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CANADIAN CONTRACT RECORD

A WEEKLY JOURNAL OF CONTRACTING

PUBLIC WORKS • TENDERS • ADVANCE INFORMATION • AND MUNICIPAL PROGRESS

EVERY THURSDAY

This paper reaches every week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and leading Contractors in all lines throughout Canada.

VOL. 6.

DECEMBER 19, 1895

No. 46.

THE CANADIAN CONTRACT RECORD,
PUBLISHED EVERY THURSDAY
As an Intermediate Edition of the "Canadian Architect and Builder."

Subscription price of "Canadian Architect and Builder" (including "Canadian Contract Record"), \$2 per annum, payable in advance.

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TENDERS FOR TOWN HALL

Sealed Tenders marked "Tenders for Town Hall," will be received by the undersigned up to six o'clock p. m. on

Monday, December 23rd, 1895

for the construction of a Town Hall, in the Town of Blenheim, according to the plans, contract agreement and specifications of J. L. Wilson & Son.

The said plans and specifications are now on view at the offices of the architect and the undersigned. Tenders will be received in part or bulk. Satisfactory security required.

The lowest and any tender not necessarily accepted.

J. W. GIBSON,
Town Clerk.

Blenheim, Dec. 5th, 1895.

TOWN OF MOUNT FOREST WATER WORKS

Plans and specifications for a System of Water Works for the Town of Mount Forest, with tenders for the cost of completion of the works from Woodland Springs, will be received by the undersigned up to the

10th Day of January, 1896

The Council do not bind themselves to accept any system or any tender that may be submitted, but any tender that may be approved of must, before being accepted, have a deposit accompanying same of \$5,000.

W. G. SCOTT,
Chairman Fire and Water Committee.

NEW COMPANIES.

NEW GLASGOW, N. S. - I. Matheson & Co., applying for incorporation; capital, \$60,000; to carry on business as iron founders, machinists and engineers.

VICTORIA, B. C. British Columbia Pottery Co, seeking incorporation; trustees, James Dunsmuir, Charles A. Vernon and Joseph Hunter of Victoria, capital stock, \$150,000.

THREE FORKS, B. C.—Cumberland Mining, Co., Ltd., applying for charter. Promoters, Nathaniel Drummond Moore, of Three Forks, William Hoover Yawkey, of Rosland, and Wm. Clyman Yawkey, of Detroit, Mich. Objects, general mining. Capitalization, \$50,000. Sunshine Mining Co., Ltd., seeking incorporation, applicants same as above company. Capital \$5,000.

MONTREAL, QUE. — Non-Magnetic Asbestos Company, seeking incorporation; capital \$15,000, applicants, John H. Seed and Francis P. McCall, of Brooklyn, N. Y., Cassius H. Wells, of Huntingdon; William Sclater, William T. Costigan, merchant, and Edward A. Cowley, of Montreal.—Northern Electric and Manufacturing Co., applying for incorporation; capital \$50,000; to manufacture electrical supplies, and to construct street railways, telephone systems, etc. Promoters, C. F. Sise, Robert McKay, Hon. J. R. Thibaudeau, and others of this city.

BUSINESS NOTES.

Dussault & Denis, plumbers, Montreal, have dissolved.

Bourassa & Nautel, contractors, Montreal, have dissolved partnership.

The Texeda Lime Company, Limited, Vancouver, B. C. is being wound up.

The Ontario Lead and Barb Wire Co., of Toronto, are now handling plumbers' supplies of all descriptions.

W. Bowness, of the Victoria Plumbing Co., will shortly register under the style of the Universal Supply Association.

Donald Sutherland, a railway contractor, died at Shubenacadie, N. S., recently. He built a section of the Grand Trunk Railway.

CONTRACTS OPEN.

WOODSTOCK, N. B.—The establishment of a pulp mill here is agitated.

BLenheim, ONT.—The Presbyterian church will probably put in a furnace.

ST. JOHN, N. B.—The medical fraternity contemplate erecting a new hospital.

DIGBY, N. S.—The New France Milling Company will build an electric railway.

MISSION CITY, B. C.—The Fraser Valley Fruit Union will erect a cannery here.

KINGSTON, ONT.—The by-law to raise \$20,000 for a new school building will be voted on by the electors.

WALKERTON, ONT.—A by-law will be submitted to grant a bonus of \$6,000 in aid of the proposed chair factory.

GREENBANK, ONT.—The trustee board of the Methodist church have secured a site for the proposed new building.

ST. CATHARINES, ONT.—The ratepayers will probably vote on a by-law next month to establish a civic electric plant.

MEAFORD, ONT.—A vote of the ratepayers will be taken on the 6th of January to expend \$6,000 on waterworks extensions.

WYOMING, ONT.—Steps will be taken at once to erect a new manse and stable for St. Johns' church, at an estimated cost of \$1,500.

ST. MARY'S, ONT.—An architect at Stratford is preparing an estimate of cost of proposed improvements to the Methodist church here.

VICTORIA, B. C.—American capitalists contemplate the establishment of a large salmon cannery near this city, a site for which will shortly be selected.

CARLETON, N. B.—The sum of \$30,000 will probably be spent on waterworks. It is proposed to lay a 12-inch pipe along Watson street to Queen street.

VANCOUVER, B. C.—Short & Squair propose to develop the resources of the Hudson river and go extensively into the fishing and lumbering business.

HALIFAX, N. S.—Steps are being taken to organize a company to erect a cold storage warehouse, and the Board of Trade will ask the Provincial Government for a grant.

LEAMINGTON, ONT.—James Lydiatt, of Toronto, representing a syndicate, has arranged with the Council for the establishment of a glass factory here. The plant will cost \$25,000.

CHATHAM, ONT.—A proposal is being discussed to sell to the county the city's interest in Harrison hall and furnish a separate civic building, the present court house being inadequate.

HULL, QUE.—Contractor Viau states that he will shortly make an offer to the council to light the streets by electric city. The council on the other hand, are considering the purchase of a plant.

BROCKVILLE, ONT.—The Y. M. C. A. have purchased a lot on which a fine building, for the purposes of the associa-

tion, will be erected. The directors will secure plans and estimates at once.

OSHAWA, ONT.—R. S. Williams & Son are preparing to build an addition to their buildings.

PORT ARTHUR, ONT.—The company recently formed to develop the Empress gold mine at Jackfish Bay propose to erect at once a ten-stamp mill. Walter Ross, of Rat Portage, is one of the prime movers.

SIMCOE, ONT.—A bonus will probably be offered to induce the Record Manufacturing Co., of Conneaut, Ohio, to establish a branch here for the manufacture of tin and woodenware, under their Canadian patents.

QUEENSTON, ONT.—Incorporation by the Dominion Gov't has been asked for Queenston Heights Bridge Co., for the purpose of constructing a bridge across the Niagara river, at or near Queenston Heights, with arches 60 ft. high.

RAT PORTAGE, ONT.—The C. P. R. contemplate making extensive improvements here next season.—It is probable that the waterworks by-law will be defeated.—Work is shortly to be commenced on the rebuilding of the Albion block.

WOODSTOCK, ONT.—Davis & Van Buskirk, civil engineers, have just reported on the proposed improvements on the Whirl Creek drains in Ellice township. The cost will be \$6,800. They have also made plans for the improvements in the township of North Oxford, on the Henderson Creek drains, the cost of which will be \$6,200.

NEWMARKET, ONT.—A meeting was held here recently in regard to the proposed Ontario and Lake Huron Electric Railway, at which Mr. Pew, the promoter, stated that he had been requested to extend the line to Goderich by way of Wingham. The Dominion and Provincial governments have granted bonuses to the extent of \$6,200 a mile.

QUEBEC, QUE.—H. Stavely, architect, is taking tenders for improvements to the old Congregational church.—Mr. Benner, representing a syndicate of capitalists, who are about to construct an electric railway here, proposes to consolidate all the electric and street railways in and around Quebec. The amalgamated company will have a capital of \$2,500,000.

SCHOMBERG, ONT.—L. E. Hambly, who is interested in the proposed electric railway between Aurora and this village, was here recently in connection with the scheme. He stated that the probable cost of the road would be about \$200,000, and that the bonus by-law would be submitted to the municipalities as soon as a government charter is secured. A. B. Armstrong, of Toronto, is solicitor for the company.

CHESLEY, ONT.—H. J. Gray, architect, of Harriston, has prepared plans for the proposed improvements to the public school. Three plans were prepared, two for new schools and one for alterations to present building, the cost of the latter being placed at \$6,145. The cost of a new eight roomed school is placed at \$9,766, with \$1,700 additional for the Smead-Dowd system of heating and ventilating.

MONTREAL, QUE.—The building of the new Protestant school in St. Louis du Mile End will shortly be commenced.—The Street Railway Co. has been granted permission by the Road Committee to build a line on Mount Royal avenue. The extension will mean about four miles of additional track.—It is understood that a private competition will be opened shortly for the erection of an extension to St. Laurent College, to cost about \$50,000, and which will be built in the spring.

WINNIPEG, MAN.—A motion has been brought forward in council to provide the

sum of \$18,000 for the erection of three new fire halls.—The Hudson Bay and Pacific Railway Co. will make application to the Dominion Government for a charter to build a steam or electric railway connecting Calgary and Fort Churchill.—E. F. Hutchings will build a large warehouse and manufacturing establishment next spring. The structure will be 50 x 155 feet, six storeys high, brick and stone. It is said that Mr. Macdonald and other wholesale men will also build warehouses next year.

PETROLIA, ONT.—The voting on a by-law to raise \$172,000 for the construction of a waterworks system for the town takes place on the 17th of January next. The supply will be taken from Lake Huron, and among the items of expenditure are the following: 66,000 ft 12-inch main, \$101,000, standpipe, \$8,500; pumping machinery and boiler, \$6,000; intake pipe, 900 ft long, \$4,000; pump house, boiler house chimney and well, \$3,500.

LONDON, ONT.—The Board of Trade have approved of the request of the Western Fair Board for \$25,000 to be expended on new exhibition buildings.—The first steps have been taken towards the re-erection of the Grand Trunk car shops in this city. The company's chief draughtsman, Mr. Holland, the car superintendent, Mr. R. Treleven, and a party of assistants, are taking a general survey of the grounds and buildings, and testing the foundations of the old shops, which were destroyed by fire ten years ago, and it is understood tenders will be called for construction next month.

FREDERICTON, N. B.—The City Council have engaged the services of Mr. Willis Chipman, C. E., of Toronto, to report on the best system of sewerage for the town. The report will be presented in February, when a vote of the ratepayers will be taken, and if favourable, tenders will then be asked.—A number of new buildings are projected. J. Clark & Son will erect a brick building, corner of King and York streets. Mrs. Cameron proposes to build a brick structure, and it is the intention of Frank McGolderick to erect a three-story brick building.—Dr. Inch has started a movement to erect a new University residence and assistance is being sought to that end. It is proposed to erect a brick or stone building estimated to cost \$30,000.

HAMILTON, ONT.—The Minister of Education and the Board of Education have approved of the plans for the proposed Collegiate Institute and Normal school. The building will front on Hunter street and will be heated by steam. Architects, Wm. Stewart & Son.—James Stewart, of Toronto, is endeavoring to form a company to purchase the Ladies' College and reconstruct it into a hotel, and also points out the availability of adjoining property as a site for an opera house.—John Coffee has taken out a permit for two two-storey brick dwellings, corner of Sanford avenue and Barton st., to cost \$1,800.—The directors of the Hamilton, Grimsby and Beamsville Railway have assured the municipalities that the extension of the road to Beamsville would be made as soon as the necessary by-laws were passed.

TORONTO, ONT.—A Court of Revision was held at Eglinton a few days ago to consider the widening of Davenport road from Bathurst street westward. The estimates presented for the work placed the cost at \$57,000, or \$14,000 more than the first estimate.—The law students of Osgoode Hall are taking steps to secure the erection of a gymnasium.—Petitions have been presented to Council asking for a light asphalt pavement on Berkeley street, between Gerrard and Carlton streets, and a cedar block pavement on Yorkville avenue between Yonge street and Avenue road.—The Westinghouse Air Brake Co., of Pittsburg, are consider-

ing the estab' shment of a branch factory in this city, and the Manufacturers' Committee have decided to offer the company a site on King st., assessed at \$8,000, at a rental of 5 per cent. on the assessed value.—A building permit has been granted to D. Nasmith, Logan avenue, for a 2 story bk. front dwelling, 35 Wardell st., cost \$1,000.

OTTAWA, ONT.—The waterworks committee has decided to ask the council to petition the Ontario Legislature for power to issue debentures to the extent of \$125,000 for extensions and improvements to the waterworks system. The proposed additions will include auxiliary steam pumps, 200 hydrants, new mains and enlargement of a number of present mains.—It is anticipated that the Dominion Government will, at the next session of parliament, vote a sum for the erection of a new Geological Museum.—The Quebec government authorities have given their assent to the Ottawa and Gatineau railway building their line through the rear portion of Bouchette township instead of the "front," and the road will be built by that route.—The City Clerk will receive tenders until the 24th inst. for repairs to the city hall.—The Ottawa County Council have endorsed the proposal of the Deschene Bridge Co. to build a bridge across the Ottawa river between Hull and Nepean townships. The Dominion Government will be asked for assistance.—The Building Committee of the Protestant Hospital have decided to invite competitive plans from architects for the proposed addition, the limit of cost to be \$45,000.—The Canada and Michigan Bridge and Tunnel Company will apply to Parliament at its next session for power to build a high level bridge over the Detroit river at Windsor. Estimated cost \$4,000,000. Application will also be made to Parliament for power to build a railway between King and Newmarket.—W. T. Jennings, C.E., has deposited with the Railway Department here the plans of a steel bridge, to be built over the Sydenham river by the Erie and Huron Railway Company.

FIRES.

The residence of J. T. Groves, at St. Catherines, Ont., was badly damaged by fire last week. Loss covered by insurance.

Charles Stewart's residence at Kintail, Ont., has been burned. Loss, \$1,000; no insurance.—The residence of Clowes Hallett, at Douglas, N. B., was recently burned. Insurance, \$500.—The Harley House and stables at Harley, Ont., owned by Mr. Campbell, of Brantford, were burned, on the 13th inst. Insurance on buildings, \$1,000.—Fire at Perth, N. B., recently destroyed W. D. Appleby's liquor store, with dwelling and Mr. H. Craig's dwelling house. Loss, \$2,500; fully insured.—On Thursday of last week W. & O. McKean's wheel shops at Dresden, Ont., were burned, entailing a loss of \$12,000. The firm will rebuild.—The residence of Dr. St. Jean at Ottawa, was destroyed by fire on the 15th inst. Insurance, \$500.—Three dwellings at Princeville, Que., have been burned. The owners were Madame F. X. Proulx, Dr. Bressard and Mr. Mailhot.—A portion of H. Falardeau & Co.'s tannery at Quebec, Que., was destroyed by fire on Monday last. Loss, \$10,000, partially covered by insurance.—A store building at Staples, Ont., owned by W. A. Maricle, has been burned.—A large three-storey brick and stone building at Winnipeg, Man., known as the Cauchon block, was gutted by fire on the 16th inst. Loss, \$50,000; insurance, \$40,000.—John A. Robinson's general store at Coderington, Ont., has been burned.

The water works at Alexandria, Ont., have been tested and found to be very satisfactory. The water is pumped from the River de Lisle, about a mile and a half distant, where there is a dam 95 feet long.

CONTRACTS AWARDED.

NANAIMO, B. C.—The contract for heating the new school has been let to V. Leek & Co., of Vancouver.

TORONTO, ONT.—The Gurney Foundry Co. are supplying the new McGill College building, Montreal, with radiators.

VERNON, B. C.—The \$20,000 worth of 5 per cent. debentures have been purchased by G. A. Stimson, of Toronto, at \$1.10.

LONDON, ONT.—The tender of the Hamilton Bridge Co. for the steel superstructure of Zavit's pond bridge, on the Port Stanley railway, has been accepted by the engineers in charge.

DECORATIVE NOTES.

A light is an important factor, and one that must have primal consideration when any scheme of color is contemplated. Its effect upon polychromatic decorations is far greater than it is usually thought to be by the uninitiated. Yellow is the strongest of all the colours, and the most diffusive of light. Hence, the room that is deficient in light must be treated in this key. The tendency must be in the direction of yellow. Pale cream ceiling, with buffish ornamentation and white and gold; walls of a fuller and richer cream, approaching golden yellow, with bits of clear yellow, gold and light blue ornamentation and warm red in generous measure; woodwork, old ivory, in polished enamel; carpet, creamy and full of bright bits of yellow, red, blue, and golden buff; drapery, old gold, blue, and pale straw; upholstery, ivory and light blue.

The room that has too much light requires an opposite treatment. The colors must be light absorbent. For this purpose let us employ for the ceiling a light green having a bluish cast, with bluish gray and reddish gold ornamentation; walls, deep sea green, with pale green gray and silver ornamentation; woodwork, a pale sea green; carpet, greens, grays, black, and silver; drapery, greenish gray; upholstery, écru, greenish, gray and silver.

HOW MINERAL WOOL IS MADE.

Of those who know what mineral wool is, or silicate of cotton, as it is sometimes called, says a writer in Cassier's Magazine, probably only a small number are familiar with the simple process by which it is made. The wool itself serving a variety of useful purposes, as a non-conductor against heat and cold alike, for steam pipes and cold storage room walls, as a "sound deafener" in floors of buildings and as a means of fire-proofing, among many others is, as its name implies, a soft and wooly substance, consisting of a mass of very fine mineral fibers interlacing one another in every direction, and thus forming an endless number of minute air cells. The wool appears on the market in a variety of colors, principally white, but often yellow or gray, and occasionally quite dark, and is made by converting scoria and certain rocks while in a molten state into a fibrous condition by a steam blast directed against the liquid material. Blast furnace slag forms the raw material for one variety of the wool and sandstone for another, yielding, respectively, slag wool and rock wool, the latter being pre-


ferable for pipe covering, because of the absence from it of sulphur, which, with moisture present, becomes an acting corroding agent. The furnace slag or the rock, as the case may be, is melted in a large cupola, and as it trickles out at the top hole in a somewhat sluggish stream it meets a high pressure steam jet which atomizes the woolen mineral, if it may be so termed, blowing it in fleecy clouds into the storage room provided for it. Soft and downy, the stuff settles wherever a resting place affords itself, the heavier and easier wool coming down first, while the lighter portions are blown further along by the force of the steam and settle in the more distant parts of the room, the material thus naturally grading itself into varieties of different quality. A thousand pounds of wool per hour are turned out by one of the cupolas, and after the storage

room has been blown full the flocculent mass is pushed into bags ready for market. The whole process affords an admirable and interesting illustration of the utilization of an utterly waste product.

In the days of the Emperor Diocletian a house painter's wages were 60 cents a day, while a schoolmaster received only 60 cents a month for each pupil.

France has 7,842,053 houses, of which more than half have but one storey, 221,799 have three storeys and 96,487 only four storeys or more.

Marble which has been blackened or turned green by exposure to air and damp should not be scraped. The work is then always more or less scratched and injured. It should be first washed with strong potash water, then with pure water, and then finished with water containing a dash of hydrochloric acid.

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MUNICIPAL ENGINEERS, CONTRACTORS AND MATERIALS

ELASTICITY OF BRICKWORK.

Experimental tests of the elasticity of common brickwork, in mortars of prevailing lime and sand are rarely made, and more rarely published. We are therefore left to infer the probable results from such available tests as come nearest to the specification of ordinary brickwork. The following is taken from the report for 1884 of tests made at the Watertown Arsenal, U. S. A. A common hard burned brickwork pier 8 in. by 8 in. by 6 ft. 8 in. laid in lime mortar, three of sand, joints broken all round, in half-brick laps, no closers, bed joints about $\frac{1}{4}$ in. to $\frac{1}{8}$ in. thick, give a compression of $\frac{3}{100}$ in. with a load of 8,000 lb. on 61 $\frac{1}{2}$ inch gauge length and $\frac{52}{1000}$ in. with 10,000 lb. and a permanent set of $\frac{45}{1000}$ in.. The age of the pier when tested was 15 months. A similar pier of half burned face brick, 23 months old, with joints $\frac{1}{8}$ in. thick, gauged on 5 ft. 4 in. of its 6 ft. 8 in. length, gave a compression of $\frac{2}{1000}$ in. with 7,500 lb. and $\frac{58}{10000}$ in. with 10,000 lb., with a permanent set at the latter load, when released to 5,000 lb load of $\frac{5}{10000}$ in. This compression was obtained on a $\frac{1}{8}$ in. joint, breaking joints all round with half-brick overlaps and no closers. In an ordinary half-inch mortar joint laid up in walling of quarter brick bond lap, with bats and mortar filling between the faces, the compression would be five or six times this quantity—say, six times, or $\frac{23}{1000}$ compression, and a permanent set of $\frac{3}{1000}$ in 10,000 lb. load per square inch, which is equivalent to ten tons per square foot—i. e., 10,000 lb. \div 64 square inches = 156.2 and 156.2 \div 15.6 = 10 tons. With a load of 20,000 lb. the compression was .019 and set .009. It crushed with 108,400 lb. = 1,877 lb. per square inch, and gave a final compression in the 5 ft. 4 in. of gauge length of 13 in. with a set of .085 in. These quantities might be multiplied by at least six to represent the equivalent result of a $\frac{1}{2}$ in. lime mortar joint, and by 9 to represent, in addition a less perfectly formed brick, and for bat and mortar filling and careless workmanship. If the brickwork were built in continuous damp weather, the compression, as well as the permanent set, would be increased. Under such conditions the difference of levels of lintels, girders, etc., would be increased when iron supports, as columns and stanchions, were used in conjunction with rickwork. It is in such weather that failures are most frequent. The observations on the behaviour of brick piers of this class laid in lime mortars tended to the general conclusion that the higher the loads the greater was the difference of the readings of the gauged compression for each additional 5,000 lb. of load increments. Another observation offered by the tester, the engineer of the machine, was that repeated heavy loads tend to destroy the mortar joints, by disintegrated,

tion, and in time the piers fail in detail at the joints in consequence. From this circumstance is to be obtained an explanation of some failures which have occurred in masonry subject to oscillations, heavy concussions or impactive force, jar or vibration.

Mildew in painted work may often be prevented by adding a little sulphur to the paint.

DEBENTURES PURCHASED

Municipalities issuing debentures, no matter for what purpose, will find a ready purchaser by applying to **G. A. STIMSON, 9 Toronto Street, Toronto.** Any assistance required in computing calculations in connection with sinking fund, etc., will be gladly given. N.B.—Money to loan at lowest rates on first mortgage.

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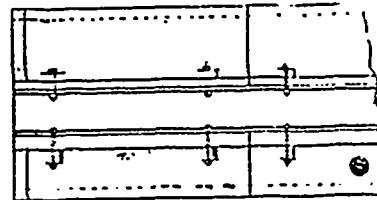
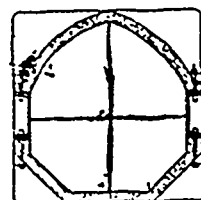
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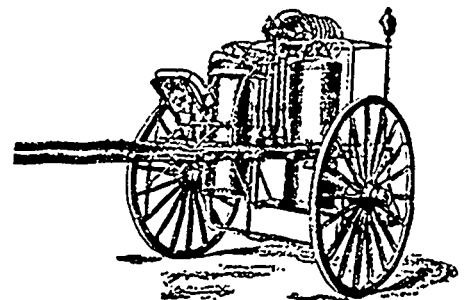
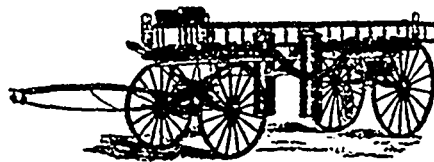
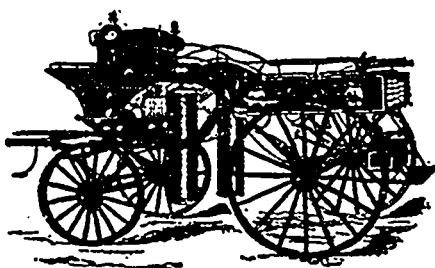
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MUNICIPAL DEPARTMENT

ANOMALIES IN SANITATION.

The basis upon which the whole structure of sanitary engineering rests is the proposition that zymotic diseases can be prevented. If this proposition be broadly true, the reason for the existence of sanitary rules and appliances, and for knowledge and skill in their application, is obvious; if not true, the belief (expressed by some) that much of what is taught and insisted upon by sanitarians is humbug, and much which is done by sanitary engineers is an expensive concession to the pseudo-science, is well founded. Those who entertain this belief are wont to clinch their arguments with the question: "If disease can be prevented, why, notwithstanding the adoption of all these rules and appliances, does not the class of diseases to the prevention of which they are specially framed and directed disappear from civilised communities?" This question The Sanitary Record meets with a complete answer, which is that "both individuals and communities still continue to preach without practising the things which are generally admitted to be essential to healthy life." As one example of the truth of this statement the following is quoted:—

"Only recently it was the writer's pleasure and privilege to spend a portion of his holidays in the Hartz mountains—the Oberland of Germany, in the province of Brunswick, where Dame Nature has been profusely generous in her distribution of beauty. The district, while comparatively unknown to, and far from the beaten track of, the British tourist, is, by reason of its being the only part of Northern Germany deserving of the name of mountainous, dearly beloved by the denizens of 'Waterland'; and hither a yearly increasing flock of them wend their way, doubtless with benefit to nearly everyone concerned. Provision in abundance for this annual influx is to be found in the way of conveyance and of accommodation, the hotels, pensions, gasthaus, and cafés vieing with each other in their amplitude of attraction and comfort. So far so good, and, to the mind of the Guelph, an earthly paradise.

"Midst of all this wealth of natural beauty and catering for popular patronage, and in a country so deservedly famed for its research, investigation, and discoveries in the deeper realms of science of hygiene and sanitation, it might reasonably be expected that some little attention would here be paid to the ascertained elements of those subjects, but what a rude awakening the assumption receives?"

"Down as pretty a valley as the eye could see or the mind can conceive, there winds its way through a charming village a mountain streamlet, innocent at its rise

of the near presence of a civilised community. As we approach it and the village from the lower side, an odour more pronounced than pleasant is perceived, and a friend suggests the proximity of a pig cot. A second thinks it probable that a middenstead is being disturbed, while a third makes a deviation, and solves the query by finding a sewage-bearing brook, which, on further investigation, proves to be at once the sewer for the district and a continuation of the aforesaid virgin streamlet!

"It would probably be argued by those who are responsible for such a condition of affairs, should there be any such, that, if it is a danger at all, its potency for evil is reduced to a minimum by the open nature of its surroundings, and that the volume of pure spring water which is continually flowing through the channel suffices for all practical purposes to keep it clean and sweet. This, however, is an argument that has often been exploded; and to those who are cognizant of typhoid fever at Lausanne, in Switzerland, some years ago, when the calamitous, and at first incomprehensible, appearance of the disease was ultimately traced to the pollution by sewage of the village stream some two or three miles from the site of the outbreak, the contention would, if advanced, be rejected with scorn."

The internal arrangement of sanitary appliances in the region named are also very objectionable, as was found on investigation, although external cleanliness appears to prevail to a marked degree; and these arrangements indicate a widespread ignorance of facts and principles.

LEGAL DECISIONS AFFECTING MUNICIPALITIES.

Judge Snider gave judgment at Hamilton on the 3rd inst., in the appeal of the Hamilton Gas Company against \$75,000 on gas mains, \$100,000 for the land through which the pipes run, and \$10,000 for meters, all being assessed as real estate. Following the decision of Chancellor Boyd, in the suit of the Consumers' Gas Company v. Toronto, he decided that the mains were liable to taxation. As to the right-of-way he decided that it was liable to taxation, but considered this limited to that portion of the underground soil exclusively occupied by the company with its mains, that is, the displaced portion and the soil immediately touching the pipes. The judge considered that the sub-soil, placed where it is, has no commercial value, the only value being as the support and protection of the pipes. It seemed to him that any value placed upon it beyond a nominal value would be purely arbitrary, in fact mere conjecture. The right to break up the streets to put in pipes did not, in his opinion, form any proper element in such valuation under the Assessment Act. Referring to the assessment of the mains, he said: "It is proved that the value of these second-hand pipes as old iron, for which alone they could be sold, if apart from this 'going concern,' would be \$9,300, less the cost of getting them out of the ground. This value as

part of this company's property as a 'going concern' is \$75,000. Now what gives this additional value? It seems to me it is made up, at least partly, if not entirely, by the support and protection, and the right to the support and protection, of the underground soil, to which I have referred. Without this support and protection, which is the only value of this soil to this company, I think this assessment of these old pipes would be excessive. For these reasons I conclude that in confirming the assessment of these mains for \$75,000, where they are, and because they have a right to be where they are, I have exhausted the company's whole assessable real estate in these streets." The judge therefore struck off the assessment of \$100,000 on the right-of-way. He held that the meters were personal property, and could not be classed as real estate, and reduced the assessment by \$10,000.

"EXTRAS."

The question of contractors' "extras" has long been a doubtful and unsatisfactory one, and has in course of time given rise to much bickering between the parties concerned in a contract. It is no very uncommon thing says the Contract Journal, of London, to find the original tender for a work exceeded by the cost of the extras; but in such cases exceptional circumstances must naturally have ruled, as they have ruled in connection with the trial which has been concluded before the Master of the Rolls and Lords Justices Lopes and Kay, and in which this question of extras was involved. The plaintiffs, Messrs. Graham and Sons, obtained a contract from the Corporation of Huddersfield for the execution of certain sewerage works. When these works were being carried out it was discovered that a mass of rock would have to be tunnelled, for which the contractors claimed extra payment; and it appears that while the surveyor to the Corporation refused to make an allowance for the additional work on his own responsibility, the Health Committee verbally promised the plaintiffs that extra remuneration should be given to them. At the trial before a special jury at the Leeds Assizes the contractors obtained a verdict in their favour, but immediately thereafter the defendants claimed that judgment should have been entered for themselves on two grounds—firstly, that the contract relied on by the plaintiffs was not under seal, and therefore was not binding; secondly, that by virtue of Section 200 of the Public Health Act, 1875, the committee could not enter into any such contract at all so as to bind the Corporation; and they appealed against the finding of the jury. Unfortunately, however, for the Corporation, the judges in the Appeal Court have decided that these points have been taken too late to be of legal use, and their appeal has consequently been dismissed. That the objections raised by the defendants were absolutely fair in spirit we would hesitate to say. It seems but natural that where a contractor encounters physical obstacles which neither party could have foreseen he should not be altogether a loser on the transaction. At all events, the case may serve as a warning to contractors to see that they have their documents duly furnished with the harmless but necessary corporation seal.

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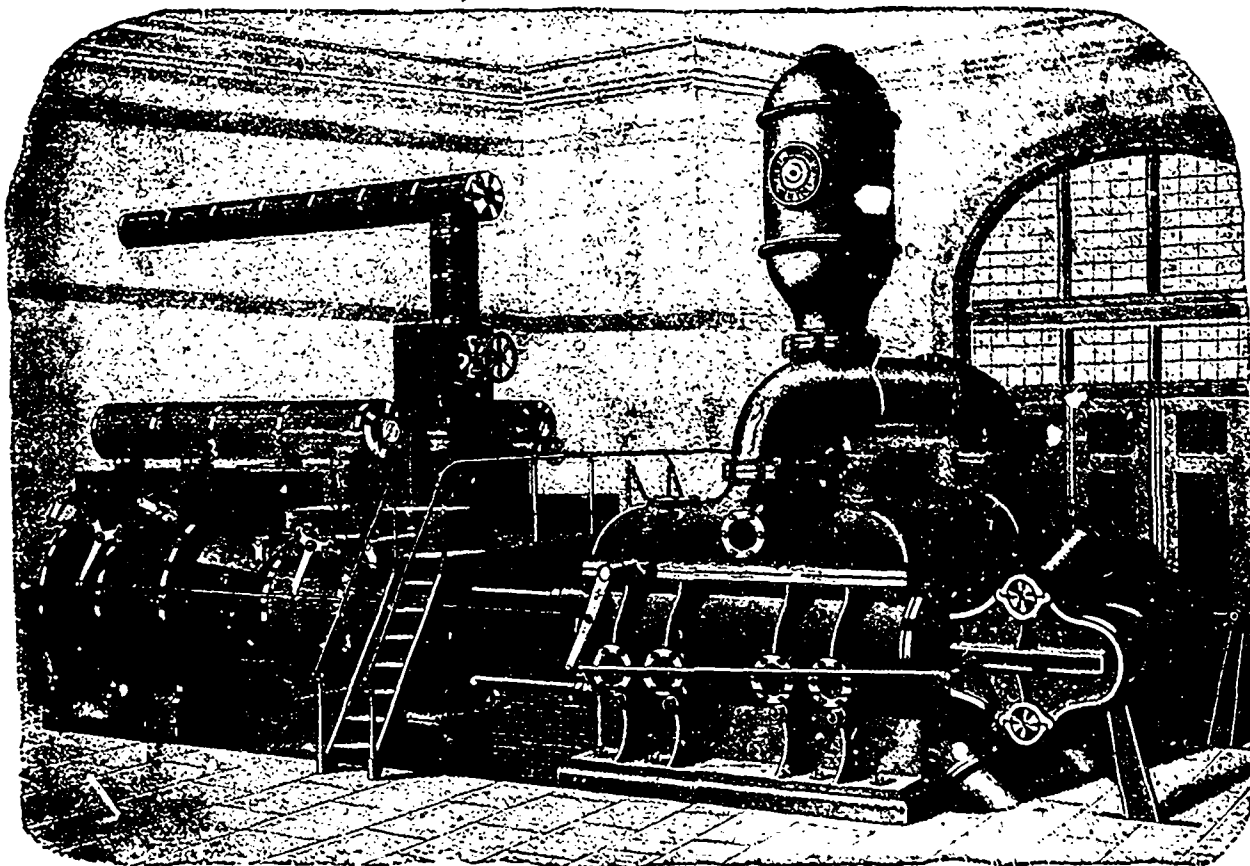
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CONDITION OF THE MARKET.

TORONTO: The holiday season is having its effect upon the market, which has assumed a degree of quietude. The outlook for spring is not the brightest, although hopes are entertained of an improvement in the early part of next year. Plumbers' supplies, lead pipe, galvanized iron and cement are moving steadily at unchanged quotations. Paints and oils are quiet.

MONTREAL: The iron and metal trade continues firm in tone, but few sales are reported. The cement market is quiet, but the recent advance in price has been maintained. The stock on hand is estimated at 20,000 barrels, more than half being Belgian, which will probably be exhausted before the spring. Paints, as in Toronto, are quiet.

LUMBER.

CAR OR CARGO LOTS.

Toronto. Montreal

Table listing lumber prices for Toronto and Montreal, including items like 1/2 to 2 clear picks, spruce culls, and various shingles.

VAID QUOTATIONS.

Table listing various quotations for lumber and building materials, such as mill cull boards, shipping cull boards, and hemlock scantling.

BRICK—M

Table listing prices for different types of bricks, including Common Walling, Good Facing, and Sewer bricks.

Pressed Brick, Per M:

Table listing prices for pressed bricks from various manufacturers like Beamsville and Buffalo.

Table listing prices for roof tiles, hip tiles, ridge tiles, and various types of bricks and ornamental tiles.

SAND.

Table listing sand prices per load of 1 1/2 cubic yards.

STONE.

Table listing prices for various types of stone, including common rubble, large flat rubble, foundation blocks, and granite.

OHIO FREESTONE, FROM THE GRAFTON STONE CO.'S QUARRIES.

Table listing prices for Ohio freestone from the Grafton Stone Co.'s quarries, including various sizes and types of blocks.

SLATE.

Table listing prices for roofing slate in square feet, including red, purple, untadng green, and black slate.

PAINTS. (In oil, 1/2 lb.)

Table listing prices for various types of paint, including white lead, red lead, yellow ochre, green chrome, and black lamp.

CEMENT, LIME, etc.

Table listing prices for Portland cements from different manufacturers like Gernar, London, and Newcastle.

Table listing prices for Portland cements and hydraulic cements, including Belgian, Canadian, Roman, and Parian brands.

HARDWARE.

Table listing prices for hardware items like cut nails and steel nails.

CUT NAILS, FENCE AND CUT SPIKES.

Table listing prices for cut nails, fence nails, and cut spikes in various sizes and quantities.

FINE BLUED NAILS.

Table listing prices for fine blued nails in different sizes.

CASING AND BOX, FLOORING, SHOOK AND TOBACCO BOX NAILS.

Table listing prices for casing and box nails, flooring nails, and shook and tobacco box nails.

FINISHING NAILS.

Table listing prices for finishing nails in various sizes.

SLATING NAILS.

Table listing prices for slating nails in different sizes.

COMMON BARREL NAILS.

Table listing prices for common barrel nails in various sizes.

CLINCH NAILS.

Table listing prices for clinch nails in different sizes.

SHARP AND FLAT PRESSED NAILS.

Table listing prices for sharp and flat pressed nails in various sizes.

STEEL WIRE NAILS.

Steel Wire Nails, 75 % discount from printed list

Iron Pipe:

Table listing prices for iron pipe in various diameters and lengths.

Lead Pipe:

Table listing prices for lead pipe in different diameters.

Galvanized Iron:

Table listing prices for galvanized iron products like Adam's-Mar's Best and Queen's Head.

Structural Iron:

Table listing prices for structural iron products like steel beams, channels, and plates.