

There are scores, yes thousands of engineers who use injectors of one of the many kinds; and who, in the event of its failure to work, will take it down, clean it, and remove the cause of trouble, and put it together again and make it work successfully, and yet never once think of trying to enquire into the principles which govern its action; and yet it seems to me that an engineer who is of an enquiring turn of mind (and who refuses to take a thing for granted, simply because there is abundant evidence that it is so, but who enquires into the reason of things, and posts himself as fully as he can on the principles of steam engineering), must eventually find himself in better circumstances than the man to whom it is quite sufficient to know that a thing is so, because he sees it is so, and who is quite satisfied without enquiring the reason why.



BOILER EXPLOSION AT GAGNON'S MILL, THREE RIVERS.

On the morning of the 7th September, J. A. Gagnon's saw mill, opposite Three Rivers, Que., was the scene of one of those disastrous boiler explosions which startle mill owners and cause them to think of the need of proper inspection of their boilers. Both ends of the boiler were blown out, one end being hurled into the St. Maurice River and the other into a field, while fragments of the building were scattered hundreds of feet around. The body of Sam. Beaunier, the fireman, was found a hundred feet away, with the top of his skull blown off, while the following were scalded and otherwise injured: Philip Gaudet, Daniel Loranger, legs broken; Napoleon Sanstete, wounded by broken glass; Philip Mercier, Dolphus Rocheleau; Bundock, father and son, severely injured about the face; Joseph Charbonneau, legs hurt. The mill and boiler were nearly new, and not only the mill but the boiler were uninsured, and the latter had not been inspected. The boiler was 5 feet diameter and 12 feet long, made of $\frac{3}{8}$ inch iron plate, double riveted, the heads being in two pieces. The tubes were not beaded over at the ends, and though there were gusset stays and round stays at the ends, they were not properly fastened. The holes were punched too near the stay and were found broken out. The angle irons were small and light, and the method of fastening poor. When enquiries were made into the circumstances, the proprietor and those in his employ were very reticent, and the only explanation they could suggest was that something had fallen on the safety valve. An inquest was held on the case of Beaunier, and the finding of the jury was that "the deceased

came to his death by visitation of God, from a boiler explosion, and no one was to blame"—a verdict that need not be surprising considering the limited acquaintance of the lay juryman in a country district with boiler making.

It seemed a providential thing for the citizens of Montreal that the recent accident to one of the old pumping engines at the water works did not take place till just after the installation of the new Worthington engine. But the accident exhibits the foolhardy policy of the Montreal city council in trifling with so essential a thing as the water supply. Over a year ago the report of T. C. Keefer, C.E., showed the urgency of improvements to the Montreal water works, and this report was to have been submitted to the public long ago. Why has it been concealed? The excuse made for not carrying out the recommendations of Mr. Keefer was lack of funds, but while they could not spend a few thousands on making safe the water supply upon which the citizens depend for their very life, they have since spent hundreds of thousands on street paving and road work generally, some of which has been of very doubtful necessity. There are many opportunities for commissions and boodle in these street contracts, and very few in an improved water works scheme, but of course such considerations could never influence a member of the Montreal city council.

For some time there have been rumors of amalgamation between the two Montreal gas companies, and now at last the absorption of the Consumers' Company by the Montreal Gas Co. is an accomplished fact, the consideration being \$700,000. There seems to be a disposition amongst some Montrealers to blame the Consumers' Co. for this sorry outcome of their hopes for competition and consequent low rates. There may be, however, another side to the story, especially when, as we hear, only 150 citizens acceded to the invitation of the new company to become customers, in spite of an energetic and painstaking canvass. This fact shows that citizens will often protest very loudly against an evil and yet be nothing but lukewarm when a practical remedy is offered. The whole history of this case shows the enormous value of a monopolistic franchise, and the question for students of municipal politics to consider is whether it is not better that such works be owned and controlled by the cities themselves. Wherever this plan has been adopted in English cities it has been found to be for the public good, especially where the management has been divested from political or other corrupting influences.

The city of Montreal has been the habitat of many conventions this summer, but only one of them appeals directly to the public, as it deals with the subject in which most of us have a vital interest, our health. The American Public Health Association is an association embracing Canada, the United States and Mexico; its membership includes nearly every prominent official connected with a public board of health, and officers of every quarantine station in the countries named. Through the liberality of the Government and the city of Montreal, a delightful trip to the Grosse Isle quarantine station enabled the visitors to personally examine and enquire into every detail connected with the inspection and quarantining of an ocean ship, the disinfection and sterilization of clothing, and the system of marking the baggage after it had passed inspection. The time on the island was not spent in play; full ad-