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## TENDERS WANTED

Sealed tenders will be received bs the underigned, on behalf of the Crunty of Huron, until 4 OCLOCK P. AL. on SATURDAY, THE 23RD OF JANUARY,

For Rebuilding the Bannockburn Bridge of Steel or Iron.

The briden is to be \&o feet long between the 2butmens; the flior to be 86 feet wide. The bridge is 10 be supported oa four cylinders shree feet in diameter and ren feet long. to be filled with conerete; the foor and joiss to be of roxk elm.
Site about two miles from Bruceficid station on the L. H. \&B. Ry.

To be completid on or before the 17 th of Auyust, next. The fowert or any tender not be had by enquiry.
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A Thoroughly Competent Master Coach Painter with railway experience. Apply,

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## CONTRACTS OPEN.

Sundridge, ONT.-Mr. lrving 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 $\$ 2,00$.

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.

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

Brockville, Ont.- G. T. Rafferty will erect a cottage on Pallisades Point, $64 \times 165$, two storieshighr and heated by steam.

Southampton, Ont.-A by-lav will be voted on by the ratepayers to raise $\$ 11, \infty 0$ 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 $\mathrm{I}, \mathfrak{j}$ co sixt zen 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 buulding of a smelting plant near this place. - Plans and specifcations are being prepared for a steam hoist and a four drill compressor plant for the Sunsét 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 tor a garbage reducing plant. The date limi: 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 bitween 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 strect. 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.
Listowed, ONT.-W. E. Binning, architect, is preparing plans for a German Evangelical church at Deemerion, and for a Presbyterian church at Molesworith, each to be built of brick with stone basements, towers, gallerics, stained plass windows, furnace heating, circular seating, etci. Contracts will be awarded about the end of January.

Hamilton, Ont.-The City Clerk invites tenders untal the 13 th inst. for supplying the Hamilton Collegrate Institute and Normal school with funniture. Address for particulars, T. Beasley, Secretary 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 way.
Belleville, Ont.-Tenders are in vited until the asth inst., addrested 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 oñ foot to extend the electric railivay west from Belleville to Trenton, and thence north to Tweed, there to connect with the C. P. R.

Winnipeg, Man.-The applicatior $n$ 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 considerngr 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 receiving tenders for the erection of a three storey brick-hospital in this town has been extended untif Tuesday, the 12 th
inst. Plans may be seen at the offices of J. T. Kirkpatrick, this town or Robert Findlay, architect, Montreal, by whom ten-derswillbereceived.-Thequestion ofusing 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.
Victoris, 13. C.-Plans are being prepared, it is said, for a new steamer to be built here in the near future. - A request has been preterred 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. E. Shay, 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 raisung the sum of $\$ 275,000$ for the completion of the municipal building 5 , 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 recelved 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 111 h inst. for the construction of an extension to the freight house at Truro, 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 fieight house may be seen at the Station Master's office, Truro, and at the chief engineer's office, this town.-L. Pottinger, general manager Intercolonial Railway, will receive tenders until Saturday, the 16 th 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 back, 200 $\times 44 \mathrm{ft}$., five stories, with two clevators, and a smoke stack 8o 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 $\$ 50,0 \infty$ to the Sisters of Providence for the reburlding of the St. John de Dieu Asylum at Longue Pointe. The buildings of this asylum were destroyed b; fire, .and it is estimated that to rebuild then 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 conilinue such building without interruption 50 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.

Ottawn, Ont.-The row of small brick bouses at the corner of Bank and Sparks streets has been sold to John Murphs \& Company, of Montreal, who will tear it down and erect a six-storcy 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 recelved at once. Mr. Hodgson, a local architect, will supervise the work.-Mr. A. M. Calderon, architect, has about completed the plans for the new manmoth departmental store to be erected by the C. Ross Company Limited, to replace the bulding recently destroyed by fire. The structure will be of red brick and sandstone, five storics high. The interior of the store will be supported with stcel beams and posts. A large portion of the buiding witl probably be made fireproof. Tenders for construction will shortly be asked.-Mr. F H. Clirysler, Q. C., on behalf of the Canadia Allantic rallway, gives notice to parliament of application for an act to extend the tine limited for the completion of a railway to some point on the northeasterly boundary of the State of New York, or on the northwesterly boundary of the State of Vermont, crossing the River Richelicu 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 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 lariding at Lotbiniere and of a rew breakwater of creosoted timber at Margaretsville, N. S.-It is said that the Sun Life Assurance Co. will etect 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 Bisiey. The cost is placed at \$7,500. - The Kailway Committee of the Privy Councal have approved of branch lines of the London and Port Stanlev railway to Port Stanley and Blenherm, also of a branch of the Detroit and Lake Erie railway to Ridgetown. The G. T. R. have apphed for approval of a branch line at Merritton.

## FIRES.

The wholesale statıonary establishment of D. MicFarlane \& Co., on St. James street, Montreal, has been wrecked by fire. The bulding was owned by Gilman Cheney, and is damaged to the extent of $\$ 15,000$. The large buildinits of the South Essex Preserving Con., at Kingsville, Ont., were pattially 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 $\$ 3,0 \infty$.-On the Ist inst. fire destroyed the Tichborne House at Parham, Ont., owned by Johnston Brown, of Kingsion. Loss, $\$ 2,500$; insurance, $\$ 400$. - The dry goods store of J. Richmond, at Kıngston. 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 insur-ance.-The stained glass windows in the Roman Catholic church at Port Colborne, Ont., have been totally wrecked by fire.

## CONTRACTS AWARDED.

Victorin, 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 $\mathfrak{i n}$ 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.

Montreat, Que.-Building permits have been granted for two houses, forming six tenements, $51 \times 55 \mathrm{ft}$, 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 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 10 be commenced early next spring.

## PLASTERING AND DECORATING.

A mistake is often made by plasterers when reparing 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 whting 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 land 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 apphed. 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, whung 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 in 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 pietentious house, but rather as being adapted for buildings where simplicity and quetness are sought rather than westhetic 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 f. from the wall run a 12 -in. band painted in pale turquoise blue, and edged by $2-\mathrm{in}$. strips of rich orange yellow. The stripes and band may be edged or separated by narrow pencullings 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 celling diagonally, or it may be diamond shaped. If the room is large, say $16 \mathrm{ft} . \times 30 \mathrm{ft}$, a good effect may be obtained by running an extra band design acioss each end of the room at about to fl. from the end walls and omitting the centre pieces. Thesc 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 10 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 mas 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 Pomperian 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 rot to overdo the picking in. If it is desired to separate ceilngs and walls, it may be done bs running an edged band just below and touching the ceiling.

All the painting, whether on woodwork or walls, should be in egs-shell finish made by a composition of two-thirds raw oil tu 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 celing. A little more elaboratuon may be employed in the vestibule, both on the walls and on the ceiling.

In decorating such rooms as we have mentioned, resard should be had to the character of their furnishings, so that there may be an agrecable harmony all round. It is not necessary to have colors simply variations of one or two primary colors, but opposite colors when intelli gently 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, soll, waste and air pipes inside of a dwelling should be of iron.

The arrangenient 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 promonent 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 tigt.t, not only water tught, but aur tught 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 alungside a lieated flue, as this will assist in creaung an upward draft in the ventulating pipes.
These few rules are cundensed 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 mechanisin. Tesscrac in cement are but little better. Hard brick in cement is rough and common. looking. Marbie 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 oll, and is, to a certain extent, flexible, and can be lad into the smallest crevices.

## FLOOR TIMBERS.

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

All parts of timber built into brich. or: stone walls should have clear spaces around them for circulation of arr. 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 pait of supports. Fastening timbers rigudly at the ends, where they are to be loaded uniformly, increases theit strength by one half, but this can seldom be done in practice. If the erds of the timbers are built solidly into the wali 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 irce passage.

Floors of timber constructed in the usual manner, with joists and beanis 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 bridg. ing every eight feet. The stuff used for bridging should not be less than $11 / 2 \times 1$ inch section. A little larger would not be objectionable. The pieces forming the

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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 skelcton of the floor will be tied solid toyether, and there will be no sagging or springing to the floor when in use.

In framing trimmers for chimncys or for stairs double joists should be em ployed 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 juist may then be spiked to the first, which makes a much better and stronget piece of work than if both "carrees" were mortised through. - National Builder. $\qquad$
The Dominion Glass Company has augmented its capital from $\$ 20,000$ to \$490,000.

USEFUL HINTS.
In reinisting 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 soid 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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## MUNCIPAL 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 systenns, 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 informatoon 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 reniedy.
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 $1 \mathrm{~S}_{93}$; 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 he mumeipality is borrowing, and in $c 5$ where the funds are thus in use at the end of the year, concealing the defict from the auditors by entering payments in Deceraber which are not actually pand till the next year, but yet in tume 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 oalarces 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 fa:lure 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; nonresident taxes; dog tax: poll tax; interest on deposits or special funds; sometimes sinking funds berome a temp

[^0]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 $t$, 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 fiom 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 mperfect record of the partuculars of debentures issued.
Other weaknesses in management ate: 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 onitted, sometumes resultung 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 spectal funds: or they are guilty of reckless expenditure; they nuthorize 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 w'at they can to make up the loss little or no pumishment is inflicted.
There is an impression abroad, and from what I have learned I am convinced it is true, that less than half our municipahttes 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 muncipalities have an unsound feeling of securty. For instance, I was tod of one where the same man has been both clerk and treasurer for twenty-five years. He controls the waterworks
revenue, cemetery reccipts, 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.
ciuses.
Some of the causes whinch 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 ${ }^{1}$ 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 simula 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 lim to make temporary use of the trust funds.

No hand-book or gude to municipal bookkeeping is avalable 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 special rate accounts and sinting 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.

Prcbably 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 andit and see that the balance which ought to beon hand is actually available.

They lack the experience in auditing to properiy adjust the bank account as regards cheques outstanding, or amounts received not yet deposited; to detecta shottage 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 relable unprovements.

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 propeily.

The weakness of the audits deprive an inefficient treasurer of a needed safeguard, and in some cases becone a teinptation 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 arises, 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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## Prices of Building Materials.

CONDITION OF THE MARKET.
Toronto : In nearly every line of buildeas supplies there is the prevailing quietude customary at this season of the year. Until new buildings are commenced in the spring there is not likely to be much activity. Orders now placed are for sniall lots such as are required for jobbing purposes. Considerable iron pije has been moving, cement is quiet, and glass and paints and oils are featureless.
Montrbal. : There has been a fair inquiry for light goods, but litlle business seems to have resulted. The influence of the holiday scason 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 ilemand.


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