

their services. The appliances and fire brigade that were unable to prevent the spread of fire from a building standing isolated in an open square, must certainly have been of the poorest description, and the people showed culpable carelessness regarding the safety of their lives and property, when they entrusted both into such hands. The firemen were utterly disorganized, and did little more than add to the excitement of the occasion. So completely did they "lose their heads," that in moving from one point to another they left the caps off many of the hydrants, and the great volume of water which thus escaped soon reduced the pressure to a point where it became useless for fire purposes. The grief of the Roman Catholics upon witnessing the destruction of their beautiful cathedral which they supposed to have been fireproof, was very touching indeed. The value of the structure is placed at \$160,000. It was built of stone, with sheet iron roof and cupola. The condition of the two thousand people whom this fire has left homeless and almost without shelter calls for sympathy of the most practical kind. We trust that this thrice repeated calamity which has befallen their city may lead the people of Hull to adopt common sense methods for the prevention of such catastrophes in the future.

SOME very bad management is exhibited by the Toronto Public School Board in connection with the building of new school houses. A case in point is a new school house at present under construction near Dufferin street in the western part of the city. This school house has only four class rooms in it, which in itself is not objectionable, if any provision had been made for adding four more in the future. There is no doubt that inside of two years this school will have to be enlarged to an eight room school, and this can only be done by tacking on the rooms in any manner possible. A design for an eight room school should have been adopted, which would have admitted the erection of four of the rooms now and the other four later on. While we are on this subject we would like to offer a suggestion, which is, that a plan for the city schools should be adopted and improved upon as far as possible in the future as experience may teach, and all schools built according to such plan. We would not have the elevations similar by any means; but would advocate as great a diversity in the elevations as there are schools, so long as they were artistic. So far there has been a very great diversity in the plans and a wonderful similarity in the elevations, for they have all been alike bad until within the last year or two. Some of the plans have been very good indeed, but the greater number have been extremely bad. There is not the slightest reason in the world why they should not be all good, and that could be best brought about by adopting a good plan, and building all the schools according to that plan. It might be necessary to change the plan slightly in each case to obtain the necessary diversity in the elevations. In conclusion we may say, that some of our supposed best planned schools are really inferior to others which are regarded second in order of merit.

THE Public School Board of Toronto has discredited itself by the manner in which it has gone about the appointment of an Inspector of School Buildings. Instead of making the appointment solely on the ground of the fitness of the applicant to perform the duties of the position, politics, personal friendships and such like considerations have been the influencing factors. The names of two candidates are before the Board, and the votes of the members appear to be about equally divided between them. For a couple of months past the contending factions have been exercising their greatest ingenuity to outwit each other, and by some means secure the election of their respective candidates. Several of the regular meetings of the Board have had to be abandoned for want of a quorum, because it did not suit the purpose of certain members to be present. Thus the legitimate objects of the Board and the educational interests of the city are made secondary to the desire of the members to put their favorites in office. One portion of the Board, and we understand the majority, support the appointment of Mr. Bishop, while the other portion support Mr. Downey. We believe that Mr. Bishop would have been appointed long ago if it were not the supposed intention of his supporters to make him architect of the Board instead of building superintendent. His opponents claim that while he may make a very good superintendent he would not be a suitable man for the position of architect. We are inclined to think that Mr. Bishop is a better man than Mr. Downey for the position of superintendent. That he would make a good architect we very much doubt. We have knowledge that it is his belief that he is to be practically architect to the Board, as he has been making

some statements as to the works on school architecture which he proposes to study, etc. Now to be a superintendent is one thing, to be an architect is another; and if Mr. Bishop is to assume the duties of an architect, we oppose his appointment. The Public School Board, if it appoints an architect, should appoint a young man of decided ability and education, who will be young enough to enter on his duties with the energy characteristic of youth, and with vim enough to fight for new principles against those of the past.

MANY of the principal Canadian towns have adopted systems of waterworks during the last few years. We notice that in many instances municipalities do not purchase the plant and operate the system, but the ownership and control of the same remain in the hands of the company which puts in the plant, the town paying a sum yearly for its water supply. It appears to us that it would be much more advantageous to these towns to own and operate their waterworks systems. A company will not put in a plant and supply a town with water for a certain amount without being assured that a fair profit will accrue to itself after paying the cost of maintenance. This being the case, there should be no reason why each town might not own and operate its own system, and instead of handing the profits over to a company, put them into the municipal treasury for the benefit of the citizens. The waterworks department or the city of Toronto contributes a very large amount yearly towards defraying the cost of municipal government. Every year the profits derived from this source increase in volume. Would it not be a foolish thing for the City Council to allow a private corporation to control our waterworks system and grow rich at the expense of the citizens? The same view holds good in the case of smaller towns and cities. The people of Brantford have been figuring on this matter, and a local paper states the result as follows: "The question that will likely agitate the minds of citizens very soon is whether or not the city will own the new waterworks. It is thought that the work will cost in the neighborhood of \$150,000. This money can now be obtained on the British market at 4 per cent., or the whole sum for an outlay of \$6,000 per year. The rate which any company have so far proposed to charge the city for hydrant use is in the neighborhood of \$7,000 per year, so it would seem to be a clear saving of over \$1,000 per year for the city to own the waterworks. All the cities in Canada that own waterworks systems have found them profitable investments. There is no reason why the city should not reap this benefit rather than let the profits go into the pockets of shareholders who may happen to live in some other city than Brantford." When a town hands over the control of its water supply to a company the latter is in a position to dictate its own terms, and sooner or later the citizens will find that they have made a grievous mistake.

A WALK through the northwest part of the city of Toronto is sufficient to cause astonishment at its tremendous growth. In the last two years ground that was then laid out in farms has been covered with houses. Where and how this rapid building up of the city is to stop, it is difficult to say. Some people seem to think immediately, and yet, although in their opinion the time is so close, it is like to-morrow always one day off. But it was not to speak of the growth of the city that we set out, but of the indifference shown by the people to this wonderful increase. Streets are laid out without one thought of the future, every attention being paid to obtaining the greatest possible number of feet at the highest obtainable price per foot. There is almost no attempt to provide parks or small gardens amidst the interminable stretches of streets, and where it is done, one hardly knows whether to be glad or sorry. We understand that just east of Dufferin street and south of the railway, a plot of ground has been dedicated as a park, on which there is not a single tree. There would not be any objection to this, if it were not that just north of this proposed park, on the other side of the C. P. R. tracks, there are a number of acres of beautifully wooded ground which would require but little to make them into one of the most beautiful parks in the city. We are not positive that this ground is in the city, but if it is not, it soon will be. Here we have a beautiful wood divided into small lots, the owner of which must cut down a large number of the trees to obtain space on which to build, and at the same time within one quarter of a mile we have a treeless piece of ground devoted to park purposes, which it will take thirty years at least to change into shady groves and winding paths. How does it come that all our opportunities are allowed to slip through our fingers like water through a sieve? Can it be that we as a people are not astute enough to see

advantages when they offer, or is it an indifference to the general good if the personal interest is not benefited that results in our neglecting opportunities that will offer but once. If we lose the Queen's Park we will be without any open ground except in the extreme east and west of the city. Small parks at close intervals are a thousand times more beneficial than the same amount of ground in large plots miles apart. In this city where street cars do not run on Sunday (and we are of those who hope never to see them running), it is impossible for the greater portion of the inhabitants to take any enjoyment out of large parks miles distant. What is wanted is the small square of ground covered with grass, having flower beds and large shade trees, at close intervals throughout the city. We are also advocates of the large parks, but let us first have the small ones, and then the large ones will follow. These parks could all be less or more connected by drives. We would strongly advocate the appointment of a Park Commission which should have the power and ability to work up, adopt and carry out a noble and generous scheme for supplying our people with pleasure grounds, breathing places, and at the same time glimpses of nature to aid in their intellectual and moral improvement.

PERSONAL.

Aulair & Co., painters, Quebec, have dissolved.

T. Chaperonier & Fils, builders, Montreal, have dissolved.

Phillips & McLeod, planning mill operators, Aurora, have dissolved.

Geo. Wiley, carpenter, of Kingston, Ont., has fallen heir to \$13,000 by the death of an uncle in England.

Mr. Robt. Forsyth, of Montreal, has threatened action for damages against the city of Toronto for alleged violation of contract.

Collingwood Schreiber, chief engineer of Government railways, is at present in Nova Scotia making an inspection of the roads there.

Mr. A. Gobeil, Secretary of the Public Works Department, Ottawa, is at present on the Isle of Orleans, Gulf of St. Lawrence, seeking to recover his health.

Mr. Fred. Thompson, electrician of the Royal Electric Co., Montreal, has been invited to lecture before the Art Association of Sherbrooke, Que., upon "The Wonders of Electricity."

Hon. G. W. Ross, Minister of Education for Ontario will visit the United States with the view of acquiring information regarding the method of conducting schools of science and practical engineering.

Mr. T. R. Hewson, C. E., of Belleville, is said to be considering an offer from the Government of Japan to go to that country for seven years, to superintend railway construction. It is understood he also has an offer from a railway in Utah and Colorado.

The many friends of Mr. Thos. C. Keefer, C.E., K.C.M.G., of Ottawa, have learned with deep regret of the accidental death of his daughter Jessie, who was drowned "while endeavoring to rescue her two nephews who were carried away by the current and lost their lives while bathing in the river."

We learn from the *Progressive Age*, New York, that Mr. John Fensom, of the Fensom Elevator Works, Toronto, Ont., and a party of friends were out sailing on the Pacific river recently, on Prof. F. Reckenzaun's new electric boat "Magnet." This boat is equipped with storage batteries of the Electrical Accumulator Company, of New York, and is the first electric boat carrying the American flag. Mr. Fensom was greatly interested in the success of the trial.

FAULTY CONSTRUCTION.

THERE is urgent need of some intelligent control of building construction in this city. One who has a knowledge of construction will see much in the erection of our buildings which is faulty. He will also notice occasionally construction which will astonish him very much, and make him wonder if the building of our buildings is left to the whim of ignorant men. Piers of brick girders wide may be seen carrying brick joints two or more stories high. Iron columns so attenuated that they can only be likened to columns of needles are placed under joists of two and three stories in height. Built up columns of scantling nailed together may also be seen carrying uncommon loads. Breasts of summer of wood and iron are made to span openings much beyond their safe carrying capacity. In fact almost any construction is not apparently too risky or dangerous to be adopted in this city.

No man having any knowledge of construction would place any weight on a g. m. brick pier or twelve feet high, and yet it is done every day in this city, and that with the sanction of the Commissioner of Works. Neither would any one place a heavy load on a column of more than thirty diameters. It is safe to state that there have been few columns placed in position of late which were under thirty diameters, and yet such a column requires a factor of safety of ten according to competent authorities. That a factor of ten has been allowed no one would be foolish enough to imagine. It is really a question of how many of them have any factors at all. That they do not give way under their loads will be sufficient proof in the opinion of those ignorant in such matters, but not of experts. When a column gives way it is only proved that it was defective in the material, or that it was ten times too weak to carry the load imposed upon it. There have been a number of accidents in this city during the past few years, due to the ignorance of our builders or supposed architects. Fortunately none of these have resulted in loss of life, (although most serious injury has resulted to a number of men,) or we would have had some notice taken of this most important matter. It would seem that we must wait until several lives have been lost before action will be taken to check improper methods of construction. Much as we would like to have some action taken, we prefer to have things remain as they are if it is necessary to have action only as the result of death through the ignorance of those who should know and do not, and who should not be allowed to work in ignorance, except at that which cannot cause loss or suffering to their fellow men.