Garth & Co., and which has been pronounced by expert engineers to be the most remarkable thing of the kind yet produced.

A number of delegates visited the Dominion Burglary Guarantee Co 's office, where they had the opportunity of seeing Mr. J A. Grose's burglary and automatic fire alarm systems fully explained. They were surprised at their completeness in all details.

The afternoon and evening were devoted to a trip which was fully enjoyed by all, namely, a river excursion to Lachine (and down the R pids), Varennes and Boucherville, where, in the evening, a grand aquatic spectacle and a ball were given. As usual, the leading spirits were Col Stevenson and Chief Benoit.

FRIDAY.

The morning was devoted to another business session, the discussions being in the form of "Topics." The president being unavoidably called away, the chair was taken by Mr. Brophy.

Topic No 1 —The best plan to extinguish a fire in a cellar stored with oil, when the only entrance is in the inside of building.

This paper, after giving the flashing point of several of the more well-known oils, stated that water was not efficient in extinguishing oil fires It was useful, however, after the flames had been smothered, to reduce the temperature.

Capt. Damrell questioned whether the storage of petroleum in cellars below the street should be permitted.

No 2 - Fire in attic of frame building; best plan for extinguishing same; should stream be thrown from both ends or through holes in the roof, or both?

Chief Hennisiller, Columbus, O , said that the average attic fire in the stereotyped two-and-a-half story hip roof house was best handled by throwing streams from both or either end of the building, and as most houses of this class have a window in each end of the attic, the means of access were usually very easy, and unless such fire has gained considerable headway, the extinguishment of it should occupy but a short time One great help for prompt and effective work was to cut a vent in the roof. This would free the attic of smoke, enabling the better and quicker location of the fire, and consequently saving a larger water damage to the floor below. In fighting an attic fire through holes in the roof many of the patented pipes that could be operated through a small opening could be used to good advantage, as the stream from the same could be directed in any quarter, and they have proved their value in many cellar, roof and attic fires where it was impossible to reach the seat of fire by the ordinary methods Under ordinary conditions the best saving had been effected by venting the fire at the highest point possible in the roof, thus enabling the firemen to locate exactly the seat of fire and get the largest possible amount of benefit from the water used The average attic roof was one of shingles, and the most successful way, after the fire has taken a good hold, to quickly put out the fire and prevent its spreading, was to wash it down well from the under side, and this could be more readily accomplished by streams thrown from the ends

No. 3.—Should not a uniform coupling be adopted in cities within a radius of 50 miles? and where they are not of the same size and styles, should not interchangeable coupling be provided?

It was resolved that this and the other topics read should be placed on the minutes of the association.

No. 4.—Is it not the duty of cities and towns provided with a system of water works to place in the fire stations water gauges, that the fire department may at all times become familiar with the state of water pressure, and keep a daily record of same?

No. 5.—The use of standpipes in large buildings.

The consideration of this topic was carried forward to next convention.

No 6 The proper location of gas meters in buildings.

Supt Abbott thought it was advisable to so place the meter as for it to get the minimum of heat, which would be as low down near the floor as possible He then described what he took to be the ideal meter. The main pipe should be put perpendicularly from the point where it entered the building Connections should be made of iron. A hood should be provided for the meter, with sufficient space between the two to prevent the heat from attacking the solder of the meter.

No 7 —The service and economy of five patrols or salvage corps in small cities.

No 8—Should not the size of our hose, nozzles, hydrants and engines be increased to keep pace with the large areas and so-called slow burning construction in vogue in mercantile buildings of the present day? and how much can they be increased and be practicable to handle.

No. 9—How best to handle brush and prairie fires, that threaten suburban residences beyond the reach of the water service?

No 10—How should buildings be constructed to be the least affected by the expansion force of material used therein when exposed to excessive heat?

No 11—What tests should be required from a water company for a renewal of a ten years' contract by a town of eight to ten thousand people relying exclusively upon hydrant streams for fire duty?

Chief Bundel thought that for a town of, say, 9,000 inhabitants, 1,000 to 1,200 gallons of water per minute, under a pressure of 80 pounds, ought to be sufficient

Mr. Brophy read a convincing paper on the subject of the removal of efficient fire chiefs from positions which they have perhaps held ably for years, for political reasons He condemned the practice *in toto*.

It was moved and seconded that Mr Brophy's paper, that is, in its political aspects, should be taken as the sense of the meeting. This was voted unanimously, though Canadian delegates, for the reason that their circumstances were happily entirely different, took no part in this stage of the proceedings

The afternoon session was devoted to general business.

The reports of the secretary and treasurer were read and adopted.

The secretary suggested that the name of the association would more properly be the *International* Association of Fire Engineers, which alteration was adopted.

He also proposed that a National Congress of Firemen should be held somewhere in 1896 or 1897, on the plan adopted some little time back in England.

Reference was made to a report which had appeared in a Montreal paper to the effect that a number of American fire chiefs, who had witnessed the fire at the Montreal steam laundry, had censured the method of the firemen who were called to extinguish it. Much indignation was expressed at the report, inasmuch as those Americans who were present, far from casting slurs on the conduct of the Montreal fire laddies, had expressed the warmest admiration for the way in which one of the most difficult fires they had ever met with had been combated. This was the deliberate opinion of those, one and all, who had been present.

After considerable discussion and excitement, it was decided to hold the next year's convention at Augusta, Ga. Chief Devine of Salt Lake City, Utah, spoke so eloquently of the advantages of his own city that it was practically decided to hold the convention of 1896 there

The election of officers was then proceeded with, Chief Benoit, of Montreal, being unanimously elected president, and Hy. A. Hills (re-elected) secretary, D C Larkens (re-elected) treasurer. Hon. J. A. Chapleau was elected an honorary member of the association, and Col Ald Stevenson was elected hon. vice-president.

The following new Canadian members were proposed: J F. Ryan, Fire Commissioner, Halifax, J. D. Murphy, Chief, Halifax.

After votes of thanks had been passed towards Hon. J A Chapleau, the mayor and city of Montreal, the Street Railway Co., Chief Benoit and Col Stevenson, the convention came to an end, the delegates having passed an instructive and pleasurable week in Canada.

Personal.

J. Ochiltree Macdonald, whose contributions on mining subjects are favorably known throughout the Dominion, was in Montreal a few weeks ago and gave The Canadian Engineer a call.

J. R Woodburn, of E. S Stephenson & Co , manufacturers of pulverizing machines, St. John, N.B , paid a visit to Toronto on his way to the London Methodist Conference, and gave The Engineer a call.

P. A Thompson, chief engineer of the Richelieu and Ontario Navigation Co., has been appointed boiler inspector at Kingston Ont., to succeed Edward Adams, who has been appointed chief inspector at Ottawa.

Hanbury A. Budden, whose card appears in this issue, has been practising at the Bar for the last six years, having been admitted in 1888, after spending seven years at McGill University, where he obtained the degrees of B A. and B.C L He has recently decided to confine his attention to matters of patent and trade mark law, and having acquired a very complete patent solicitor s library, is in a position to give the greatest care to matters of this nature He has devoted himself particularly to electrical matters, which at this time are so widespread in their bearings.