

very much to the point. The adoption of systematic sampling of concretes after placing in the forms, and bringing the test results to the attention of those who are responsible for the field work, will do much to raise the standard of quality.

In conclusion, the writer believes, from a study of this article as well as from studies of tests which have complied with every step in the process as outlined by Mr. Young, that:—

1. Mr. Young's modified method has little in common with the theories for proportioning mixtures proposed by Prof. Abrams and Mr. Edwards.

2. This modified method restricts the engineer to the use of harsh low-area aggregates which must carry relatively small quantities of fine sand, and therefore is not general but is bounded with narrow limitations, applicable only to any one single grading of aggregate.

3. It is not a method which permits the best grading of any aggregate to be chosen, but arbitrarily chooses a definite grading and merely shows the variation in strength which will result when various proportions of cement are used with this definite combination of sizes.

4. The coarse gradings made necessary for apparent economy are harsh working, of lower compressive strengths, and require slightly more cement, than would gradings of higher surface area which might be obtained from the same aggregate.

5. Because of the limitation as to area of aggregate, this surface area method is less general in scope than the volumetric method of proportioning now in general use.

PUBLIC WORKS AND "ECONOMY"*

By S. BAKER

City Clerk, London, Ont.

RECREATION and art galleries are more important than a low tax rate. "The wolf at the door" will compel men to work, and good citizenship will see that we have sanitary factory laws, fair wages and proper housing. But it is not wages that determine living conditions; it is living conditions that determine wages. If a city provides parks, proper amusement and recreation grounds, and works of art, to raise the physical and moral tone of its people, improved labor conditions, better housing and higher wages will follow. A city well planned and governed can demand and secure a better class of citizens.

Waste and reckless expenditure are wrong, but when economy takes the form of reducing all expenditures, it is likely to prove to be penny-wise and pound-foolish. It is merely negative and leads nowhere. The incurring of expenditures by municipalities should first be approved by a municipal bureau under government control, with competent expert financiers and engineers to prevent wasteful or foolish works, but no necessary work should be unduly held back. These works in most cases increase the resources of the municipality more than its liabilities.

Forethought, continuity of purpose, public initiative, co-ordination of effort, intelligence in administration and single-mindedness in public life are infinitely more important to a city than the lowering of the tax rate.

*Excerpt from paper read at the Southwestern Ontario Town Planning Conference.

It is announced that Hon. F. C. Biggs, Ontario's Minister of Public Works, has decided to have all toll roads taken over by the county and provincial road systems and all tolls abolished.

When the Toronto street railway is taken over by the city in 1921, the price that will be paid for the railway, rolling stock and other equipment will be determined by arbitration. The city hall estimate of what Toronto will have to pay is between \$8,000,000 and \$10,000,000.

Letter to the Editor

OPPRESSORS OF THE POOR

By J. G. SULLIVAN

Consulting Engineer, Winnipeg, Man.

Sir,—One does not have to be a student of history to know that there has existed in the old worlds up to recent times a condition which made it practically impossible for any individual to remove himself from the class into which he happened to be born. Even those of us whose fathers came from Great Britain have been told many times by father or grandfather that a gentleman was a man who did not have to work for a living, and that he was in a class by himself, protected in his holdings of land, etc., by laws of entail; and no matter how depraved he might become, the laws and customs maintained him in his position and he and his offspring existed without working. They told us that other classes were tradesmen, farmers and laborers, and that it was next to impossible for any of these to enter into the gentleman's class.

Practically All are Workers

We do not have to go very far in the Bible before we are told that God Himself said to Adam, "With labor and toil shalt thou eat thereof all the days of your life." It would not appear entirely illogical to classify the "gentleman" described above as an oppressor of the poor. Such conditions do not exist in Canada or the United States. Mention a successful rich man, and in ninety-nine cases out of a hundred, you have named one of the hardest working men in the country. In this country we are practically all workers, and if there are oppressors of the poor we must look for them among the workers.

The radical labor leader will tell you that the arch fiend is the capitalist, without defining what he means by the word capitalist. We would not expect him to include a poor widow who may have a few thousand dollars in the savings bank, although we are not sure how he would class this same widow if she should draw out her savings and purchase war bonds or railway or other commercial stocks.

Capital is what we have saved out of what has been produced, the sole means of sustaining the life of the industrial worker, for as a matter of fact, the industrial worker, whom the radical leader tries to make you believe is the only producer, is not a producer of the real necessities of life, but rather of luxuries which follow where people have been frugal and saved up some capital which will permit them to enjoy luxuries.

False Teachings of Radicals

The real producers of the necessities of life are the farmers, and if they had been controlled and guided by the teachings of the present leaders of industrial workers, it is the writer's belief that a universal famine would exist on this earth to-day, and the first to die would be the industrial worker. The writer has no quarrel with industrial workers or their leaders, but rather with the false teachings of the radicals. For instance, it is a common teaching that the industrial worker is underpaid, and that he is producing all the way from twice to twenty times the amount that he is being paid for. If that were a fact, we would expect to see the wealth of the world increasing at a tremendous rate. What are the actual facts?

The estimated wealth of the world at the beginning of the war did not exceed one trillion dollars. This consisted mostly of tools of production and maintenance used for the comfort and happiness of mankind created by capital, which in turn was created by frugality and sacrifice. The value of the world's plant has not increased during the past five years, but in all probability has decreased in actual value,