

then placed in the trench and tamped until the water came up to the surface. The walls were made in layers of not more than eight inches and wherever a joint occurred the layers above lapped over at least five feet in either direction; always before starting a new layer the lower one was "ragged" up, swept clean and watered thoroughly.

It is somewhat strange that this method of concrete foundation walls has not been more extensively used, for it is not only superior to an ordinary bonded wall, but has been found to be cheaper than a stone wall properly built in cement; doubtless though we shall see it adopted more often in the future now that a beginning has been made.

Some difficulty was experienced in carrying out this work through the heavy generators bearing on the ground a few feet from some of the trenches. On this account before allowing the old walls to be removed three-inch sheet piling was driven sixteen feet down. As the stone was taken out waies were placed along this and carefully strutted. At one of the other trenches it became necessary to underpin the stone wall of adjoining building before proceeding with the work.

#### CANADIAN ASSOCIATION OF STATIONARY ENGINEERS.

##### NINTH ANNUAL CONVENTION.

The ninth annual convention of the Canadian Association of Stationary Engineers was held at Hamilton, on the 8th, 9th and 10th August. The hotel headquarters were at the new Waldorf House, and the meetings were held in Oddfellows' Hall, John street.

The first session opened at 11 a.m., on Monday, 8th, with president, Bro. E. J. Philip, of Toronto, in the chair, and vice-president, Bro. W. F. Chapman, of Brockville, in the vice-chair. The other executive officers present were, J. G. Robertson, Montreal, secretary; R. C. Pettigrew, Hamilton, treasurer; G. C. Mooring, Toronto, doorkeeper. The delegates present from the branch associations were: Charles Moseley, John Fox, Wm. J. Webb, and Thos. Eversfield, of Toronto No. 1; John M. Dixon and John J. Richardson of Toronto No. 2; Thos. Ryan and Peter McNaughton of Montreal No. 1; Geo. Mackie of Hamilton No. 2; Chas. Asselstine of Kingston No. 10; Wm. Allan, of London No. 5; John Grundy, of Brockville No. 15; Wm. Bear of Dresden No. 8; Wm. Oelschlager of Berlin No. 9; Thos. Pilgrim of Brantford No. 4; and John L. Wendell of Waterloo No. 17.

Other members reported present were the officers of Hamilton No. 2, consisting of Robt. Mackie, president; W. R. Cernish, past president; Thos. Chubb, vice-president; Joseph Ironside, recording secretary, James Carroll, financial secretary; Wm. Nash, treasurer; W. I. Stevens, conductor, and Thos. R. Carter, doorkeeper; Peter Stott, T. Cook, C. Hurton, J. Webb, T. Elliott, C. De Mille, W. Morris, J. Wadge, J. Clair, J. Fielding, David Hunter, Robert Stewart, J. M. Morris, and G. Epps, all of Hamilton; Geo. Gilchrist, Geo. Bradley, A. M. Wickens, Samuel Thompson, Walter G. Blackgrove, J. G. Bain, John Ruse, P. Trowern, all of Toronto; F. G. Mitchell, of London.

Among the visitors present were J. E. Taylor, representing the International Correspondence Schools, Scranton, Pa.

Executive treasurer Pettigrew, having introduced Mayor Colquhoun, and Aldermen Carscallen and Nelligan, of the Hamilton city council, the Mayor came forward, and in the name of the council and citizens, welcomed the association to Hamilton. The duty demanded of him was a pleasing one, for societies with such high ideals as this should meet with hospitality and friendship, wherever they convened. His chief regret was, that owing to the restrictions of a city by-law, which was as unchangeable as the laws of the Medes and Persians, he could not offer them the use of the City Hall as a meeting room, but he was glad to see they had comfortable quarters and plenty of room here. He hoped the delegates would carry back with them the most kindly recollections of

their visit to Hamilton. They would be welcomed and "taken in"—using that phrase in a hospitable sense—and they would find the people of Hamilton kind and fraternal. Hamilton was a city to be proud of; it was of no mushroom growth; there had never been a boom since 1856, but its growth had been a steady, legitimate one, and that was what they wanted. Hamilton was now becoming known as one of the prettiest cities on the continent of America—an assertion with which the visitors would agree, he believed, before the convention was over. He might say more, but he was not an adept at figures of speech. As a banker he was more familiar with the figures that could not lie (laughter). In conclusion, he welcomed the delegates collectively and individually, and trusted their convention would be both pleasant and profitable.

Alderman Carscallen wished to emphasize the welcome extended by the Mayor, and was glad the association had seen fit to choose Hamilton as a convention city. He had been struck with the principles of this association, as announced in the preamble of the constitution, which he begged leave to quote: "This association shall at no time be used for the furtherance of strikes, or anyway interfering between its members and their employers in regard to wages, recognizing the identity of interest between employer and employee, not countenancing any project or enterprise that will interfere with perfect harmony between them; neither shall it be used in any manner for political or religious purposes." As long as this association is conducted on those principles, it would have the respect of every right-thinking man, and he would admonish all the members to adhere to those principles. He had always been in favor of organized labor, for the improvement of the condition of the workmen, and as a means of obtaining their rights; and he had no hesitation in saying that the organization of labor had been the means of lifting men up. Union for mutual help and defence of interest was reasonable and seemed to prevail. As a councillor of some years' experience he would advise them never to be hasty in amending the constitution. A proposition might appear reasonable at first sight, but on second thought it would be seen to be a mistake. He hoped their deliberations would redound to the credit of the association.

Alderman Nelligan also expressed the pleasure it afforded him to join in welcoming the association to Hamilton. In the city council he was an advocate of day labor, as a means of getting good and efficient work, instead of awarding municipal work to contractors, who would squeeze the men and get all the profit there was in a job for themselves. He hoped the delegates would have a good time, and be pleased with their stay in the city.

Bro. Robert Mackie then read an address of welcome on behalf of the Hamilton branch, as follows:

"On behalf of the Hamilton Association No. 2, I have a great deal of pleasure in extending to you, delegates of the Canadian Association of Stationary Engineers, at our 9th annual convention, a hearty welcome to our city. We might say that you are not strangers in a strange land, for you have been here at a former meeting of this kind, the Executive having been formed in our city. The continual growth of the association, however, has brought with it a larger number of delegates. It is not necessary to go into details of the advantages of engineers belonging to such organizations as ours. The members of the Hamilton branch received a great deal of valuable information last winter by a series of addresses and papers on subjects in which we are all deeply interested, given by the best authorities we could procure. In conclusion, we trust your stay with us will be a very pleasant as well as a profitable one."

The president appointed Bros. Ryan, Wickens and Blackgrove a committee to draft a reply to the addresses of welcome.

The president gave his annual address as follows:

I have the honor and pleasure to welcome you to this the 9th annual convention of the C.A.S.E. The subordinate associations have chosen you to represent them at this convention, and to look after their individual interest in particular and the whole society in general. The second meeting of the executive—it was really the first, the previous one being only a meeting to get into shape—was held in this city, and I little dreamt at that time that I would occupy the president's chair