

made. We feel very much indebted to you for calling our attention to the article in question, and for your interest in the matter. The *Architect and Builder* could very easily have ascertained the facts before publishing an article calculated to inflict a great deal of injury upon us."

The tabulated statement of Mr. Haskins, City Engineer, alluded to, contains a certificate from that gentleman that the sewer pipe referred to in his statement was all manufactured by the Campbell Sewer Pipe Company, except that for two sewers, which was twenty-four inch imported pipe. The aggregate length of the sewers in the city amounts to about 159,000 feet, while that constructed of imported pipe amounts to but only about one mile.

These facts seem to be conclusive as to the superior excellence of the pipe manufactured by the Hamilton and Toronto Sewer Pipe Company, at their works in Hamilton. Regarding the products of the Standard Drain Pipe Company, of St. Johns, Que., Mr. W. C. Trotter, the president of the Company says :

"I have to thank you for drawing my attention to the article in the *Architect and Builder*. Such statements are too frequently made by those who either have no desire to obtain correct information, or who will not use it justly when they have obtained it. When our factory was started here in 1884, the question was at once raised by importers of Scotch pipe as to the strength and durability of our product, and the argument was advanced, 'Scotch pipe has been used here for fifty years, and is known to be of good and durable quality. If you buy Canadian pipe you do not know what you are getting.' Notwithstanding which opposition, some of the large dealers took up the sale of our pipe, the article affording the utmost satisfaction. Pipe of our manufacture has been subjected to the most severe tests, and has been proven to be first quality in every respect, not only fulfilling the requirements of engineers as regards resistance to crushing pressure, but far exceeding any possible requirement. For instance, our contract with the city of Montreal calls for twelve inch pipes which will sustain a crushing weight of 2,000 pounds to the square inch—but the official test, made by P. W. St. George, Esq., C. E., City Surveyor, shows that our twelve-inch pipe withstood an average pressure of 5,696 pounds to the square inch, which was 3,696 pounds in excess of the requirement. In a competitive test as to the absorption of moisture made by Mr. St. George as between Scotch pipe and that manufactured by this company, the results showed that our pipe absorbed but one unit in forty-six units of pipe, while the Scotch pipe absorbed one unit in eighteen of its weight. This shows greater density of body and non-absorbing qualities two and a half times greater in our pipe than in Scotch pipe. Again, our pipe has been subjected to the 'smoke test' in competition with those brands of Scotch pipe most largely imported into Canada. This test was made in the Montreal corporation yard and conducted by R. P. Fleming, Esq., C. E., Engineer to the Sanitary Association of Montreal. In Mr. Fleming's report he says : 'A drain consisting of eight lengths of straight pipe and three junction pieces, was submitted to the crucial smoke test, which the pipe withstood in a most satisfactory manner ; while a second drain of inferior pipe from another factory, when submitted to the same test, showed numerous defects through

which the smoke escaped in large quantities.' The drain of inferior pipe referred to was laid with Scotch pipe."

The facts which are here stated regarding this important Canadian industry are incontrovertible ; and they prove that the statements made by the *Architect and Builder* are not only wrong and misleading, but absolutely vicious. It is difficult to imagine why a respectable Canadian journal should proclaim that Canadian sewer pipe is inferior to the imported article, when enquiry in proper quarters would have elicited contrary facts. That no such enquiry was made is evident from the testimony of the managers of the only two sewer pipe factories in Canada, and the fair inference is that the *Architect and Builder* has been unwisely influenced by dealers in foreign made pipe, who are naturally prejudiced against the domestic product. An explanation is now in order.

CANADA NEEDS MORE PROTECTED INDUSTRIES.

DEMAGOGUEISM seems to be run mad in the United States. That fact is particularly and painfully noticeable in the acts of both the President and both branches of Congress. Canadians have cause for rejoicing, in that recent events have demonstrated that much of the proposed love for Canada expressed by our Yankee friends was grounded in conceit and sordid avarice, the ulterior object being to denationalize Canada, sever it from its connection with the Mother Country and make it a part and parcel of the American Union. If Canada does not study the course in which events in the United States are shaping themselves she will not be true to her own best interests. The specious arguments some time since put forth by Mr. Wiman, Mr. Butterworth, Professor Goldwin Smith and lesser lights of the Annexation Party in behalf of Commercial Union, and their efforts to show that the autonomy of Canada would not be hazarded by such union, are demolished by the stand taken by Senator Sherman, who shows very clearly that if Canada desires any closer relations of any sort with the United States it can only be by becoming an integral part of that republic. "Forewarned, forearmed," and Canada can now observe without the aid of spectacles that Commercial Union and Annexation are synonymous terms.

Canada does not desire to cast her lot with the Great Republic, and there are innumerable good and sufficient reasons why she should not. But while unanimous sentiment may be in this direction, it should be remembered that our Yankee friends are a covetous people who are possessed of the idea that their manifest destiny is to absorb all of the North American Continent, and the isles of the sea adjacent thereto, and to give the north pole to their screaming eagle as a roosting place. They will do this if they are permitted to do it, and it remains with Canada to thwart the ambitious project. The way to do this is to be able to do it. Recent events in the United States show plainly that the temper of the people there is to force Canada to the abandonment of some of her most valuable rights, failing in which to force a quarrel which would lead to war, and the war to subjugation and annexation. There may be more or less delay in carrying out the programme, but it is the programme nevertheless which many would like to see carried out.