely, condescended to a clerkship of £150 per annum, which will barely suffice to keep him from actual mendicity. The third was a widow and four young children, whom she hopes to educate by opening a school for young ladies. She landed with something short of £100, the proceeds, she tells me, of her furniture, after paying her passage money. She has been here ten days, and has £30 left. The best advice I could give her—lady as she certainly is—is to advertise for a housemaid's situation, and, if she can obtain one, to apply her wages to the board and lodging of her four little ones. She has not the shadow of a chance of anything better. Her piteous cry—'If I could but get back again'—was enough to break one's heart. It is not merely absurd, it is absolutely wicked, to delude the people of the 'better class,' as it is called, to come out in the hope of improving their position. Nothing answers here but brawny limbs and stubborn impudence. You may judge how false are the representations of our prosperity by the single fact, that the week before last we had not less than twenty-eight bankruptcies in one week, but little above the average, which is two *per diem*.

DISTINGUISHED CONVICTS IN A BRITISH COLONY.—The Rev. Joseph Johnson, sent out to minister to the convicts in Fremantle, Western Australia, by the Colonial Missionary Society, announces the arrival of Robson and Redpath, and Agar and Tesser, with their friend Saward, alias Jem the Penman. The writer says:—"They are all engaged on the public works, making roads, &c. Redpath and Robson are engaged, as I am writing, wheeling stones near my house, with shackles upon their persons. Their health appears to be good, but they seem wretched and dejected, and weary of their lives. The celebrated Rev. Dr. Beresford, who is related to a noble marquis, and who, with a living of £1,000 a year, committed forgery to an

enormous extent, has also arrived out in the colony, and is now employed sweeping the wards in the new convict prison, which has just been completed. It is an immense structure, and took seven years to build. The prison has 1,000 separate cells, chapel, hospital, lunatic asylum, and residences for the Governor and his deputy, chaplain, doctor, &c.

AUSTRALIAN STATISTICS.—The golden colony of Victoria, on the 30th of June last, had a total population estimated at above 480,000. A general passenger or emigrant rate of 5s. per head is charged, and a special rate of £10 on each Chinese upon his arrival. We say his, because few or no women come with China men. The last general population census was that of 29th March, 1857, and gave the total as 406,577, including 25,424 Chinese and 1,768 Aborignees. There were 269,910 males and 145,667 females. The public revenue of the Colony of Victoria, is stated at £3,500,000 sterling yearly, without loans or special funds. For the year ending June 30th, 1858, it was £3,423,642, being an increase over the previous year of £500,000. Of this amount £1,630,000 consisted of Customs duties, and £1,000,000 the proceeds of public land sales. Tariff on spirits and cordials of all kinds, 10s. per proof gallon ; on wine having not only 25 per cent proof spirits, 2s. per gallon ; on beer, cider, perry or spruce, 6d. per gallon ; on opium, 10s. per lb. ; on cigars, 3s. per lb.; on all other tobacco, 2s. per lb.; on sugar, 6s. per cwt.; on molasses, 3s. per cwt.; on tea, 6d. per lb.; on coffee or chicory, 2d. per lb.