

## AS SEEN BY OTHERS

### Returning Confidence.

The American Artisan.—That confidence is fast being restored in the various branches of business enterprise throughout the country, is becoming more and more apparent with the dawn of each succeeding day. Optimism is supplanting pessimism, and a spirit of satisfaction is dissipating the cloud of anxiety which for a time threatened to work dire results. Stocks are going up in value and with this the hoards of money are being unlocked. The securities of American railroads and corporations are now said to be on a sounder basis than they have been within a quarter of a century.

### An Overcrowded Profession.

Toronto Telegram.—Civil engineering is not riding the crest of any wave of prosperity in Canada just at present. A vacancy in the office of city engineer of Hamilton, salary \$3,000, attracts over fifty applicants. A comparison of the number of candidates for the office with the size of the salary thereto attached suggests that the engineering profession must be somewhat overcrowded.

### Industrial Education.

American Machinist.—From whichever standpoint the matter (industrial education) is viewed, the magnitude of the problem is the same, but if the opening of the schools must be preceded by a preparatory educational process in which the boys and their parents are brought to realize their aims and value, it would clearly be folly to establish the schools in number very much in excess of the demand. In spite of the enthusiasm behind this movement it is quite possible that financial and other difficulties will prevent this, and there is probably no reason for sounding an alarm. There is, however, ample time to go slowly and avoid the ultimate setback which a false start will certainly bring upon the movement.

### More Lessons from Quebec Bridge.

Concrete and Constructional Engineering.—The principal lesson to our mind is that every structure of importance requires either a highly-trained, responsible engineer or architect permanently or at least regularly on the spot. To leave important structures to representatives lacking high technical training and experience is wrong. No matter how practical and experienced the clerk of works may be, his horizon is, with but few exceptions, necessarily not a wide one. Had there been a man on the spot of the technical training we claim is necessary he would have immediately realized that the faults observed in the Quebec Bridge were of extreme importance; he would have stopped the progress of the works, and at least no lives need have been lost, for there was ample time for the necessary precautionary measures. . . . Loads and dead weights were taken too finely, stresses and strains that should have been provided for were underestimated, and the result has been that both designer for contractor, and consulting engineer are held responsible for the disaster, with its fearful loss of life and property.

### Municipal Ownership.

The Montreal Gazette.—The Kingston municipal plant is making gas at a cost of \$1.26 per thousand feet and selling it for \$1.09. These are the official figures. The practice is defended because the city sells electricity to the street railway on a less than cost basis. Municipal ownership frequently develops wonderful excuses. Kingston should rank high in the prize list.

### Letting of Contracts.

The London Times.—During the past few years there have been several illustrations of the advantages and defects of the system of assigning contract work by the method of lowest tender. The inherent merit of the system is that it is

the fairest means yet devised for the selection of a contractor from a number of competitors; and although instances have been before the public of bribery and corruption arising from abuse of trust by authorities in making the selection, the system itself has proved to be satisfactory in principle, and it is likely to be continued. The inherent defect of the system is that it conduces gradually to lowering the quality of the work. In the case of yearly tenders such as are invited by railway companies, prisons, and asylums, this aspect of the matter is perhaps most manifest. Firms possessed of plant for turning out the various kinds of supplies demanded must keep their plant employed, and, if they are unsuccessful one year, they have scarcely an alternative to lowering their price on the next occasion.

### Auto Men a Bar to Good Roads.

The Weekly Sun.—The fears expressed in many quarters of Ontario that the good roads movement is intended chiefly for the benefit of auto drivers appears to have found lodgment in New York as well. The sum of \$50,000,000 was some time since appropriated by the Legislature of New York for road building, and of this amount \$42,000,000 is still unexpended. The State engineer says that \$40,000,000 of the balance left will be required to construct proposed trunk lines connecting the leading cities. These trunk lines, the engineer says, are wider and heavier than ordinary traffic calls for, and are being made so for the purpose of enabling those who own autos to enjoy a fast ride from one city to another while the interests of farmers, who desire a greater mileage with a lessened width of track, are being neglected. An American journal says the views expressed by the engineer appear to be generally held by farmers in the State.

### Grand River Freshets.

The Globe.—The spring freshets have become dangerous from three causes: the drainage of the swamps, the destruction of the forests, and the removal of fallen and sunken timber from the beds of the small tributary streams. The natural dams having been taken away, artificial ones should be constructed. The swamps, which formerly acted as sponges, can never be restored to their original condition, nor can expansive areas of good agricultural lands be reforested; but it should be possible to secure the forestation of much land that does not lend itself to farming operations, especially along the branches of small streams. The retention of freshet water in hundreds of reservoirs all over the plateau would undoubtedly improve its climate and help to counteract the tendency to aridity from which these high lands suffer every summer. . . . The suggestion to appoint a commission of inquiry is a good one. If its work were thoroughly done it would probably give a much-needed impulse to practical forestry by imparting to farmers everywhere clearer ideas of the great benefits nature is ready to confer on those who endeavour to work intelligently with her, instead of persistently endeavouring to thwart her beneficent efforts for the pleasure as well as the advantage of short-sighted human beings.

### COBALT AND ITS CONCENTRATORS.

(From a Correspondent.)

The narrow seams of ore, and wall rock impregnated with leaf silver, surlalite, chalcopryite, and other minerals carrying silver values, is bound to make a product too low in value (owing to excessive freight rates, sampling, and smelter charges) to permit of direct shipping to the smelter.

This product can, in the most of cases be concentrated from fifty tons of ore to one of concentrates, the resulting product being equal in value in most cases to first grade ore from the mine.

The cost of treatment and losses due to concentration being far below the freight, sampling and smelter charges entailed in shipping a low grade product.

At present, three concentrators are in operation, namely, the Buffalo, Cobalt Central and Coniagas, two concentrators are about ready to operate, and three of the large producers are contemplating the installation of extensive plants.