

The advertising writer for the magazine and the daily papers has succeeded in making the advertising pages of many journals of as much interest to the women-folk as are the editorial pages. The advertisement writer for the technical magazine is making some attempt to brighten the advertising pages of the journals which they patronize, and to-day the pages of our better technical magazines are read and studied as carefully as our editorial pages. To appeal to people of intelligence it is necessary that judgment be shown, the claims made and the statements set forth in reference to the various articles and supplies that the advertiser may have to dispose must be reasonable. These claims may be made in a striking manner, but continued misrepresentation will lose its value. With the spread of education the numbers to be reached by magazines and technical journals is largely increased. The press is a great educational influence, and if its advertising pages are judiciously taken advantage of, it will become a powerful sales agent.

### THE CITY ENGINEERS' TENDER.

Of late years it is becoming the practice of city engineers to tender along with the contractors upon every important piece of work undertaken by the municipality.

This practice grew out of the conditions which arose in many places when the contractors were few, and where they arranged among themselves as to prices. The immediate results were that contract prices were lowered in many places, and, as the competition became keener, it frequently happened that the city engineers' tender was higher than the average tender price.

Naturally, contractors have been objecting to this practice on the part of the city engineer, but it is not to be expected that such criticism will alter the procedure.

It might be well, however, to call the attention of engineers to the fact that in some municipalities the contractors who have provided large equipment are not being fairly treated, and that the general taxpayer, unknowingly, is contributing to the construction of works which should be charged entirely to local improvement. The fact that the city engineer is not required to deposit bonds, nor to make allowance for depreciation of plant, nor required to give a guarantee, makes it possible for him to tender at lower figures than the contractor who has to take these matters into consideration. The careless method of bookkeeping frequently employed makes it impossible to tell exactly what our work costs.

Contractors may be counted upon to take advantage of every legitimate means of securing good prices for their work, but in his endeavor to keep down the prices the city engineer must be careful that he is not favoring certain of the ratepayers at the expense of the municipality.

### PAINTING OF STEEL BRIDGES.

Every spring the question of the maintenance of steel bridges should be carefully considered by those having such in their charge. A little money spent on repair, such as the renewal of floors, repair of piers and abutments and painting will add many years to the life

of the bridge, and result in the saving of considerable money.

The principal operation in preparing steel for a coat of paint is to thoroughly remove all blisters, scales, rust and old paint until the steel has a polished surface, and dust and dirt cleaned from the steel. It is well known that any rust or moisture under the new paint will corrode the steel as much as if left exposed without a cover. Paint, therefore, should not be applied in the early morning or the late afternoon, or on damp, foggy days. It is just as necessary that the material be dry as clean.

The primary coat should be applied thin, and, if possible, without dryers. The second coat, applied after the first is thoroughly dried, may be thicker in consistency, but not so thick but that it will dry within two or three days. For painting steel bridges the Road Commissioner of Nova Scotia uses the best red lead, mixed in the proportion of 150 pounds of lead to one gallon of raw linseed oil, making a thick paste, which is to be used as soon as possible after being mixed. This is again thinned to 20 pounds of paste to one gallon of oil. In addition to the red lead paint, used in many places, there are a number of tar and graphite paints which are equally as good. These paints give a coat good in appearance and cheaper than the red lead.

Neglect of steel structures in the matter of painting is one of the most fruitful causes of their early weakening, and it is a matter that should not be overlooked.

### EDITORIAL NOTES.

Mr. James H. MacDonald, Highway Commissioner for Connecticut, in a recent interview stated that he believed the coming street pavement will be of cement. Properly laid with hard rock, it will last under ordinary traffic many years.

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In this issue will be found a very interesting article by Mr. F. D. McArthur, B.Sc., engineer for Yorktown, Sask. Mr. McArthur describes the first compressed air waterworks tank used in Canada. This article would seem to indicate that the standpipe is a thing of the past in connection with waterworks systems, although this method of delivering water has been used for some time in connection with water supply for railway locomotives.

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The Clarkson School of Technology commemorated on March 18th last the fourteenth anniversary of their charter day. The programme was an exceedingly interesting one. The address of the occasion was given by Dr. C. P. Steinmetz, of the General Electric Company, Schenectady, N.Y. As might be expected, Dr. Steinmetz was very complimentary in his reference to the engineering profession, and to the young men preparing to go out into the world his opening sentence was: "It will depend upon you young engineers to secure the success of the engineering in the future."

### PRECIPITATION FOR MARCH.

The total precipitation recorded in Canada during March was very generally much less than the average, the only districts which recorded an amount in excess of the average were Western Alberta, Eastern Saskatchewan, Manitoba and the Rainy River district of Ontario.