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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. 7.

JANUARY 7, 1897

No. 49.

THE CANADIAN CONTRACT RECORD.

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As an Intermediate Edition of the "Canadian Architect and Builder."

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TENDERS WANTED Survivas Linea

Sealed tenders will be received by the undersigned, on behalf of the County of Huron, until 4 O'CLOCK P. M. on SATURDAY, THE 23RD OF JANUARY,

For Rebuilding the Bannockburn Bridge of Steel or Iron.

The bridge is to be 80 feet long between the abutments; the floor to be 16 feet wide. The bridge is to be supported on four cylinders three feet in diameter and ten feet long, to be filled with contente; the floor and joists to be of rock elm.

Site about two miles from Brucefield station on the L. H. & B. Ry.

To be completed on or before the 17th of August, next. All further information may be had by enquiry.

The lowest or any tender not necessarily accepted.

JOHN ANSLEY,

Chairman of Committee.

w 230 , W ~~

Wingham, Jan. 5th, 7897.

 $\eta^{b'}\eta^{b}$ WANTED

A Thoroughly Competent Master Coach Painter, with railway experience. Apply,

BOX 75, CONTRACT RECORD.

CONTRACTS OPEN.

SUNDRIDGE, ONT.—Mr. Irving intends putting in an electric light plant in his woollen mill.

HINTONBURG, ONT.-W. A. Davis intends building a residence in the spring, to cost \$2,000.

STEWARTON, ONT .- The Presbyterian church will probably purchase a new organ, at a cost of \$1,500.

GUELPH, ONT .- The by-law to provide funds for the purchase of an electric light plant was defeated by the ratepayers.

BRANTFORD, ONT .- A by-law to raise \$14,000 for a new school on Albion street was carried by the ratepayers on Monday

BROCKVILLE, ONT.-G. T. Rafferty will erect a cottage on Pallisades Point, 64 x 165, two stories high and heated by steam.

SOUTHAMPTON, ONT .- A by-law will be voted on by the ratepayers to raise \$11,000 for the purchase of an electric light plant.

COWANSVILLE, QUE.—The ratepayers have approved of a by-law to provide the sum of \$20,000 for putting in a system of waterworks.

COAL CREEK, N. B .- It is rumored that Mr. Harding, of this place, intends building a steam saw and grist mill at Douglas Harbor.

CORNWALL ONT.—The by-law granting a bonus to the Ontario and Pacific railway was carried at the municipal elections on Monday.

PERTH, ONT.—The Badaur water power privilege on the Tay, four miles above the town, has been purchased by John A. Stewart and D. R. Noonan.

YARMOUTH, N. S .- Mr. Grantham, councillor, proposes erecting a fine opera house. The building is to be a spacious fire-proof structure, built of brick, with a steel roof.

PORT ARTHUR, ONT.—The Street Railway Company will likely put in a plant at the power house for lighting the town, to consist of a dynamo capable of running 1,300 sixteen c. p. lights.

ALLISTON, UNT .- The Northern Nail & Wire Company of Ontano has been incorporated, with a capital of \$30,000. The promoters are Hugh. F. Kelly, W. G. Fisher, A. A. Burk, J. D. Shipley and W. J. Kelly.

ROSSLAND, B. C.—A movement is on foot for the building of a smelting plant near this place. — Plans and specifications are being prepared for a steam hoist and a four drill compressor plant for the Sunset mine.

HALIFAX, N. S .- The City Engineer

has been instructed to report on the cost of installing an electric light plant to do the city lighting.-The Board of Health have decided to invite new tenders for a garbage reducing plant. The date limit is January 20th.

HILTON, ONT.—The authorities of Hilton, Jocelyn, and Richard's Landing, three villages on St. Joseph's Island, in Algoma, are petitioning the Ontario government to construct a \$10,000 floating bridge between Camp d'Our and the mainland.

MONTREAL, QUE.—Lortie & Son are calling for tenders for one house to be erected on Gareau street, St. Henri, for Joseph St. Cuge, also for a residence to be erected on Reading street. Same architects are preparing plans for two houses to be erected at Notre Dame de Graces.

KINGSTON, ONT.-Mr. C. F. Gildersleeve, chief promoter of the Kingston and Smiths Falls railway scheme, states that the work of construction will be commenced in the spring, as the Dominion government will likely grant a bonus therefor. The construction of workshops in this city will be a part of the project.

LISTOWEL, ONT.-W. E. Binning, architect, is preparing plans for a German Evangelical church at Deemerton, and for a Presbytenan church at Molesworth, each to be built of brick with stone basements, towers, galleries, stained glass windows, furnace heating, circular seating, etc. Contracts will be awarded about the end of January.

HAMILTON, ONT .- The City Clerk invites tenders until the 13th inst. for supplying the Hamilton Collegiate Institute and Normal school with furniture. Ad-dress for particulars, T. Beasley, Secre-tary Board of Education.—The ratepayers of the township of Ancaster have granted a bonus of \$5,000 to the proposed Hamilton, Cleedoke and Ancaster electric rail wav

Way.

BELLEVILLE, ONT.—Tenders are invited until the 15th inst., addressed to Mrs. W. B. Northrup, for the building of an addition to the tower of St. Thomas church. Plans may be seen at the office of H. Corby.-A scheme has been set on foot to extend the electric railway west from Belleville to Trenton, and thence north to Tweed, there to connect with the C. P. R.

WINNIPEG, MAN.—The application of build a bridge over the C. P. R. tracks & Salter street will be considered by the Railway Committee of the Privy Council at Ottawa this week .- The City Council are considering the question of the most suitable street pavement, and during the present year it is probable that about ten miles of roadways will be paved with brick or asphalt.

CORNWALL, ONT.—The time for re-ceiving tenders for the erection of a three storey brick hospital in this town has been extended until Tuesday, the 12th inst. Plans may be seen at the offices of J. T. Kirkpatrick, this town or Robert Findlay, architect, Montreal, by whom tenderswillbereceived.—The question of using the water power created by Sheik's Island dam is now under consideration, and it is probable that some manufacturers will be induced to locate there.

VICTORIA, B. C.—Plans are being prepared, it is said, for a new steamer to be built here in the near future.—A request has been preferred to the government for the erection of a suitable residence here for the admiral commanding the Northern Pacific squadron of Her Majesty's navy.—Mr. C. Æ. Shaw, C. E., of this city, is making a preliminary survey of the proposed Victoria, Vancouver and Eastern Railway, from Kootenay to the coast. If the charter is secured, the construction of the road will be commenced shortly.

TORONTO, ONT.—The probable cost of providing a suitable building for the Toronto Technical School has been placed at \$75,000. The City Council is asked to provide the sum.—The two money by-laws received the sanction of the ratepayers on Monday last. One provided for raising the sum of \$275,000 for the completion of the municipal buildings, and the other for expending the sum of \$26,000 for the construction of a 24 inch water main on Front street.—The City Clerk has received petitions against the construction of a brick pavement on Beaconsfield avenue and a macadam pavement on Terauley street.

Moncton, N. B.—Tenders are asked until the 11th inst. for the construction of an extension to the freight house at Truto, N. S., also for 500 rods of snow fencing between Oxford Junction and Pictou, and between Point Tupper and Sydney. Plans and specifications for extension of freight house may be seen at the Station Master's office, Truto, and at the chief engineer's office, this town.—L. Pottinger, general manager Intercolonial Railway, will receive tenders until Saturday, the 16th inst., for the construction of a section house at Sacre Coun, a section house at St. Alexis, a freight house at St. Flavie, and a freight house at Causapscal, all in the province of Quebec. Plans of the above may be seen at Levis, River du Loup and Rimouski, and also at the offices in Moncton.

QUEBEC, QUE.—The new factory for W. A. Marsh & Co. will be of brick, 200 × 44 ft., five stories, with two elevators, and a smoke stack 80 feet high—David Ouellet is preparing plans for alterations to the Convent at Rimouski, for the Ladies of the Rasary. – The Quebec legislature will be asked to provide for guaranteeing the capital and interest of a loan of \$500,000 to the Sisters of Providence for the rebuilding of the St. John de Dieu Asylum at Longue Pointe. The buildings of this asylum were destroyed by fire, and it is estimated that to rebuild them would cost over one million dollars, which amount the Sisters of Providence are unable to provide. It is proposed, therefore, that the government shall be authorized to enter into a contract with the Sisters, by which they will bind themselves to rebuild the asylum at a sufficient distance from the river to prevent it being exposed to spring floods, to con-tinue such building without interruption so that it may be completed within five years, and to put up the new buildings for that object on plans approved by the Lieutenant Governor in Council.

OTTAWA, ONT.—The row of small brick houses at the corner of Bank and Sparks streets has been sold to John Murphy & Company, of Montreal, who will tear it down and erect a six-storey modern departmental store on the site.—The plans for the proposed addition to the Protestant Hospital have been approved of by the directors, and tenders for

construction will be received at once. Mr. Hodgson, a local architect, will supervise the work.—Mr. A. M. Calderon, architect, has about completed the plans for the new mammoth departmental store to be erected by the C. Ross Company Limited, to replace the building recently destroyed by fire. The structure will be destroyed by fire. of red brick and sandstone, five stories high. The interior of the store will be supported with steel beams and posts. large portion of the building will probably be made fireproof. Tenders for construcbe made fireproof. Tenders for construction will shortly be asked.—Mr. F. H. Chrysler, Q. C., on behalf of the Canada Atlantic railway, gives notice to parliament of application for an act to extend the time limited for the completion of a railway to some point on the north-easterly boundary of the State of New York, or on the northwesterly boundary of the State of Vermont, crossing the River Richelieu by a bridge at or near Lacolle, in the County of St. John.— Specifications have been prepared, and tenders will be invited shortly by the Department of Public Works for several works of construction. Amongst these are: A new pile wharf at L'Original; the deepening of Collingwood harbor to a depth of 20 feet, at an estimated cost of \$200,000; the rebuilding of the entire west side of Owen Sound harbor: partial reconstruction of the breakwater at God. reconstruction of the breakwater at Goderich, consisting of crib work, estimated cost, \$120,000; new landing pier at Kingsville, Essex County, consisting of pile work, estimated cost \$15,000; extension of the wharf at Cap l'Aigle; construction of a new landing at Lotbiniere and of a new breakwater of creosoted timber at Margaretsville, N. S.—It is said that the Sun Life Assurance Co. will erect a large building suitable for their purpose. -The Dominion Rifle Association have selected the plans of Saxe & Rodden, of Montreal, for the proposed Canadian headquarters at Bisley. The cost is placed at \$7,500.—The Railway Committee of the Privy Council have approved of branch lines of the London and Port Stanley railway to Port Stanley and Blenheim, also of a branch of the Detroit and Lake Erie railway to Ridgetown. The G. T. R. have applied for approval of a branch line at Merritton.

FIRES.

The wholesale stationary establishment of D. McFarlane & Co., on St. James street, Montreal, has been wrecked by fire. The building was owned by Gilman Cheney, and is damaged to the extent of \$15,000. The large buildings of the South Essex Preserving Co., at Kingsville, Ont., were partially destroyed by fire on the 2nd inst., together with much of the machinery. The loss will probably reach \$50,000, fully covered by insurance.—A boarding house and store at Yorkton, N. W. T., owned by Mr. Clarke, were burned on December 31st.—The woodworking factory of R. K. Jones, at Woodstock, N. B., was damaged by fire recently. The loss is about \$3,000.—On the 1st inst. fire destroyed the Tichborne House at Parham, Ont., owned by Johnston Brown, of Kingston. Loss, \$2,500: insurance, \$400.—The dry goods store of J. Richmond, at Kingston, Ont., was gutted by fire recently. The building was owned by the Estate of James MacNec.—The residence of John Lundy, near Prescott, Ont., was destroyed by fire on Tuesday last. The loss is heavy, only \$600 of which is covered by insurance.—The stained glass windows in the Roman Catholic church at Port Colborne, Ont., have been totally wrecked by fire.

CONTRACTS AWARDED.

VICTORIA, B. C.—The contract has been let to the Albion Iron Works Co. for the construction of a ten-knot steamer.

It will be 68 feet in length, with compound engines.

LONDON, ONT.—Fleming & Lighthart, of this city, have been awarded the vitrified stone contract, and the Dennis Iron Works the iron doors and grating contracts, for the new town hall and lock-up at Dutton.

MONTREAL, QUE.—Building permits have been granted for two houses, forming six tenements, 51 × 55 ft., three stories, wood, lined with brick, to be erected on de Montiguy street, for Aubry Bros.; carpenter and joiner's work, W. Guercier.

COATICOOKE, QUE.—The contract for

COATICOOKE, QUE.—The contract for the construction of a wing to the Presentation Convent has been awarded to Messrs. Octave Blain and W. Welsh, for the sum of \$5,000. The work is to be commenced early next spring.

PLASTERING AND DECORATING.

A mistake is often made by plasterers when repairing badly cracked ceilings or walls by using plain lime putty, or mortar containing but a small percentage of plaster of Paris. Instead of using so much lime, in either stopping up cracks or patching, it would be much better if he would use plaster of Paris, with a little whiting added and mixed with glue water. This would allow him ample lime to make a good job of the work, and there would be no danger of the new work breaking away from the old.

If there is color to be laid on the patched plastering, it may be taken for granted that there will be several shades of the same color if the ceilings or walls are old or dirty, or if they have been kalsomined or whitewashed, they must first be made clean by scraping or sandpapering. After this is done thoroughly, the whole should receive a light coat of white shellac, the walls should then stand a day or two, after which the colors or decorations may be applied. It must be remembered that the shellac must be applied to the new patching and stopping, as well as to the old work, otherwise the coloring will change and look faded and flat where the new mortar has been applied, and each crack will show a faded line. The cost of plaster of Paris, whiting and glue, is no more than double that of "fine stuff," and it is worked easier, and the results are much more satisfactory, so that in the end it pays better to use superior materials.

While on the subject of plastered walls and ceilings, it may not be amiss to offer some suggestions as to the colors that may be employed in the decoration of same. Of course, it is not intended that these suggestions be considered as suited for a pretentious house, but rather as being adapted for buildings where simplicity and quietness are sought rather than æsthetic effects, the decoration of which the ordinary painter will be able to execute satisfactory.

In treating a sitting room, make the body of the ceiling a warm grey, then about 2 ft. from the wall run a 12-in. band painted in pale turquoise blue, and edged by 2-in. strips of rich orange yellow. The stripes and band may be edged or separated by narrow pencillings of black. Do not make a square field with this band work, but continue the band and

stripes from wall to wall, letting them cross each other at right angles. Where the room is large, it will be as well to paint in the centre piece harmonizing with the general design, having the bands crossing each other the same as the outer band. The centre piece may be square but set in the ceiling diagonally, or it may be diamond shaped. If the room is large, say 16 ft. x 30 ft., a good effect may be obtained by running an extra band design across each end of the room at about to ft. from the end walls and omitting the centre pieces. These extra bands should be treated the same as the ones on the ends of the room.

In treating the walls, excellent effects are obtained by making them a light sage green. Run a band of pale olive round the room about 30 in. wide, having narrow bands of terra-cotta color on upper and lower edges, with dividing lines of Venetian red. This band should be up from the base about 2 ft., which would make the upper edge of it about 4 ft. 5 in. from the top of the base; this will leave a strip of sage green between base and band, and between band and ceiling. Of course the width of the band and its height from base may be changed to suit conditions. The above proportions are suited to a room where the ceiling is to ft. high.

The woodwork should be painted in light cheerful colors-perhaps a medium green, with grooves and chambers picked in with black and touched up here and there with bright vermilion, would suit most tastes. At any rate these colors properly proportioned would have a very pleasing effect when taken in with the walls and ceiling. Of course the colors for walls and celing may be varied to any extent without varying the design. Buff for the walls, with pale blue band and dark brown stripes, give a good effect, while the ceiling may be done in cream, with robin egg blue band and Indian red edgings separated by dark blue lines, with the woodwork finished in maroon and a light shade of Indian red.

The library may be finished in the same design, though it may be in darker colors and subdued in tone. A clear grey-blue should be used on the ceiling, with a band of Pompeiian red, edged with medium green and striped with vermilion. Color the walls with a deep buff, with a chocolate band edged with dull Indian red, in similar design to sitting room. The woodwork may be ebonized and picked in with bronze and buff, but care must be taken not to overdo the picking in. If it is desired to separate ceilings and walls, it may be done by running an edged band just below and touching the ceiling.

All the painting, whether on woodwork or walls, should be in egg-shell finish made by a composition of two-thirds raw oil to one of turpentine, and the groundwork should be well prepared by being well and smoothly sandpapered. All holes or indentations in the woodwork should be well stopped with hard drying putty, and the hole should be fair and even on the face.

Other rooms in the house may be finished in like design, adopting colors to suit the taste. Where there is a hall, there may be some deviation from the design, and a frieze may be added, or stencil designs may be run all round just under the ceiling. A little more elaboration may be employed in the vestibule, both on the walls and on the ceiling.

In decorating such rooms as we have mentioned, regard should be had to the character of their furnishings, so that there may be an agreeable harmony all round. It is not necessary to have colors simply variations of one or two primary colors, but opposite colors when intelligently employed give very rich and pleasing effects; but the inexperienced decorator will have to experiment a little in order to discover which combinations produce the better results.

SOME RULES FOR HOUSE DRAINAGE.

All drain, soil, waste and air pipes inside of a dwelling should be of iron.

The arrangement of soil and waste pipes must be as direct as possible, and long branch wastes under floors should never be permitted, if possible to avoid them

Each stack should run up as straight as possible, avoiding all sorts of offsets, Y's or S connections.

None of the waste or vent pipes should be so covered in that they can not be got at without doing more or less harm to the building. It is wiser to keep these pipes in sight, even in the best rooms, than to place them in inaccessible places. By proper management a pipe may be made more or less agreeable to the eye by a little decoration with bronze, paint or enamel. There is no reason why a vertical pipe may not be fluted to imitate a column, with base and capital, if it is to take a prominent place in a room, or it may be cased in. Where pipes must be placed in recesses or chaces in walls, or in partitions, they should be covered with paneled doors, which may be screwed over the recess so that they may readily be taken down when required.

The soil, waste and air pipe systems should be thoroughly tight, not only water tight, but air tight as well. Hence the pipes must be of a thoroughly sound material, and all joints must be perfectly made.

The system must be amply ventilated and should have no "dead ends." Each soil pipe, therefore, must extend at least full size from the cellar to and through the roof; waste pipes must also be extended, but should be enlarged just below the roof to four inches in diameter, to prevent obstructions in the pipe during the winter through hoar frost.

Wherever practicable soil and waste pipes should run alongside a heated flue, as this will assist in creating an upward draft in the ventilating pipes.

These few rules are condensed from Paul Gerhard's little work on "House Drainage." National Builder.

FLOORING IN ENGINE ROOM.

There is need for a material suitable for . the flooring of machinery spaces, says a writer in the Architects' and Builders' Review. At present the choice lies between very unsatisfactory points. Wood absorbs oil, concrete does the same, and also works up into fine dust very destructive to the running mechanism. Tesseræ in cement are but little better. Hard brick in cement is rough and commonlooking. Marble is too dear, and is also liable to crack when weights are moved upon it. I think that street asphalts, laid on a bed of concrete, would fulfil all purposes, but have not heard of its being so used. It seems to be non-absorbent, evenof oil, and is, to a certain extent, flexible, and can be laid into the smallest crevices.

FLOOR TIMBERS.

Timbers that carry floors should, as a rule, be laid the narrowest way of the room, and all bearing timbers should be so arranged as to tie in the principal walls, or if the building forms a corner, having two or more external walls, they may be laid in opposite directions in the alternate stories.

All parts of timber built into brick, or stone walls should have clear spaces around them for circulation of air. Timbers passing over several points of support, such as joists over bearers, joists or bearers over partition walls, or similar cases, should be in as long lengths as possible, by which their strength is greatly increased as compared to what it would be if they were cut into short lengths, (Concluded on Page 4.)



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just sufficient to span the intervals between each pair of supports. Fastening timbers rigidly at the ends, where they are to be loaded uniformly, increases their strength by one half, but this can seldom be done in practice. If the erds of the timbers are built solidly into the wall they will have a tendency to strain and injure the masonry. The want of a free circulation of air causes timber to decay, and in any case it would soon shrink and become loose. All floor joists, wherever possible, should be laid with a slight camber in the center, say about one inch in twenty feet, to compensate for settlement of support and shrinkage of timbers.

Floors near the ground should be ventilated to secure a perfect circulation of air round all their parts. This is easily done by using ventilating bricks about ten feet apart all around the building. For the same purpose openings should be left in all dwarf walls in order to allow the air to have free passage.

Floors of timber constructed in the usual manner, with joists and beams set apart, have but little power to resist fire, but if the spaces between the joists or beams be filled up solid with other woodwork, which thus closes up the openings against the passage of the flames, and the under surface be coated with mortar containing a large proportion of plaster of Paris, and finished smooth, the floor will resist the action of fire longer than a floor of iron beams and brick arches. The wooden beams should be secured to each other by dowels or spikes.

All floors where joists are more than ten feet in length should have one or more courses of bridging nailed through them. The rule is to put a tier of bridging every eight feet. The stuff used for bridging should not be less than 1½×1-inch section. A little larger would not be objectionable. The pieces forming the

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WALLE MILLS

Head office INGERSOLL, ONT bridging should be kept in a straight line, and each piece should fit into its place pretty snug and be well nailed to the joists. If this work is well done the timbers forming the skeleton of the floor will be tied solid together, and there will be no sagging or springing to the floor when in use.

In framing trimmers for chimneys or for stairs double joists should be employed for the "carrying," or outside joists, particularly if the trimmers are framed into the joists. The trimmers may be framed into, or spiked (a bad practice) to, the first joist, and the second joist may then be spiked to the first, which makes a much better and stronger piece of work than if both "carriers" were mortised through. — National Builder.

The Dominion Glass Company has augmented its capital from \$20,000 to \$490,000.

USEFUL HINTS.

In reinishing old floors, if the floor has been treated with oil and varnish and has been allowed to become very dirty and rough, the old finish should be removed with steel shavings. With these every particle of the old finish can be removed. The floor should be finished as a new floor.

Pipes made by winding thick paper or cellulose around a solid core are described in a German technical paper. Between each turn a layer of molten asphalt is laid on, and the pipe is thus made impervious to air and water. The pipes are joined together by means of paper sockets and asphalt. They are said to be light and not liable to fracture.

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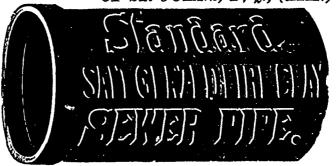
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MUNICIPAL DEPARTMENT

TO MUNICIPAL OFFICERS.

The CONTRACT RECORD is desirous of publishing, as far as possible, advance information regarding projected works of construction in all parts of Canada, such as sewerage and waterworks systems, railways, street pavements, public and private buildings, etc. Municipal officers would confer a favor upon the publisher by placing at our disposal particulars of such undertakings which are likely to be carried out in their vicinity, giving the name of the promoter, character of the work, and probable cost. Any information thus furnished will be greatly appreciated.

MUNICIPAL ACCOUNTS AND AUDITS.*

PRESENT CONDITIONS.

The public attention has been so frequently and so sharply drawn to instances of irregularities on the part of municipal officers, resulting in serious loss to municipalities, that surely some steps must soon be taken by our local government towards finding a remedy.

Some of the irregularities on the part of treasurers which I have myself met with or which have been reported by others are: Neglect to deposit the funds in a bank in compliance with the Municipal Amendment Act of 1893; mixing the public funds with their own private money; using public funds in their private affairs, nominally during such times as they are not required by the municipality, but actually when municipality is borrowing, and in c where the funds are thus in use at the end of the year, concealing the deficit from the auditors by entering payments in December which are not actually paid till the next year, but yet in time to produce the vouchers at the time of the audit; or in case of the treasurer having the custody of a second fund such as that of the school board, the surplus of the one is made to cover the shortage of the other, and it seems that the local auditors, if they do test the cash, are not able to grasp the fact that the two oalances together must be compared with the cash on hand in the two funds combined.

Then there are misappropriations, not often through duplicate or pretended payments, but usually through failure to account for all or part of the moneys received from some of the various sources, such as proceeds of debentures sold; revenue from waterworks, cemetery lots or interment; rents; fines; non-resident taxes; dog tax; poll tax; interest on deposits or special funds; sometimes sinking funds become a temp

A paper read before the Chartered Accountants of Ontario, Tuesday, 15th December, 1896, by Arthur C. Neff, C A., Toronto

tation to defalcation, and in cases where the fund has been invested in the municipality's own debentures, such defalcations are very likely to confuse local auditors.

A moderate proportion of losses (frequently indirect) arise out of official shortcomings, such as bad bookkeeping, errors and neglect of duty. For instance, refusal to keep a ledger on the plea that the statutes do not require it, or using a ledger only for the purpose of accumulating the receipts and disbursements of the year, under the proper heads, but totally neglecting such accounts as should be carried forward from year to year, such as accounts with schools, local improvements, drains and sewers, special funds, debentures, special rates, etc., the result being imperfect statements of assets and liabilities, and sometimes loss of balances due to the municipality. Frequently there is but an imperfect record of the particulars of debentures issued.

Other weaknesses in management are: unauthorized or illegal payments, payments made without proper vouchers, omitting to charge payments made, paying by cash instead of by cheque (thus cutting off the means of tracing the cash), errors in calculation, errors of principle in bookkeeping, that is, improper entries, or entries omitted, sometimes resulting in serious loss; imperfect settlements with collectors and neglect of the returns of uncollected taxes.

But the faults are not all those of treasurers. Municipal clerks and collectors of taxes use the funds they collect as long as they dare, or can, before they hand them over; or they account for part only of what they collect, or they default entirely.

Councils themselves neglect to levy the special rates for a sinking fund to meet maturing debenture debts; they misappropriate the sinking funds, or other special funds; or they are guilty of reckless expenditure; they authorize or order illegal or improper payments even "bondling" the money to themselves, and then cook the reports to make the best possible showing.

When shortages or defalcations are discovered, the sureties are often found to be dead men, or men of straw, or men of influence, or in case of a guarantee company the requirements of the bond have been neglected and the municipality at least shares the loss. If the friends of the defaulter or his sureties do what they can to make up the loss little or no punishment is inflicted.

There is an impression abroad, and from what I have learned I am convinced it is true, that less than half our municipalities would bear expert investigation, and that if properly handled, the average result of such an investigation of all the municipalities in the province would much more than pay the cost, and it would give a fair starting point for better management.

Many municipalities have an unsound feeling of security. For instance, I was told of one where the same man has been both clerk and treasurer for twenty-five years. He controls the waterworks

revenue, cemetery receipts, arrears of taxes, and practically the collection of the taxes. He keeps a bank account as a matter of convenience and signs the cheques himself. They have local auditors, but the reports are not printed for circulation. They have unbounded confidence that their affairs are in excellent condition. I thought it was the best "prospect" for a special audit which I had struck.

CAUSES.

Some of the causes which contribute to these conditions are the unbusiness-like appointment of treasurers who have few or none of the qualifications which are necessary to properly assume the duties. The position being looked upon as one of honor, and usually being given as a reward for services rendered, or on account of influence, the renumeration is put at a much lower rate than would be paid for a position of similar responsibility in mercantile life.

Add to this the necessity on the other hand of maintaining a good social standing and the treasurer finds he must divide his time with other business or engage in speculation, and if he is unsuccessful in these, the temptation is forced upon him to make temporary use

of the trust funds.

No hand-book or guide to municipal bookkeeping is available to treasurers, by which they can assist themselves over the difficulties, to cope with which they lack the training. There are no regulations requiring a ledger to be kept, or establishing a complete system of accounts adapted to the needs of municipalities.

The provisions of the statutes regarding precial rate accounts and surface finds.

The provisions of the statutes regarding special rate accounts and sinking funds are frequently neglected and the auditors cannot then report their true condition.

The cash is not all deposited in a bank as is now required by statute, and when it is so deposited, it is not protected by the counter-signature of the head of the council.

Prebably the most important cause lies in the inefficiency of the audit.

The auditors do not usually check the bank account, nor do they check the cash down to the date of the audit and see that the balance which ought to be on hand is actually available.

They lack the experience in auditing to properly adjust the bank account as regards cheques outstanding, or amounts received not yet deposited; to detect a shortage in the receipts; to point out errors of principle or illegal or improper payments, or to check the condition of the sinking fund.

They lack the experience and knowledge of bookkeeping which would enable them to instruct or guide the treasurer.

They lack the knowledge of municipal law and management necessary to enable them to take a broad view of the situation, and to suggest reliable improvements.

They are not always independent of the treasurer and the council, and a very important fact in their favor is that they are not sufficiently paid to enable them to do the work properly.

the work properly.

The weakness of the audits deprive an inefficient treasurer of a needed safeguard, and in some cases become a temptation to carelessness and even wrong-doing.

A contributory cause is the common neglect of councils to critically examine the auditor's reports as they are required by statute to do before passing them, and their tendency, when any doubt atises, to shirk the expense and responsibility of an investigation, leaving the trouble to accumulate and grow until it forces itself into attention.

(To be Continued:)

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CONDITION OF THE MARKET.

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MONTRBAL: There has been a fair inquiry for light goods, but little business seems to have resulted. The influence of the holiday season has been felt in every line, and as travellers are off the road, few sales are reported. For a few weeks trade will be quiet, until the approach of spring shall revive the demand.

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	\$ \$	\$ \$
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YARD QUOT		
Mill cull boards and scantling Shipping cull boards, pro-	10 00	10 00 12 00
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Oil, linsted, refined, \$ 1mp.	63	16 to 24 gr-ge, per lb 434 4 26 guage, 434 4 28 11 11 12 13 13	× i
[Less than bbl., 5c. per gal. advance.]	75	Note.—Cheaper grades about 1/2, per l	
FULLY	¥ 2¾	Structural on:	^
Paris white, Eng., dry 90 125 90	100	Steel Beams, per 100 lbs 2	75 5 1 1 50 1 1
Sienna, burnt 10 15 12	500	ticos, it	
Umber, " 8½ 12 12 Turpentine 43	3 15	plates, "Sheared steel bridge plate	
••			31!