

back but that it had not taken the necessary steps to publish all the facts. When the *Monetary Times* omitted to mention the name of the journal referred to in its article, the company apparently allowed the matter to rest, and took no further steps until recently to remedy the omission and make its agents and friends acquainted with all the facts. The Great-West has now, however, done so in a thorough-going manner, and has lost no prestige or friends thereby.

While dealing with this subject, we might say that our attention has been called to an article in a recent issue of this same *Economist*, entitled "People in Glass Houses," or something to that effect, in which an attempt was made to show that THE BULLETIN was in the same class with the *Economist*. A ridiculous canard which was circulated some time ago by the notorious Mutual Reserve, and the fact that THE BULLETIN carries an advertisement of the Foresters, were put forth as absolute proof of the "moral obliquity" of this journal. No attempt was made, however, to answer or explain the charges presented in our article. As to the "moral obliquity" of THE BULLETIN, our readers must be the judges. Certainly the status of this paper is not likely to be affected either for good or for evil by anything which appears in the *Economist* as it is now conducted.

### PROGRESS OF FIRE PROTECTION.

We have derived much interesting and useful information from a perusal of Mr. Sims' well written and instructive paper on the above subject. The preparation of such an essay involves much thought, labor and research and is indicative of great enthusiasm on the part of the writer. Mr. Sims certainly appears to be greatly interested, even enthusiastic in his theme. The paper, which was read by Mr. Sims before the Insurance Institute of Toronto, is a pamphlet of 39 pages, illustrated with 14 cuts of ancient and modern fire appliances, from fire buckets, squirts, etc., to the most recent steam engines and appliances for resisting and fighting the fire fiend. Indeed, Mr. Sims has exhaustively ranged the entire field of fire prevention and fire protection, from the first crude attempts to the most recent effective efforts made to master the dread element of fire.

We regret that the state of our columns will not admit of further remarks from us on this occasion, but the subjoined extracts will give readers of THE BULLETIN some pointers as to the purport and merits of Mr. Sims' valuable contribution on the subject he so ably handles.

Mr. Sims divides the history of fire protection into three periods as follows:

1. From the early dawn of history down to the year 1700 A.D., say 20 or 30 centuries, there was no substantial progress, as the appliances at the close of that long period were practically the same

as they were at the beginning, and consisted of buckets, squirts, hooks, and a few simple hand used implements kept by each household, and called into use by the party discovering the fire or by the tolling of the church bell. The water supply was generally deficient and the distribution dependent upon water-carriers. There were a few exceptions during this long period of almost inappreciable development, which were in the best days of the civilizations of Greece and Rome, in which some feeble efforts were made to provide organized fire protection, but which were lost in the dark ages which followed.

2. From 1700 to 1850, 150 years, is the period of the evolution of the hand engine from a small crude affair to a very efficient machine. Also during this period there was considerable progress in the supply and distribution of water by pipes and storage tanks. Flexible hose, both suction and delivery, was introduced, and Volunteer Fire Brigades generally and efficiently organized.

3. From 1850 to the present time, say 50 years, the most astonishing progress has been made, and may be described as a series of new creations instead of development. This short period has witnessed the general introduction of waterworks, powerful steam pumps, reservoirs, hydrants, steam fire engines, aerial truck ladders, water-towers, fire boats and electrical alarms, with a host of accessories too numerous to classify and describe, backed up by Paid Fire Brigades, on duty day and night, the whole constituting equipments as perfect as the ingenuity of man can well devise.

It may be asked what effect these modern and powerful protective appliances are having in checking and controlling the destruction of property by fire. Though statistics respecting the fire waste are of very recent date, and in many respects incomplete, we are able to determine from the reports of Insurance Departments, with some measure of accuracy, the ratio of the value of property destroyed year by year, to the value of the whole property in the State. As these statistical reports date back only 25 or 30 years, we cannot make a comparison of the ratio of the destruction of property now with what it was 50 or 100 years ago. Though waterworks and the steam fire engine were being introduced about the middle of the last century, they did not come into general use for 10 or 20 years later, so that the full benefits arising from modern appliances have not been felt for more than the past 25 years. It will be surprising to find that instead of a gradual proportionate reduction in the fire waste it has increased, as shown by the following statistics gathered from Government Insurance Reports covering a period of 22 years down to the year 1901:—

#### UNITED STATES AND CANADA.

1880-1891, 22 years,	Loss \$58 to each \$10,000 of property value.
1880-1889, 10 "	" " 55 " " " "
1890-1899, 10 "	" " 60 " " " "
1897-1901, 5 "	" " 59 " " " "
1897, 1 year,	" 51 " " " "
1898, 1 "	" 55 " " " "
1899, 1 "	" 64 " " " "
1900, 1 "	" 63 " " " "
1901, 1 "	" 60 " " " "

Notwithstanding the efficient devices which the inventive mind has supplied, and the barriers that have been raised against the danger of fires, the fire loss to the whole value of perishable property has in late years increased, and has reached the enormous sum of about \$160,000,000 annually, in Canada and the United States.

Viewing the large area over which this property is spread, and its vast value, we must assume that the foregoing figures furnish a fair average and constitute a reasonable comparison of the proportionate loss of property by fires in recent years with that of previous years, and the conclusion is that in the face of the increased means of protection, there are forces at work increasing the danger of fires, equal to or slightly in excess of the effectiveness of the appliances