

MONTREAL CITY SEWERAGE.

We present our readers with a plan showing the main lines of sewers now existing, or proposed to be constructed, in the City of Montreal. Public attention has been drawn of late to this subject so important to the health and comfort of the citizens, and our object is to enable all to understand and appreciate the present state of the sewerage, as well as the contemplated improvements. A few extracts from the report of Mr. Macquisten, City Surveyor, will be useful for both purposes. From this report we gather that main sewers are in good condition, with a few local defects. Thus:—The CRAIG STREET SEWER which discharges at Lacroix Street, and at the Elgin Basin, was cleaned last year, between St. Denis Street and St. Lawrence Street, for the first time between these points since 1860. About five hundred cubic yards of sediment, chiefly sand and crushed limestone, were removed from it. The brick work of this sewer is in good order, but about 200 feet of it, opposite the Champ de Mars, is of only 4 x 2' 8" internal measurement, there is no record of the reason for it having been built smaller at this place.

The WILLIAM STREET SEWER leaves the west portion of the Craig Street sewer at a point on Commissioner Street near to the Fish Market, and passes along Foundling and William Streets to Cantin's Dock, where it receives the water of the dock each time it is emptied. This sewer is in good order, and clean. The BONAVENTURE STREET SEWER discharges into McGill Street portion of the Craig Street Sewer at the intersection of Craig and McGill Streets, and passes along Craig and Bonaventure Streets to the south-western limits of the city. This sewer, excepting about 150 yards near Guy Street, where it has been injured by the breaking of a water pipe laid too close to it, and at opposite St. Antoine Street, where the brick work has been injured by a manufacturer blowing waste steam into it, is in good order.

The COTEAU BARON SEWER, discharging at Monarque Street, passes through Papineau Road, St. Catherine Street, Amherst, Ontario and Berthelet Streets, Burnside Place, Victoria Street and Sherbrooke Street to near McGill College Avenue. The portion of this sewer from near Dorchester Street to its upper end in Sherbrooke Street, is in good order.

The lower portion in Papineau Road, from Dorchester Street to the river, is square in cross section, having stone side-walls with timber floor and covering; there is no record of when this portion was built. It is clean, and for the past 15 years required only a few timbers in the covering.

The FULLUM STREET SEWER, which receives the water of two creeks at its upper end, is clean and in good order.

The COLBORNE AVENUE SEWER, discharging near the jail, and intended to receive the new Craig Street sewer, is quite new, and amply large. As to the lateral sewers, those constructed in the last ten years are clean and in good order. Previous to the period above mentioned many of them were constructed in sections of streets as they were asked for by the proprietors or on the application of some members of Council; about seven miles of these are of wooden boxes; in many other cases parties applying were furnished with the timber and spikes and allowed to lay them at their own cost; in many other cases parties requiring a sewer when there were no funds available for the purpose were allowed to construct it as they pleased; and we have no record of them.

In Griffintown the sewers in the following streets discharged into the old main sewer in William Street, viz: Grey Nun, Queen, King, Prince, Duke, Nazareth, Dalhousie, Ann, Shannon, Murray and Eleanor; these sewers have not sufficient grade; the Common Street sewer, from Colborne to King Streets, seems to have been intended to discharge into Prince or Queen Street, but having no fall into the sewer in either of these streets, is connected with an old culvert passing below the Lachine Canal. The water from this culvert is used by Mr. Brush to feed the boilers of his steam engine. The sewers in some parts of Vitré, Juror, Lagachetière and Dorchester Streets have apparently been built in sections from time to time; some portions of these are not in good order and have not fall enough.

Now, we come to House drains, and here we find the main defect, and, no doubt, the cause of a large percentage of the death rate. The greater number of the house drains in the city are constructed of wood, and until about the end of the year 1872, there was no law to compel proprietors to construct them of better materials. Many of the wooden house sewers are rotten and partially filled up; some have holes through them caused by rats, untrapped sinks are connected with them by a straight wooden spout, a tin or other pipe, and the sewer gases discharge directly through such conductors into the dwellings.

On Dorchester Street, a complaint was made by the proprietor of a house of an escape of coal gas in it from the Gas Company's pipes; on examination it was found to be caused by his own sewer, which had been constructed for years, not being connected with the main sewer. When his sewer was opened, the stench from it was so abominable that it was difficult to get men to work at it.

Out of 7,645 houses visited, there are 1,756 into which the sewer gases are led direct through untrapped pipes, connected with sinks, and 994 houses in which the smell arising through the

same is complained of; in some the smell is abominable.

This state of things demands the most energetic action on the part of the Board of Health, whose control extends to sanitary arrangements in dwelling houses. On their zeal and on the personal interest of proprietors and tenants, depends the ultimate removal of this fruitful cause of disease. It is a work of time, as each case has to be investigated and remedied separately. But it is a work more important at present than the construction of the main sewers proposed.

We will in considering the latter refer to the plan and section on page 245. The first and most important scheme is that of remodeling the Craig Street tunnel. At present this sewer has its summit at St. Lawrence Street, whence it flows west, through Craig, McGill, and Commissioners Streets to the Elgin Basin, and east through Craig Street to beyond St. Hubert Street, where it leaves Craig Street, and passes by a tunnel under Dalhousie Square, through Lacroix Street to the river. So that the western part of this drain flows west through Craig Street to McGill, south down McGill to Commissioners, then east to Elgin Basin where it discharges. This course is roundabout, and impeded by the Bonaventure Street drain which meets it from opposite direction at McGill Street. It is intended to change this course, in fact to continue the Bonaventure Street sewer through Craig, on a continuous, though slight down grade, not only to the present outlet at Lacroix Street, but as far as the Colborne Avenue tunnel. The head of this main sewer will then be above Fullum Street, near the Canal, whence a flushing inlet will be connected with the tunnel. Here we will have a large body of water whereby to wash out this great drain whenever required. In fact a continuous stream can flow through it at most seasons, and keep it clean. The necessity for this provision will be readily seen, when it is remembered that the total fall of sewerage from Fullum Street to summer water level at Colborne outlet is only thirteen feet, the distance being about fifteen thousand feet. It is thus seen that the average grade is less than one in a thousand feet. Flood gates at the intersection of McGill Street, will turn the stream through the latter when desired. This will give Montreal, for the first time, a natural and efficient channel for its principal drains. The next important feature to refer to is the extension of the outlet at Elgin Basin to the outer edge of the Island wharf, where a rapid current will sweep away the refuse coming from the area still left to drain into McGill and Commissioner Streets. This improvement we take to be a prime necessity. It will effectually stop the stench usually afflicting that neighbourhood, and preclude the necessity of periodical dredging hitherto experienced. Scheme No. 2 consists of a proposed intercepting sewer along St. Catherine Street, from the western city limits to Colborne Avenue. This would constitute the main artery of drainage for all the upper part of the city, and would carry off the waste and filth of all the district north of St. Catherine Street. That this improvement should also be carried out at once, can scarcely be discussed. Here, we have fortunately an ample fall, and no necessity for flushing, as no convenient canal is at hand. The elevation of St. Catherine Street at the western city limits is 127 feet above the Colborne outlet. Thence there is a gentle incline towards the east to Bleury Street, where it falls rapidly towards St. Lawrence Main Street, at which point it is still 59 feet above the outlet. Following its course to Colborne Avenue, we there find it with 35 feet of height above the water level. This drain then, properly constructed, will be an invaluable auxiliary to the city drainage, and a great boon to all the wealthy proprietors of the Mountain slopes.

Scheme No. 3 we do not entertain. It is costly and useless—would necessitate tearing up the water side street, raising the revetment wall, and all to no purpose. Nor do we see any object at present in carrying the main outlet further down than Colborne Avenue. The difference of level of the surface of the water in the River St. Lawrence between the outlet near the gaol and the foot of the current Ste. Marie below the Longueuil Ferry Wharf is only from three to four inches; the distance between these points is 2,200 feet; from the latter point to Ruisseau Migeon, the fall is from 8 to 12 inches, and the distance 5,900 feet; these differences of level vary very little at any time. The fall is therefore only 2 inches per 1000 feet, and of little avail.

The total length of sewers at present constructed is estimated at 75 miles, of which ten miles are known to be wooden box drains, which should be replaced by brick or vitrified clay pipes.

The cost of the Craig street Tunnel is estimated at.....	\$192,200
The cost of the St. Catherine street intercepting sewer at.....	136,000
Replacing wooden drains by brick or vitrified pipes.....	143,190
Flushing Inlet at Fulford street, and extension at Elgin Basin.....	10,000
	\$481,390

The citizens of Montreal must not hesitate. These improvements are vital. They are a question of Life and Death. If our new Mayor, Dr. Hingston shall succeed in pushing through this gigantic, but truly indispensable drainage scheme (a portion of which has already been resolved upon under his régime,) he will deserve to be enshrined as one of the greatest benefactors of Montreal.

LITERARY NOTICES.

Among the valuable papers in the GALAXY for April is one on "A New Country," in which we find this complimentary paragraph: "Canada is not an older settlement than the United States; in many parts it is younger; yet Canada has solid buildings and handsome monuments, and takes care of her fine landscapes. Quebec has the picturesqueness of the old world itself. One feels that Raffaele and Phidias were valued at more than sixpence by those settlers." The tale of the Forest of Arden is an agreeable study of Shakespeare's most charming comedy. For so stern a verbal critic, Richard Grant White is not an elegant writer, but he generally has something to say and he puts it clearly. The appendices to this able magazine are, as usual, well stored with entertaining and useful reading.

The April number of the CANADIAN MONTHLY has come out in good time. The contents are perhaps the best which we have had in the present volume. The paper on The Intellectual Life is slightly sophomoric, but it contains valuable suggestions, and is of that serious character which betokens a species of substantial study too little cultivated in Canada. Canadian Historic Names is valuable, but a more systematic arrangement might perhaps have improved it. The critical part of the magazine, including literary reviews, musical criticism, dramatic notices, and other articles, is remarkably well done. Altogether, the periodical is worthy of encouragement. THE CANADIAN ILLUSTRATED NEWS as a family weekly, and this magazine as a monthly, should be on the table of every reading family in the Dominion.

ANTIGONE.

Toronto leads Montreal by many lengths in the encouragement and cultivation of music and the drama. The Grand Opera House and the Royal Opera House are temples of art. The best actors visit the Ontario capital with pleasure, because they are appreciated. Oratorios and musical works of high pretensions are performed with a certain degree of perfection. In Montreal, there is less ambition, as there has certainly been less opportunity. But we are happy to announce that under the direction of our widely-known elocutionist Prof. Andrew, and Prof. Harrison, Music Master in the new Proprietary School, an impulse upward is to be given, at Association Hall, on the 22nd inst. The composition selected is no less than Sophocles' Tragedy of Antigone, with melo-dramatic dialogue and choruses as written and adapted to the music of Mendelssohn.

The Tragedy of Antigone was written by Sophocles, and performed at Athens, about 450 years before the Christian era. It is the last of three Dramas connected with the history of Oedipus; who, by marrying Jocasta, the widow of Laius, king of Thebes, became the father of two sons, Eteocles and Polynices; and two daughters, Antigone and Ismene.

After his death, Eteocles and Polynices agreed to reign alternately; but Eteocles having grasped the sceptre, determined to retain it. Upon this, Polynices, aided by his father-in-law, the king of Argos, endeavored to regain possession of Thebes. An Argive army besieged the city, and was defeated; and the brothers, encountering in battle, fell by each other's hand. Creon their uncle, as their nearest male relative, immediately ascended the throne; and, enraged against Polynices, forbade on the pain of death that any should perform the rites of sepulture to his corpse, which he decreed should lie unburied.

The drama opens with a scene between Antigone and Ismene, in which they deplore the fate of the Labdacidan House. The last evil which has befallen it, is Creon's edict forbidding the sepulture of Polynices. Antigone is resolved to disobey the law. She does not ask Ismene to join her in the act; she determines to be alone in piety and sisterly love; "Death will be dear to me for such a deed; despise thou the Gods, if thou wilt."

On their leaving the stage, the Chorus, consisting of the Nobles and Counsellors of Thebes, sings a glorious strain, describing the late battle, and rejoicing in the safety of Thebes. Zeus has destroyed their enemies. Peace and prosperity smile anew.

Creon enters. He explains why he has deemed it imperative to prohibit the burial of Polynices. The Chorus acquiesces, expresses its obedience, and avows that Creon is acting lawfully.

While Creon and the Chorus are discussing the edict, a sentinel rushes on to tell them that it has been braved; that some unknown hand has strewn dust on the corpse of Polynices in spite of their active vigilance. The Chorus declares that the deed is the act of some God. Creon is incensed at such a supposition.

The sentinel, having been threatened with death unless the culprit be discovered, takes his departure. The chorus sings a moral strain, respecting the wondrous powers of man.

At the conclusion, Antigone is led on, a prisoner, having been captured in the act of renewing her homage to the dead. Creon questions her. She recklessly confesses the deed. The Chorus, revolting at such bravado, declares that she has the unbending fierceness of her race. Ismene then appears, and desires to share the blame with her sister. Antigone, however, repulses her; and Ismene, having now nothing to live for, wishes to die. She reminds Creon that Antigone is betrothed to his son Hæmon; but he abhors the idea of such a marriage.

The Chorus then prepares the audience for what is to come. It concludes its wild lament for the Labdacidan race by the significant hint,

"that Gods blind those whom they are about to destroy."

Hæmon enters. Creon asks him if he is leagued against him. Hæmon answers submissively, but defends Antigone. Angered by his son's opposition, Creon is roused almost to the climax of his rage, and mocks the Gods.

The Chorus here sings a hymn to "Eros, the mighty God." Love has "stirred up the strife of relations." It has made Creon and Hæmon enemies. Antigone is led on, and, at the mournful sight, the Chorus "can no longer restrain the fountain of their tears."

Antigone clings to life, and shudders at the thought of death. The Chorus sympathizes with her. She almost repents her deed. The Chorus commences a poetical enumeration of instances in which fate and madness have destroyed men.

Creon re-appears; Tiresias also. He advises Creon to spare Antigone and to bury Polynices. Creon angrily accuses the prophet of having been bribed to oppose him. The Chorus sides with Tiresias, and Creon, at length, consents to release Antigone.

The Chorus sings its celebrated hymn to Bacchus. Upon this burst of joy, the messenger arrives with saddest news.—Antigone has strangled herself, and Hæmon has died beside the dead body of his beloved.

Creon enters, heart stricken; he has lost all his former vehemence and pride. But his cup is not full; a messenger appears to inform him that Eurydice, his queen, has slain herself, cursing him for the death of her son.

The Chorus then concludes the drama by singing the moral of the piece:

'Tis wisdom that sees
The way to be blest;
To reverse the decrees,
Orbained by the deities
Ever is best.
All the strokes of injustice
Most justly rebound;
Recoiling, they wound.
When erring men, corrected, grow sage;
Their wisdom crowns their age.

CORRESPONDENCE.

LA BECQUEE.

To the Editor of the CANADIAN ILLUSTRATED NEWS.

SIR,—The picture with the above title in the Canadian Illustrated News of April 3rd, is a charming subject, treated in a charming manner.

You say that you cannot find a suitable English title for it. Allow me to propose two. One is "From Mouth to Mouth." A story is often said to go from mouth to mouth. In "La Becquee," the cherries, literally, go from mouth to mouth. The other is "Baby fed in birdie-fashion."

Yours respectfully,
Métis, Quebec, T. F.

[We have received other translations from correspondents, but none so satisfactory as the above.]
EDITOR C. I. NEWS.

THE CHURCH MILITANT.—A Methodist parson, called to preach in an out-of-the-way town in California, was informed before entering the pulpit that he must be careful, as many of the assembled congregation were "roughs," and would not hesitate to disturb him if his remarks didn't suit. The holy man made no reply, but, having reached the desk, he took from his pockets two revolvers, and, placing one on each side of the Bible, gave a sharp glance around the house, and said, "Let us pray." Report says that a more orderly service was never conducted.

CONSIDERABLE MECHANICAL GENIUS.—A devoted father purchased a tool-chest for his son, a lad of eight, who seemed to have considerable mechanical genius. Up to the latest accounts the boy has sawed off but two table-legs and six knobs from the bureau, bored only seven holes through the doors and three through the piano-case, and by the aid of the glue-pot stuck the family supply of napkins firmly to the parlour carpet.

HUMOUROUS.

A WESTERN editor did not wish to hurt the feelings of a gentle poet, but apologized for the non-appearance of a long and tender poem by saying:—"Beautiful Spring" was crowded out of our Sunday edition to make room for an account of the great snow storm."

A TAUNTON doctor reports that he recently had a coloured case which reported itself to him in the following style: "Doctor, I'm jes' dreading; I've had the fleuring in my hip, and a sore on the roof of my tongue; I've put on a mustard alteration and goggled my mouf, but it done me no good."

A paragraph is going the rounds of the newspapers to this effect: "There is one good wife in the country and every man thinks he has her." Old Brown who lives on Olive street, who is bald and whose wife has red hair and a wicked eye, read this and murmured as he immediately passed his hand over his head, "I dunno! I dunno!"

The following is a summer episode, as evolved by little Johnny: "Last summer our dog Towser was a lyn in the sun and trine to sleep, but the flies was that bad he cudden, cos he had to catch em, and bime by a bee lit on his head, and was a wicking about like the dog was bin. Towser he hel his head still, and when the bee was close to his nose Towser winked at me, like he said you see what this duffer is a doin, he thinks I'm a lily of the valley which isn't open yet, but you just wait till I blossom and you will see some fun, and sure enuf Towser opened his mouth very sly, so as not to frighten the bee, and the bee went inside Towser's mouth. Then Towser he shet his eyes dreamy, and his mouth too, and had begun to make a peaceful snuffle when the bee stung him, and you never see a lily of the valley ack so in all your life."