The Colonist.

FRIDAY, APRIL 16TH, 1880.

THE FORCE OF OPINION.

Public opinion is powerful. It affects everyone—the king on his throne as well as the hoodlum at the street corner. Every man, let him be ever so high or so independent, desires to stand well in the estimation of his fellowmen. If there is a man on earth who can afford to disregard public opinion that man is the Czar of Russia. What need he care, it might be asked, for the praise or the censure of the inhabitants of countries to most of whom Russia is a mere geographical expression and the Czar almost as much a creature of the imagination as Prester John? But there are indications that the Czar does care about the opinion that is formed of him by men and women whose only apparent relation is him is that they live on the same planet. Its disquiets and pains him to know that people of whose existence he has the most dim and shadowy idea look with horror on what is done in his dominions by his servants acting under orders which he approves, and that they execrate him as a heartless oppressor and a cruel tyrant. The feeling with which he is regarded by persons whom he has never seen and whom he never will see, who cannot possibly do him either good or harm, would, it might be thought, be to him a matter of supreme indifference. But it evidently is not.

Accounts have been circulated far and wide of dreadful things that have been done in his empire. He wishes to have it to be believed that those accounts are either wholly false or the grossest and most malignant misrepresentations. The world has been told by the London Times and by George Kennan that defenceless exiles, women as well as men, have been barbarously butchered by an officer high in the Czar's service, and that the man by whose orders the brutal outrages were committed has been rewarded for what he has done.

Instead of treating these statements with contemptuous silence the Czar has caused an official explanation of what has been described as a savage massacre to be published. This explanation is said by George Kennan in the April number of the Century Magazine to be a "clumsy invention, intended to break the force of the real facts and to deceive readers who are not acquainted with the conditions of exile life."

The cause of the disturbance, the Czar's explanation states, was the establishment in a place called Yakutsk of a printing office, in which nihilistic pamphlets, proclamations and other revolutionary publications were printed and from which they were circulated. How exiles, who were very poor and who were completely surrounded by soldiers and other servants of the Czar, and who were a thousand miles from any place in which even a newspaper is published, could procure a printing press and types, have them secretly conveyed more than a thousand miles in a country where everything belonging to the exiles is subjected to many and searching examinations, is what the official account does not begin to explain. How, too, a number of exiles living under the perpetual surveillance of military police could in a small village set up a printing office is beyond the comprehension of ordinary mortals. And what the unhappy people, who can only communicate by letter with the outside world with the utmost difficulty, could do with the publications after they were printed is to people of common sense an impenetrable mystery. This part of the official account, every one must see, is utterly devoid of truth.

The account goes on to say that the soldiers who were sent to seize this printing press were resisted by the exiles, and several of them were severely wounded by sabre cuts and revolver bullets. This is a most unlikely story. Where were the exiles to get the weapons? They were not allowed to carry them into the country, and the Russian Government takes very good care to see that they cannot get arms in the land of their exile.

More wonderful still, the author of the official account tells what he evidently believes to be a most credulous public, that after these desperate ruffians, who had made the village of Yakutsk a revolutionary propaganda, had been tried and sentenced they suddenly attacked their escort with revolvers, which they carried concealed on their person. This seems the most improbable part of the improbable story, for the men were, no doubt, disarmed when they were taken prisoners, and they were carefully searched before they were allowed to enter the court room. That the Russian soldiers who had these desperate exiles in custody would permit them to have arms in their prison and to carry them with them to the court room is simply incredible.

It was after the prisoners had attacked their escort that, according to the official story, the troops were called in. Before they were subdued it was necessary to shoot and bayonet several of them. Of course, after this act of resistance, the rebellious exiles could not expect to be mercifully treated. "Three of the survivors," it is admitted, "were subsequently hanged and the others were condemned to penal servitude in the mines, instead of mere deportation."

There are other statements made in the official explanation which Mr. Kennan shows to be false. But it is something to find that the Russian authorities considered it necessary to invent a pack of lies in extenuation of the acts of cruelty of which they were guilty. It shows that they are feeling the subtle and impalpable influence of European and American public opinion. We venture to predict that this official explanation, which is false on its face, will not be believed by intelligent men anywhere. Those who drew it up had too little regard for even probability—to deceive the most credulous.

Mr. Kennan stoutly maintains the truth of the account which he has given of the Yakutsk outrage. He says:

"My first information in regard to the Yakutsk tragedy came to me in a private letter from Siberia last summer. Since that time I have received eight separate and independent accounts in manuscript of the whole series of events, with copies of official documents relating to the case; plans of the house and enclosure which the massacre occurred; the names of all the officials and exiles concerned; the full text of the sentence of the court-martial that tried the survivors; the last letters of the men who were hanged; all the details that are essential to a complete understanding of the situation and the circumstances. These accounts if translated and published would fill two whole numbers of the Century Magazine, and they have come to me from eight individuals—not all of them exiles—and from a half a dozen parts of the Russian empire."

The account published in the London Times came from a different source from those whence Mr. Kennan derived his information. That account tallies exactly with the narratives received by Mr. Kennan and is, as that gentleman emphatically avers, strictly accurate. This being the case it is not likely that the Russian official explanation will have the slightest effect upon public opinion with respect to the treatment of political prisoners by the Government of Russia.

NOT MESMERISED.

We beg to assure the Times that THE COLONIST has not been hypnotised. There has been no mesmerist near THE COLONIST office, so far as we know, for many a long day. We are wide awake, as we usually are, and we know perfectly well what we are about.

We observe that our contemporary is, as usual, making a great deal of fuss about very little, indeed. One would suppose by the outcry it has made and is making that the extension of the provincial guarantee to the electric tramway companies involved the expenditure of millions of the people's money, instead of adding what really amounts to nothing to the liabilities of the province.

The Times admits that the prospect of both the projected roads is excellent, and that they will from the start pay interest on the money invested in them. If that is the case the province runs no risk at all. Then what is all the outcry about?

To us this guarantee business appears exceedingly simple. The gentlemen who form the companies, and many others besides, believe that the tramways will be a great improvement to the part of the province in which they are laid. They will give increased accommodation to the people and will help to develop the country. It is not easy to raise the money they require in this province or elsewhere, for the simple reason that the circumstances of the country are not known to capitalists abroad, and some capitalists that are at home may not have the faith that the Times has in the feasibility of the tramway projects. It is of importance to get the money on the easiest possible terms, and the projectors will be able to get it on those terms if the Legislature gives them the benefit of the credit of the province for a limited period. Capitalists at a distance may not know much about British Columbia or the prospects of the electric railway, but they do know that the Government of the province is good for a very great deal more than the interest on the bonds to be guaranteed. By extending the guarantee the Legislature can ensure the roads being built within a reasonable time, and thus give a very large proportion of the population of the province advantages which they prize very highly, and that, too, at no expense to the taxpayers.

Railways are in a sense public works, even when they are built by private corporations. This is recognized by the Federal Government, by the Provincial Governments and by municipalities in all parts of the Dominion. Grants of land and cash bonuses and subsidies are given to them, and interest is sometimes guaranteed on their bonds. Even the Times itself within the last year has consented to railway guarantees, and of one of them electricity is the motive power. It has even done more. It has advocated granting subsidies to a saw mill, a flour mill, a paper mill, and a sugar refinery. If it is right for the community to help concerns which are in a strict sense private by grants of public money, it surely cannot be wrong to aid a project like an electric railway which is built expressly for the accommodation of the public, when that aid is not likely to involve the expenditure of a single dollar of the people's money.

Our contemporary grants that both the tramways will pay, and it uses that fact as an argument to withhold from them public assistance in the way of a guarantee. We cannot see the force of this reasoning. Every one knows of enterprises that would be sure to pay if capital could be procured to establish them. For want of the necessary capital they are not commenced, and consequently the community does not receive the advantages they are capable of conferring upon it. The electric tramways are enterprises of this class. It is now believed that they will be sure to pay, but it is difficult, perhaps impossible, to get the money necessary to build and equip them at a low rate and on their own merits. If the Legislature comes to the aid of the companies they will be built, and the public will receive the benefit.

It is presumed that the projectors need the Government guarantee or they would not ask it. They would, we think, if the money could be readily raised without the Government's intervention on easy terms, be very foolish to apply for the guarantee; for it is not to be expected that they will get the benefit of the public credit unconditionally. The Government will require security and will exact conditions—the bargain which it made with the Shuswap and Okanagon Railway Company shows that it is extremely cautious, and can take good care of its own interests. It may happen that the companies would find the Government's conditions embarrassing, and that they would feel easier and freer if the conditions of their charters were the only ones which they were bound to comply with. This consideration would, we think, prevent their applying to the Legislature for guarantees unless they were really required to enable them to go on with the works.

On the other hand, we are not sure that it would not be good policy on the part of the Government to secure a share in the management of the roads. If the province had an interest in the tramways it could see its power to protect the public, and we all know that there are times when the Governmental hand is needed to restrain corporations that have grown many. When these corporations are, in effect, monopolies, they are very apt to use their power to the prejudice of the public. It is on account of this tendency to a misuse of power that many thoughtful and experienced publicists contend that all railways should be under governmental control. If the tramways had such a representative of the Government—that is, of the public—on its Board of Directors the people would stand a better chance of getting the accommodation they pay for than if the companies were in the strictest sense private concerns.

Our contemporary, as a matter of course, embellishes its article with reflections on those who are concerned in furthering these enterprises. We are not sure that it means anything by its insinuations and its accusations. It has got into the bad habit of speaking of those whom it opposes as if they were awful examples of the total depravity of the human race, but something more is needed than its bare word to convince the public that those whom it denounces are in any way different from their fellow mortals.

DISSATISFIED.

The discussion that took place at the Board of Trade meeting on Friday shows how thoughtful and conservative men regard the way in which this province is treated by the Dominion Government. Those who have the interests of the Government at heart see with great regret that the feeling of discontent is growing and spreading. The men who complain are not chronic grumblers or irreconcilable members of the Opposition. Those who consider that the province is neglected, that its just and reasonable claims for improvements which are greatly needed are not recognized, are men who have given the Government a generous and even a zealous support. It cannot be said that what they ask for is unreasonable or what the province, considering the sum it contributes to the general revenue, is not fairly entitled to. When they see how small a sum is granted for services that are essential to the prosperity of the province, it is not surprising that, like Mr. Finlayson, they look back with regret to the time when the province was independent of the Dominion of Canada, and calculate what would be done with the money that is collected in the province in the shape of customs and excise duties if the Legislature of the province were entrusted with the expenditure of that large sum for the benefit of its inhabitants. "Had this province," Mr. Finlayson is reported to have said, "not entered confederation the harbor would have been cleared of rocks long ago." The same reflections are made when the lighting, the buoying and the surveying of the mouth of the Fraser River, the granting of a subsidy for steam communication between Victoria and New Westminster, the exemption from duty of mining machinery and other subjects which require firmness and liberality on the part of the Dominion are considered.

It may be said that these regrets are vain, that the province receives many and great advantages from the confederation, and that isolation, even if it were desirable, which it is not, can never again be attainable. This may be true. But is it judicious to permit British Columbia to become soured and discontented? Such a state is very apt to become chronic, and people who feel that they are ill-used and unfairly treated are liable to encourage any agitation and to join any movement that, in their estimation, affords a prospect of bettering their condition. If the authorities in Ottawa heard the expressions of opinion that are freely and frequently made in all parts of this province by all sorts and conditions of men they would become alive to the importance of paying greater attention than they have hitherto done to the claims of its inhabitants for more attention and better treatment.

We have tried to look at this matter impartially, and we cannot see that anything that British Columbians ask the Dominion Government to do for them is unreasonable. Victoria is surely entitled to have its harbor placed in good condition. The Dominion is not asked to bear the expense of extensive harbor works. All that is wanted is to have dredging done where it is absolutely required, and rocks that are an impediment and danger to navigation removed. This ought to be done even if it were a far less important harbor than it is. Harbors in which the trade is not nearly so great are far more carefully attended to than Victoria. Expensive breakwaters are constructed, channels are dredged, and they are furnished with costly lighthouses and buoys. Victorians do not ask the Government to deprive any harbor in the Dominion of any work that is necessary for its safety or its convenience. All that they want is the same attention that those ports receive, that the Dominion outlay should be, in some degree, commensurate with its wants.

The request for a lighthip for the mouth of the Fraser, for such surveys as are necessary for the draughting of a chart on which the navigator can implicitly rely, and for a system of buoys requisite for the guidance of the ships that enter the river is moderate. All these are urgently required and ought to be supplied. The same may be said of the subsidy to a steamer between Victoria and New Westminster, and of everything else that the Dominion has been asked to grant. They are all what British Columbians are justified in applying for, and what the Dominion ought to give.

We do hope that the authorities in Ottawa will take warning in time and treat this province in such a way that even their enemies must admit that it receives justice at their hands. At present it is those who have been the friends of the Government who are the loudest and the most bitter in their expressions of discontent and displeasure.

THE RAILWAYS AID BILL.

There is no province of the Dominion that needs railways more than British Columbia. Without them communication between one part of the province and another is extremely difficult, and for purposes of trade almost impossible. They are absolutely necessary for the development of its natural resources. No matter how great the stores of precious metals that lie hidden in the mountains of the country are they cannot be made available without railways. British Columbia, it is confidently asserted by many who are presumed to be well acquainted with its resources, is one of the richest mining countries in the world. But what good will its mineral wealth do its inhabitants if the greater part of it is almost as inaccessible as if it were in the regions of the moon?

How can the minerals which are hidden in this mountainous country be reached is the problem which the legislature of this province is trying to solve. The country is large and its population is small. The Government does not possess the capital to open up the province by means of railways. It has no money to give as subsidies to railway companies, and although there is plenty of land, the greater part of it is absolutely worthless for agricultural or pastoral purposes. Even timber is very scarce in large tracts of country through which the railroad must run. It is evident that unless the province can offer the railroad builder a share of the minerals that may be hidden in the great areas of barren rock on the route of the railway he will have no inducement to construct it. This is what the Government have determined to do. They say, in effect, to the railroad men, "open up the country; place the gold and silver which are now inaccessible within our reach and we will give you a share of the wealth which your road may be said to create." Is this an unreasonable proposition?

The gold and the silver are now of no use to any one, and will not be for hundreds of years to come if they are not made available by railroads, which it is admitted on all hands are not likely ever to be constructed by unaided private enterprise. Is it better for British Columbians to leave these regions undeveloped for an indefinite period longer than to have them made to yield their wealth almost at once on condition of giving the builders of the railroads a share of the precious metals that would never have been made available but for their aid? This is the question for the Legislature to decide.

We see that up to this moment there are no two opinions in the Legislature on the subject. All the members, without a single exception, have given their adherence to the principle that it is wise to extend to the men who open up the country an interest in the gold and silver which they bring within the reach of the miner. Not a single voice was raised in the Legislative Assembly against the principle of the Railways Aid bill, when the motion was made to read it a second time.

In that Assembly are men who know the country well. They know what the land is worth; they have a good idea what proportion of it is fitted for agricultural purposes and what proportion is bare, barren rock. They know, too, how the country is suffering for want of railroad accommodation, and they know the good which railways will do if enterprising men can be induced to build them. Many of them, too, are, or have been, practical miners, and they know how much the country loses for want of railways. It is very significant that not one of these miners and representatives of miners had a word to say against the principle of the bill introduced by the Leader of the Government. This fact of itself affords a fair presumption that a practical solution of the British Columbia railway problem has been found.

We are free to confess that under ordinary circumstances granting a royalty to a railway company would be objectionable. But the circumstances of British Columbia are not ordinary. Any road that will be built in this country for a long while to come will have to run through a thinly peopled country, and it will necessarily be many years before the local traffic will be large, and as we have shown, the choice is between giving the railway companies a share of the product of the mines sunk on their lands, or no railways at all. If, for instance, the miners of Cariboo were ten or more years ago offered the alternative of remaining as they were without railways, or to pay a royalty of five per cent. for the railway accommodation they needed, which would they have chosen? There is no question but they would have jumped at the offer of a railway at that price, and they would never have had reason to repent their choice. There are many parts of the province in the same position as Cariboo. It is this view of the situation that reconciles practical miners who feel the want of railway accommodation to the royalty.

There have been changes made in the measure since it was introduced that take from it some features that were regarded as objectionable. In the first place, the period for which the royalty is granted has been made definite. It is to exist for twenty-five years and no longer. The royalty is not to be required until after the mine pays working expenses. It is explained that no mine already existing, if it happens to be on railway land, is subject to the royalty. The mining laws of the province will be in force on railway lands as well as on Government land, and the railway company will not be able to dispossess any miner who has complied with the provisions of those laws. Objection is made to the royalty because its payment will make the examination of the books of the mining company necessary. We cannot see why a company that is doing a fair business and intends to deal honestly by the public can have any objection to having its books open to the official auditor. This is a matter which will, we think, be easily compromised between the mining company and the railway company. If the mining company which owes its existence to the railway company does not object to the amount of the railway's share, a way can, without much difficulty, be found to get over the objections.

What the people have to consider is, can the province afford to do without railways? If the Railways Aid Bill will give the province the railway accommodation it needs to develop its mineral resources will the royalty which it imposes be too high a price for that boon? The question is one of great importance, and it should not be answered without consideration and enquiry.

It appears that last night the Opposition having received fresh light on the subject, opposed both the principle and the details of the bill. This, as far as we know, is unprecedented. To allow a bill to be read a second time without so much as a single word even of criticism, and at a further stage to condemn it in toto is contrary to usage and bespeaks a want, both of principle and intelligence, in the men who pursue such an extraordinary course. It is evident that their first decision was arrived at by the free and unbiassed exercise of their judgment, and that they were forced to the second under pressure.

THE WESTMINSTER SEAT.

We see that our contemporaries have begun to talk about the vacancy which the death of Mr. Chisholm has created in the Dominion House of Commons. They do well to remind the electors of the Westminster District that they will soon be called upon to perform an important public duty. The selection of a member to represent the province in Parliament is a matter that requires to be carefully considered. The province, when its representation in the Councils of the Dominion is considered, is small; it is also very far from the seat of Government. In order that this distant province should receive the attention at the hands of the Federal Government that its importance demands it should be represented in the Commons by intelligent and public-spirited men—men who will stand up for the province, no matter what influences may be brought to bear upon them. Every elector knows that in order to obtain what she is justly entitled to, it is necessary that British Columbia's claims should be strongly and persistently urged. We see that British Columbians are under the necessity of sending delegations to Ottawa to enforce their claims, and that even the Legislature feels itself obliged to use its influence to obtain for her what ought to be accorded to her freely and spontaneously. Yet no one can say that with all the influences that are brought to bear on the Federal Government this province obtains from the central Government what its inhabitants have a right to expect.

This difficulty in having its reasonable claims recognized is one of the disadvantages of its position. We are very far from saying that it would fare better at the hands of any other Government than the one now in power. The distant and the absent must look well after their rights and interests or they will be sure to be imposed upon and neglected. It is peculiarly necessary therefore that the province should send good men to Ottawa.

A little reflection will show that every district in the province is deeply interested in the man whom the people of Westminster elect to fill the seat now vacant. We trust that those electors will not permit private partialities or local prejudices to prevent their choosing the best man in the whole district, if he can be prevailed upon to serve them, to send to Ottawa. He should be a man who possesses a sense of duty and not a self-seeker. He should be too large-minded to believe that loyalty to party means a patient submission to the decisions of self-sufficient departmental officials who believe that they know what the province requires better than those who live in it, who thoroughly understand its interests and who are well acquainted with its circumstances and its modes of doing business. He should possess ability to advocate the rights of the province and the courage to stand up for them in all places and against all opponents. We trust that the electors of New Westminster will remember that they are required to choose a representative, not for themselves only, but for the whole province. There are, no doubt, many who are ambitious to represent the district in Parliament, but it should be remembered that the man who is most eager to be chosen to fill a position of trust and responsibility is very seldom the man who is best fitted to perform its duties.

EDITORIAL COMMENTS.

THE New York Herald does not hesitate to give its opinion of the Republican tariff. The Herald, it must be remembered, is not a party newspaper. It is thoroughly independent of all parties, and its criticisms on the acts of the Democrats when, in its opinion, they deserve condemnation are quite as severe as are its strictures on what it considers the mischievous legislation of the Republicans. This, then, is what it says of the McKinley tariff bill: "It is as iniquitous and oppressive a law as has ever been proposed since the foundation of the government. Every corporate and capitalist interest that "fried out" finds its reward in the bill, which strikes at the hard earning of the laboring poor in every page."

THE Ottawa correspondent of the News-Advertiser says that the clause relating to the free importation of mining machinery is to be enlarged so that it will read "mining machinery not now manufactured in Canada." This is a very important change, and will make the concession of very great value to this province. We are much pleased to see that the Government has reconsidered its decision in this matter. As the item was first worded the exemption was more apparent than real. But since the little word "now" has been inserted the element of uncertainty has been eliminated from it, and the importer will not have much difficulty in finding out whether the machinery he wishes to bring into the country will be dutiable or free.

MR. W. C. MCDONALD, of Montreal, is following the example of Sir Donald A. Smith, Sir George Stephen and other philanthropists who took stand of the Atlantic in doing good with their wealth while they are alive. Mr. McDonald has given the immense sum of half a million of dollars to the McGill University, Montreal. Two hundred thousand of this is an endowment and three hundred thousand in buildings. He is a practical man, and his money is given to advance practical education. He has given $350,000 in buildings and money to encourage the school of applied science. This will make it one of the best of its kind on the continent; and to the faculty of law he has given $150,000. These princely gifts are not all that Mr. McDonald has given to that University. He was, previous to their presentation, a large benefactor of the College. Mr. McDonald is a native Canadian. He was born in Prince Edward Island, and he has made the principal part of his fortune, of which he is making such a noble use, in Montreal.

IT appears to be impossible to carry on an election in the county of Haldimand according to law. Every election that has been held of late years in that Ontario county has been protested, and the member returned has lost his seat. There is a petition against the last election. Dr. Montague, the successful, or rather the apparently successful, candidate and his agents are charged with bribery, using undue influence, treating, personation, taking false oaths, hiring teams, paying the travelling expenses of voters and engaging canvassers who have within the last eight years been found guilty of corruption. The black list of charges in the petition is a very long one. It is evident that his opponents are determined to leave no stone unturned to deprive him of the seat to which he has been elected. The worst of it is the county has such a bad character and the results of former trials have been such that the chances are that some of the charges will be proved and the seat for Haldimand will be again declared vacant.

INTO A MAELSTROM OF DEATH.

Detroit Free Press.

We had been held in reserve on the second day at Gettysburg so long that most and horses became nervous and afraid. My horse was an old veteran, who would drop his head and pick at the green grass with a battery firing on either side of us, but as the moments dragged away on this occasion he evinced a woman's nervousness. I looked down the lines and saw that the alignment was constantly being broken by the horses backing up and forging ahead. They could see the fighting to the right and in front, and the smoke from the Union battery to the left and in front of us broke back and over us and the horses breathed it in and blew it out of their nostrils in gasps.

A tremor of excitement—a sort of shiver—ran down the line.

The wind had shifted a bit to blow the smoke to our left and down across the meadows we saw the Confederates forming with the green woods for a background. Jeb. Stuart's men were there—Ashby's men—men from Hampton's Legions—Imboden's Virginians—Rosser's Rangers—guerrillas from Mosby's command. There were fragments from every command we had met on the turnpikes of old Virginia, and there wasn't a squadron which wouldn't stand for a charge. The battery began firing more rapidly, and there wasn't a man of us who did not realize what was coming long enough before we got the word. Some of the horses knew it too. You could feel them filling their lungs and stringing up their nerves for hard work.

The sergeant in gray wheeled into line under a fire which must have tried the nerves of the bravest, and then the compact mass got the word to advance. They were coming for our battery, which was without infantry supports. There we stood, two thin, short lines, representing a thousand dragoons, but not numbering one half that figure, and a body of five to one was moving down upon us. I saw several of the gunners look back. They saw the odds and wondered, perhaps, why we did not run away.

"Attention!"

We had obeyed the order before it was given.

"Right dress!"

We were a minute ahead of the command.

"Forward—draw sabres—guide right—trot!"

Ah! We are off! The gray moves north and the blue moves south. We are going to meet in the meadow below. We must hold them back until infantry supports can be brought up. Every man knows that he is moving down into a maelstrom of death, but no one lags. A strange exultation creeps into the heart. It is as if you had heard some grand, good news and wanted to shout over it and tell everybody of your good luck.

"Gallop—charge!"

Death! Why, if one could die a score of times instead of only once there would be no fear. I sit so lightly in the saddle that my horse seems to have no weight to carry. He skims over the ground as if he had wings, and I begin cheering and yelling in chorus with my comrades. It is a living missile of 500 men thrown at the front of 3000. What a crash there will be! How horses will go down and men pitch from their saddles. Afraid? No! Why man, I would not miss this scene for a year's life! My hand clutches the sabre with a strength I did not know I possessed. I feel a hunger for blood such as I never felt before.

"Yi! Yi! Whoop—rah!" and we strike them fair in the centre. The 500 have the greatest momentum, and we drive through the 3000 as a wedge is pounded into soft wood. There is a flash, flash and a pop, pop of pistols. Men strike at me. I strike back. I feel the desire of the tiger to slay.

"Rally!"

We have driven through the mass, and the bugles sound the call to gather for the return. The horses obey it without a touch of the rein. It seems that the whole living mass is riding in a circle, and that there is blood on every man and horse. All of a sudden we shoot out from under the smoke-cloud into the sunshine—not the 500 but the 300—and the battery opens again. We are to the right of it, and it sends grapeshot into a wild mob to drive it back into the cover of the woods. It is a sight to look down over that field. Five hundred dead and wounded men and horses are lying there. It is only as I sit on my horse and look over the field that I begin to feel weak and grow frightened. My head begins to swim—things grow dark, and some one helps me to the ground. I have a pistol ball in my shoulder and the blood is running down my back from a sabre-cut on the head.

THE SEWAGE QUESTION.

The Various Methods for the Disposal of Sewage Briefly Discussed.

TO THE EDITOR:—The question of creating an effective sewerage system has become so difficult and the results obtained by different corporations, after spending large sums of money, have been in many cases so eminently unsatisfactory, that perhaps, in no other engineering work is so much careful thought and circumspection required before deciding on a fixed course of action.

This letter has been written chiefly with a view of opening the subject, and bringing, if possible, into relief the complicated nature of the problem which Victorians will soon be called upon to solve.

Before treating of the disposal and purification of sewage, it may perhaps be as well to discuss a point which is often raised, viz: the advisability of utilizing the sewers to remove the rainfall. Every case should be treated on its own merits. As regards Victoria, where the roads are macadamized, and the streets not infrequently deep in mud, where the large rainfall is not appreciably contaminated by factory smoke, horse dung, etc., and where the natural drainage is fairly good, the combination of the two systems would obviously be wrong. For a very long time to come it will be unnecessary to provide any costly arrangements for carrying off the surface water.

The various ways of disposing of sewage may be classified thus:

(1). Discharging the crude sewage into the sea.

(2). The dry earth system.

(3). Purifying the sewage.

Class (1). The effect of salt water is to retard oxidation and thus preserve intact the offensive and dangerous qualities of the foul matter. In other words, it may be said to pickle sewage. It is a well authenticated fact that the fevers which so frequently ravage the town of Rio Janeiro are caused by this crude and barbarous method. Many other cases—notably Marseilles, Southampton, Brighton, Edinburgh—could be cited, but it is needless to dwell longer on this expedient, the unanimous opinion of sanitary engineers and medical authorities being that it is radically and obviously bad.

Class II.—The dry earth system affords merely a temporary remedy, not a permanent cure. The amount of earth required is large—two hundred times the weight of the organic matter; the difficulties of getting rid of the night-soil are great, and finally the expense is usually heavy. Besides, the liquid refuse still remains to be treated, thus involving double expenditure. These objections increase in gravity with the growth of a town.

Class III.—The purification of sewage may be subdivided into the following processes:

(a.) Irrigation.

(b.) Intermittent downward filtration.

(c.) Precipitation.

(a.)—Some twenty years ago it was thought that a valuable manurial element was being wasted, and that a considerable saving might be realized by utilizing the sewage as a fertilizing agent. Unfortunately the experience of these twenty years seems to show that except under favorable conditions sewage farms, from a financial point of view, are a failure, and are also objectionable for other reasons. Edinburgh may be taken as a case in point. There it has been customary to irrigate the Craigentinny Meadows with sewage to a depth of one inch per day. According to the report of the Rivers Pollution commission "the water leaves the grass land still filthy and offensive." It is only fair to state on the other hand that Mr. Francis Sclater considers "where land can be obtained at a reasonable price, with favorable gradients, and with soil of a suitable character, a sewage farm, if properly conducted, is the best method of disposing of water carried sewage, * * * but no money profit can be expected." The extent of land required is about one and a quarter acres per one hundred units of population. To this outlay must be added charges for a system of sewers for moving the sewage and for the maintenance of a large and trustworthy staff. This, however feasible the irrigation process may appear in theory, it has been found to work well in practice only under favorable circumstances.

(b) Intermittent downward filteration, in the words of the inventors, Messrs. Denton, may be describeds "the concentration of sewage at REGULATED INTERVALS on as few acres of land as will absorb and cleanse it without preventing the production of vegetation. It is by this means that the assimilative powers of growing plants are brought to bear upon the fertilizing elements of the sewage, at the same time that the percolation of the sewage through the soil brings it in contact with the atmospheric air pervading the soil, and renders it harmless by oxidation."

It would seem undesirable to provide any of the inland towns of Victoria with so unsavoury a filter. If placed at any distance from the town, the cost of removing the sewage by pumping or otherwise could not fail to be heavy. Finally, it may be added that this process, by itself, has never met with any great success in actual practice.

(c). Combining the sewage with various substances having a precipitating action on the solid matter, the effluent being more or less harmless. In all these precipitating processes, except one which will be described last, it is customary to collect the sewage in settling tanks, where it is treated with certain ingredients which drag down the putrescible constituents, the supernatant water escaping into some some river or stream, or being filtered if found necessary through a small area of earth. The disposal of the sludge left in the settling tanks has hitherto proved difficult and expensive. Usually the foul semi-fluid mass is dried, pressed, and sold as manure—if a market can be found. The best method of dealing with this sludge is to burn it, but here again the question of excessive cost crops up.

In the majority of the precipitating processes lime and iron are the principal ingredients used. All lime mixtures, however, produce large quantities of sludge, and the resultant effluent is generally poisonous, requiring further treatment before becoming harmless.

What is called the A. B. C. process—a mixture of alum, blood, clay and charcoal—gives a fairly satisfactory effluent, but has proved costly in execution.

The introducers of the magnetic spongy carbon process claim to have originated a method by which the sludge produced in the settling tanks is greatly reduced in volume.

In this system, the sewage, after passing through strainers which remove extraneous substances, is treated with ferozone, and then led into subsidence tanks. The sewage is next conveyed to filter beds of polarite and sand, which remove the foul matter still remaining. The sludge which forms in the subsidence tanks is pumped into lagoons, dried, pressed, and sold as manure.

The constituents of ferozone are sulphates of iron, aluminium, calcium, and magnesium, moisture, combined water, silica, and magnetic oxide of iron.

The magnetic spongy carbon, or polarite, used in the filters is composed, roughly speaking, of about 54 per cent. of magnetic oxide of iron, 25 per cent. of silica and small per centages of alumina, magnesia, lime and water. It is prepared from carbonate of iron. This process is in use at Acton (Pop. 17,000) where the works cost $370,000. It is claimed in extenuation that a large part of this sum was due to the purchase of land, etc., and also that allowance was made for an increase in the population to the extent of 50,000 inhabitants.

The last method of purifying sewage, which will be discussed in this letter, and one which has attracted considerable attention, is the iron process. In this the sewage is treated with a solution of sulphate of iron either in the sewers, or, better still, in the houses. This solution, it is stated, decomposes the putrescible matter, depositing a fine black silk—the effluent being entirely harmless.

The fact of precipitation taking place in the sewers is a grave objection, but it is asserted by the patentee that the silt, instead of lodging in the pipes, is swept along by even a moderate current. The following advantages are claimed for this process:

"For equal quantities of matter removed from sewage the deposit formed by the iron process is only from one-eighth to one-twentieth part of that formed by any existing method.

The deposit is inoffensive, perfectly manageable and of appreciable value.

Obnoxious smells and sewer gas are not produced below the place where the iron solution is mixed with the sullage. . . . No foul matter collects below such points. The purchase, etc., of land, the construction of settling tanks and the use of steam pumps and machinery, are rendered unnecessary.

Bacterial life and the germs of disease are destroyed in the sewage treated.

In the main drains ventilating apparatus is rendered unnecessary. Outfall works are small and cheap. The costly and perplexing problem of the acquisition of land, and its preparation for the reception or passage of sewage will be easily solved, as the effluent from the iron process does not require any secondary purification by passage through land.

Where the levels render pumping necessary, the cost will be materially reduced, as it will only be necessary to pump clear water instead of sewage."

Without wishing to lay stress on any particular system, the iron process, granting the advantages claimed by the patentee, would seem peculiarly suited to Victoria. The effluent being entirely innocuous might be allowed to flow into the harbor at points, thus, in fact, rendering large and lengthy sewers and pumping machinery unnecessary. Treating the sewage in the houses, though naturally the better plan, greatly increases the cost. In Victoria, however, where the inhabitants are not crowded together in dwellings after the fashion of European cities, a mean course would seem to meet all requirements. The sullage from residences could be treated in the public sewers, and the sullage from hotels, factories, public buildings, etc., purified in the house drains.

The following tables compiled by Mr. Conder, M. Inst., C.E., the originator of the Iron Process, may prove of interest:

ACTUAL COST OF PRINCIPAL EXISTING METHODS PER ONE THOUSAND UNITS OF POPULATION.

	Capital Cost.	Annual Cost.
Iron Process—Installation and Royalty	$ 1,765 00	$ 200 00
London—Part of Cost, Lime and Iron	7,360 00	584 00
Windsor—Lime, Iron and Land	18,615 00	1,379 00
Henley—Pneumatic Pumping and Land	19,467 00	1,379 00
Leeds—Part of Town, Lime and Land	9,733 00	812 50
Hendon—Lime and Land	39,907 00	..
Twenty-Four Towns—Irrigation (1868)	..	1,034 00
Manchester—Fail System	..	1,294 00

COMPARATIVE EFFICACY OF PRINCIPAL METHODS.

Weight of Solids Per Million Gallons in	Sewage.	Effluent.	Sludge.
	Cwt.	Cwt.	Cwt.
Birmingham—Lime and Land	147	72	326
London—Lime and Iron	110	70	616
Leeds—Lime and Land	92	69	240
Coventry—Alumina	76	55	250
Twenty-Four Towns	..	68	..
Chichester—Iron Process (when air dried 20 cwt.)	61	33.3	25
Southampton—Porus Carbon	126	71	330

After a careful study of the different systems it is difficult to arrive at any satisfactory conclusion. The adherents of each school are enthusiastic over their own views and correspondingly doubtful of the efficacy of any other method. All that seems clear is that the old processes have proved unsatisfactory, and that the new ones are on their trial. It would be unwise, therefore, to rush hastily into expense without a most exhaustive consideration of the MODERN systems.

In concluding this brief description of the various systems of sewerage, past and present, it may perhaps be not amiss to again point out that however sanitary engineers may differ as to the merits of their respective methods, all agree that the discharge of sewage into the sea is inexcusable. VICTORIAN.

April 12, 1880.

A TOUGH DEBTOR.

"I struck the hardest game of my life to-day," said the agent of a very successful collecting firm to a San Francisco Examiner man. "I tackled my man for $20 that he owes a restaurant. He's an artist—paints landscapes and portraits—and you see his name covered all over with taffy in the newspapers week in and week out. 'I'm sorry,' says he, stopping work on his picture and pushing his velvet smoking cap onto the back of his head while he looked lazily at the bill, 'but I can't pay this for a few months yet.' 'Why not?' says I. 'Because,' says he, 'I have a more pressing liability.' 'More pressing than a board bill? says I, sarcastically. 'Yes, a good deal,' says he. 'I'm buying a pair of shoes on the installment plan, and the second shoe is to be delivered to-day if I can make a partial payment. The coin's here,' says he, tapping his vest pocket. 'All right,' says I, 'but you just give that coin to me on account, or I'll sell you up.' 'Sell up what?' says he. 'Why, these here pictures,' sweeping my arm in a comprehensive way around the studio. 'These pictures?' says he. 'All right, my boy, go ahead. If you can sell them I'll be much obliged to you. It's a derned sight more than I can do.' With that he lighted up his pipe and went on painting as tranquil as a summer's day. I admired him and asked him out to have a drop of something. 'Excuse me,' says he, standing back and regarding his picture with one eye closed, but not even glancing at me; 'I never have any social relations with my trades-people.' I was faint when I got down to the street."

For Delicate, Sickly Children.

Scott's Emulsion is unequalled. See what Dr. C. A. Black, of Amherst, N. S., says: "I have been acquainted with Scott's Emulsion of Cod Liver Oil, with Hypophosphites, for years, and consider it one of the finest preparations now before the public. Its pleasant flavor makes it the great favorite for children, and I do highly recommend it for all wasting diseases of children and adults. Sold by all druggists, 50c. and $1.00.

Children Cry for Pitcher's Castoria

COMMERICIAL REPORT.

Bradstreet's Weekly Review of Trade and Commerce.

A General Improvement Noticeable in Most Branches—The Business Failures in the States and Canada.

NEW YORK, April 11.—Special telegrams to Bradstreets show that, owing more to the prevalent spring weather and improvement in the condition of country roads, there has been a noticable demand from the interior merchants. This influence has been the more conspicuous at Boston, Chicago, Memphis, St. Paul, Omaha, Kansas City, St. Louis, New Orleans and, to some extent, at Pittsburgh. Mercantile collections generally are unsatisfactory, though signs of improvement are noted.

Cattle are firm at Omaha and dull at Kansas City, where they are lower.

Raw sugar has gone up 11-12, and refined is about steady.

Coffee has advanced slightly on reduced total.

The visible supply of hogs and produce are fairly active, with a f