

town last week examining the dock. He stated that it was the intention of the company to thoroughly reconstruct the whole structure, which he estimated would cost about \$5,000.—Mr. John Stagg, Chairman Sewer Committee will receive tenders until noon to-morrow (Friday) for the materials and labor required in the construction of pipe sewers on the following streets: Daniel street, from James to Pearl street, 305 feet; Daniel street, from Pearl to Brock street, 300 feet; Garden street, from Pearl to James street, 330 feet; Perth street, from Brock to Abbott street, 675 feet; Kincaid street, from Jones to Gourlay street, 185 feet.

PETERBORO, ONT.—Mr. W. Blackwell, architect, will call for tenders this week for a new four roomed school house, also for additions and alterations to the old Central school.—The County Council, at a meeting held last week, granted the sum of \$1,000 towards the construction of a new iron bridge with stone abutments over the river Westwood at Westwood, in the township of Asphodel, and the sum of \$1,200 towards the reconstruction of the Smith street bridge.—The brick building on Simcoe street formerly occupied by Mr. A. Huskell, barrister, is being torn down to make room for a new store for the Peterboro' Hardware Co.

HAMILTON, ONT.—Messrs. Knox, Morgan & Co. are negotiating for the purchase of Lawry & Sons' building on Macnab street and will erect an addition two stories in height. It will be fitted up for a first class wholesale house.—At a recent meeting of the Waterworks Committee it was decided to ask the City Council for a special appropriation of \$5,000 for the purchase of about one hundred hydrants.—Building permits have been granted as follows: Charles Bolton, two story brick dwelling on Emerald street, between Cannon and Robert streets, cost \$1,000; Wm. Strong, two semi-detached brick dwellings on the north east corner of King and Tisdale streets, cost \$2,200.—The Council has decided to ask for tenders for the purchase of \$2,500,000 worth of debentures, payable in forty years.—Robert Clohecy, architect, invites tenders until 6 p.m. to-morrow (Friday) for the various works required in making additions and alterations to St. Joseph's convent in this city.

WINNIPEG, MAN.—Mr. George Browne, architect, has prepared plans for a new church edifice for the congregation of Westminster church. The cost of erection will be about \$25,000, the site selected being the south east corner of Charlotte and Notre Dame streets. The plans will be submitted to the congregation at a meeting to be held during the present week.—Mr. Thomas Gilroy, Chairman Finance Committee, will receive tenders until the 21st of July for the purchase of debentures to the amount of \$31,000.—Plans for a handsome \$6,000 residence for G. V. Hastings, of the Lake of the Woods Milling Co., are being prepared by W. Chesterton, architect. The building will be solid brick on stone foundation, having a tower on the corner. It will be erected on the east side of Donald street, near the Assiniboine river.—The Canadian Rubber Company, of Montreal, have purchased a site on Princess street and intend erecting a brick and stone warehouse this summer. The building will probably be three stories in height and will cost about \$35,000.—The Sisters of St. Boniface have purchased a piece of land adjoining their present building on which they propose to erect an addition.

MONTREAL, QUE.—The City Surveyor has been instructed to prepare an estimate of the cost of making the new approaches to the Wellington street bridge.—Steps are being taken to erect a new Presbyterian church in the east end to accommodate the congregation of Taylor church, which is outgrowing its present house of worship. A site has been secured at the corner of Logan street and Papineau road and plans approved of. The building will cost \$20,000.—Tenders are invited by the City Surveyor until Wednesday, the 5th of July, for the construction of sewers in the following streets: Cote des Neiges Road from McGregor street southward to end of existing sewer; Emily street, from Pine avenue to St. Cuthbert street; Frontenac street, from Forsythe street southward to end of existing sewer; Lusignan street from St. James street to Notre-Dame Street; Montcalm avenue, from Notre Dame st. northward; McGregor st. from Cote des Neiges eastward to end of existing sewer; Ottawa street from Queen street to William street; Pine avenue, from Drolet street to St. Urbain street; Pantaleon street, from Bay street to Pine avenue; DeSallabery street from Craig street to Notre Dame street; Wolfe street from Craig street to Notre Dame street.—The Road Committee has reported to Council in favor of a permanent sidewalk on Albina street; for a block stone pavement on Amherst street, between Sherbrooke and Chermier streets; for an additional appropriation of \$11,000 to finish the paving now in progress on Amherst street; for a sewer in Richmond street, between St. James and Notre Dame streets, and for sewer in St. Hubert street from Roy to Rachel streets.—The Council of Ste. Cunegonde are considering the question of increasing their fire apparatus.

TORONTO, ONT.—Tenders are invited by Mr. Carl Zeidler, 12 Nelson street, until 6 p.m., on Tuesday, July 4th, for the erection of a club house for the Toronto Leislerkruuz, in accordance with plans prepared by Mr. C. F. Wagner, architect, and which may be seen at No. 12 Nelson street.—The authorities of Trinity

University are having plans prepared for a new wing and for refitting the present eastern corridor, and the work will be proceeded with at an early date.—The Council of St. Hilda's college, 335 Shaw street, has obtained the promise of several thousand dollars towards their new permanent building, and active steps towards construction will be taken in the fall.—Some time ago the Board of Works instructed the City Engineer to ascertain the wishes of property owners on a number of streets regarding the pavements they desire. In response the Engineer has recommended the following pavements: Front st., from Church to Jarvis street, asphalt, cost \$14,870; Carlton avenue, asphalt, cost \$1,660; Beverley street, asphalt, cost \$33,800; Huntley street, asphalt, cost \$10,800; St. Patrick street, cedar block, cost \$4,060; D'Arcy street, cedar block, cost \$4,000; Huron street, cedar block, cost \$6,300; Cecil street, cedar block, \$2,525; Prospect street, cedar block, cost \$660; Scott street, southern extension, tamarac block, cost \$7,700.—A granolithic sidewalk is recommended for the west side of Sherbourne street from Wilton avenue to Bloor street at a cost of \$8,140.—The cost of constructing a street car entrance into High Park via Garden avenue is placed at \$19,022, and via Duncan street, at \$23,430.—Building permits have been granted as follows: Mrs. Adelaide Baigent, brick casing to dwelling, 497 Sherbourne street, cost \$1,500, Hatheway & Downey, mansard roof to dwellings s. e. corner Brunswick avenue and Harbord street, cost \$1,500; Fred. Sheppard, mansard roof and alterations to dwelling, 515 Eastern ave., cost \$1,000; Justice Osler, mansard roof, to dwelling, 35 Avenue street, cost \$1,050.

**FIRES.**

The factory of J. S. Pelletier, of St. Luce, Rimouski, Que., has been destroyed by fire. The loss will be about \$10,000, which is covered by insurance. On Saturday night last Messrs. Cullis Bros. saw mill at Auburn, Ont., was burned to the ground, all the machinery and lumber being destroyed. Loss between \$2,000 and \$3,000. There was a small insurance.—The store of H. W. Wilson, on Sparks street, Ottawa, was damaged by fire on the 26th inst. to the extent of \$5,000. The loss is covered by insurance.

**CONTRACTS AWARDED.**

WINDSOR, ONT.—The contract for the construction of J. S. Edgar's residence on Bruce avenue, has been let to A. Morris.

GUELPH, ONT.—The Waterworks Committee has accepted the tender of Alex. Gartshore, of Hamilton, for supplying water pipes and special castings, at \$32 per ton for 4 and 6 inch pipe.

CARLETON PLACE, ONT.—Messrs. Moffat & Co. have received the contract for remodeling the frame building belonging to the Gréig estate, opposite Taylor's block, and will convert it into two stores with plate glass fronts.

VANCOUVER, B. C.—The contract for interior fittings for the Inland Revenue offices in the new public building in this city has been awarded by the Dominion Public Works Department to Messrs. Robertson & Haskell.

THILSONBURG, ONT.—The contract for the erection of the new High School building has been awarded to Mr. John Smith, of this town, at \$6,500. This does not include heating, the contract for which has not yet been let.

PETESBORO, ONT.—Mr. John Baskin, of Norwood, has received the contract for grading twenty-six miles of the Canada Atlantic Railway between Ottawa and Parry Sound. This work will take about six months to complete.

MONTREAL, QUE.—The Irundation Committee have finally awarded the contract for the superstructure of the Brock street tunnel to the Dominion Bridge Company, at the price of \$4,038, including the repairing of the roadway.—The Road Committee, after reconsidering the question have awarded the contract for tile drain pipe to Messrs. F. Hyde & Co.

**PROTECTION OF PILES.**

Some recent experiences of William Kennish, engineer, at Wilmington, N. C., with regard to the treatment of piles that are to be driven in water infested by the teredo or limnoria, have led him to emphasize his reasons for charring the piles before treating them with creosote. Previous experience had demonstrated that an armor of charcoal would repel boring insects by offering them no nutriment, and that the surface being more permeable would more readily absorb the antiseptic fluid. "Lately," he says in a communication to the *Engineering News*, "having to shorten some piles that had been treated without charring, it was discovered that the transverse sections sometimes exhibited wedge shaped portions extending from the center to the outside which had not received the antiseptic fluid. An examination to discover the cause of this failure demonstrated that pieces of the thin interior epidermis, which had escaped the

axes when the pile was stripped of its bark, had prevented the passage of the oil to the outside of these untreated sections; it was also shown that the creosote when injected from the side of the log pursues the lines of the medullary rays toward the pitch, and that there is no passage of the fluid across them. Thus the sections shielded by the inner skin of the bark which had not been removed in peeling had been entirely deprived of oil. It is self evident that if these piles had been charred this evil would have been removed.

"The cost of charring is so slight and the advantage is so great that I would strongly advise engineers to specify that piles of marine waters shall always be charred. If only that portion of the pile which comes in contact with the water be charred, omitting that which is driven into the bottom, the advantage is additional in the respect that the part exposed to attack receives a greater portion of the preservative."

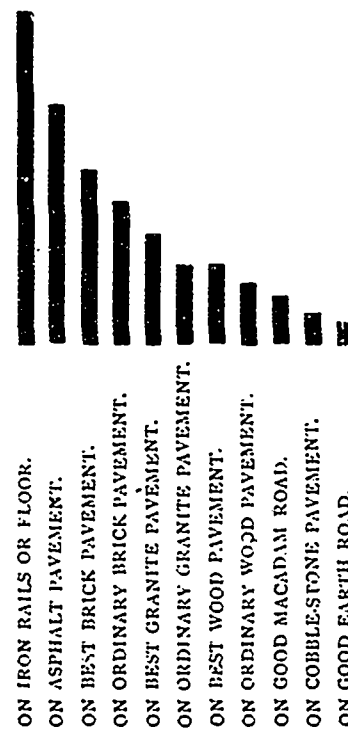
Charring alone seems to be of little value, as experiment with submerged logs, one charred and the other both charred and creosoted, shows that the teredo had bored through the charcoal and eaten the wood, while the log treated with creosote was untouched.

Iron says: "As the contract of metal has now been placed, it may be expected that work on Sir E. Watkin's great tower at Wembley Park, will shortly be proceeded with. The erection, which is to eclipse anything of the kind that has ever been attempted, is to be entirely constructed of steel, which is to be furnished by the Stockton Malleable Iron Company. It will be 1,150 ft. above the level of the ground, and it will therefore exceed by some 150 ft. the height of M. Eiffel's celebrated Parisian structure. Messrs. Heenan and Froude, of Manchester, are building the tower."

**MUNICIPAL DEPARTMENT.**

**COMPARATIVE RESISTANCE TO TRACTION.**

The relative resistance offered by the various forms of pavement is clearly shown in the following diagram, by the eminent engineer, Rudolph Hering. The comparison is based on the load one horse will haul on a level over the following:



This he supplements with the statement: "If one horse can just draw a load on a level road on iron rails, it will take one and two-thirds horses to draw it on asphalt, three and one-third on the best

Belgian block pavement, five on the ordinary Belgian pavement, seven on good cobble-stones, thirteen on bad cobble-stones, twenty on an ordinary earth road, and forty on a sandy road."

**LEGAL DECISIONS AFFECTING MUNICIPALITIES.**

YORK V. TOWNSHIP OF OSGOODE.—Judgment on appeal by the plaintiffs from the judgment of Falconbridge, J., who tried the action at Ottawa, dismissing it with costs. The action was brought to restrain the defendants from trespassing by entering upon and digging a ditch upon the lands of the plaintiffs in the township of Osgoode, under an award made by the township engineer under the ditches and watercourses act, affirmed by the county judge upon appeal. The trial judge following the decision of Galt, C. J., upon a motion for an interim injunction, held that the award, so affirmed, was final and conclusive upon the plaintiffs and that they had no remedy in this court. The plaintiffs contended that the proceedings before the engineer were without jurisdiction; that the award was therefore not binding; that the defendants could not justify their proposed trespass under the award. The court held that Murray v. Dawson was not applicable; that the jurisdiction depended upon the jurisdiction of the engineer to make the award; that upon the evidence he had jurisdiction; that whether the plaintiff was benefitted by the proposed work was a matter to be determined by the engineer and was the subject of the appeal to the county court judge under the act, and that his decision as to matters over which the engineer had jurisdiction could not be reviewed. Appeal dismissed with costs.

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