

organized in trade unions and even the unskilled and ignorant laborers on the work, have received increases in compensation in many cases fully equal to the change in the value of the dollar, and in some cases far exceeding it. If the engineers on such work are paid the same percentage of the total cost that they were in 1914, their increased pay will fully offset the changed value of the dollar. The same thing is true of engineers employed in manufacturing industries, and here the compensation of engineers has been largely increased.

#### Justice to Salaried Men

At this time especially, employers who represent invested capital and those responsible for work in the public service, stand in great need of the loyal support and co-operation of their salaried professional staff. It is exceptional where salaries have been increased to fully correspond to their decreased purchasing power. The injustice in thus reducing the rate of compensation for loyal and efficient service paid to the very men on whose brains and fidelity the country is more dependent than on any other class, is truly a fatal error.

#### How Long Will High Prices Stay?

There has been reluctance to raise salaries to correspond to the changed value of the dollar because of the idea that prices were to drop back with the conclusion of the war. So far from this being the case, the above quoted records show that following the lull in business after the armistice, prices have risen above even the war-time scale, and are now at the highest point ever reached. Business has largely readjusted itself to the changed conditions and the activity in some lines exceeds that registered during the war.

At the bottom of the changed price conditions is the surplus of demand over supply. The world urgently needs more food and coal and steel and cotton, more of the goods made from them and from other raw materials, than are now being produced. The competition among buyers that sent prices soaring in the early years of the war, is still an active force to maintain prices.

The only two things which can restore prices to their former level are increased production or decreased consumption. World-wide disorganization of industry and of government, deficient capital and deficient transport facilities all tend to reduce production. The world of consumers, long held down to a war diet and war clothing, now eagerly seeks to replenish its larder and wardrobe and to repair and renew its stock of buildings and machinery.

The outlook is that it will take years to again organize the world's equipment for production and distribution, including finance, transportation by land and sea, and merchandizing, so that the demands of consumers may be met as before the war and prices be brought back to former level.

If this analysis be correct, then all classes of workers whose compensation is below the general level will continue to suffer a hardship. The inevitable tendency will be to drive the competent men in these poorly paid callings out into other better paid occupations. Delay in adjusting the pay of the engineer to compensate for the decreased value of the dollar, therefore, does serious harm not only to him but to the public.

#### Have Already Suffered Losses

It may well be argued further that the high scale of prices, or low dollar value, has continued now for fully three years. During that time, the engineer who has had but little increase in salary has suffered a heavy monetary loss through causes entirely beyond his control.

The present price level is not considered merely temporary by such of our government agencies as the Department of Labor and the Federal Reserve Board, or by such economists as Irving Fisher and J. S. Holden. Substantial relief from the high cost of living, therefore, cannot reasonably be expected through a decrease in prices; it must be met by increases in salaries.

From the above considerations, the committee feels justified in urging that a readjustment of compensation should be based on the assumption that the present sale of prices is to continue for an indefinite time.

It will be generally agreed that the salary of an engineer ought to be at least sufficient to enable him to live in the manner which his position and responsibility call for, and in addition to repay within a reasonable time the investment in time and money he has made in gaining the education and experience which is necessary for his work.

#### The Living Wage Principle

There is a wide general acceptance of the principle that the worker in any occupation should receive at least a reasonable living wage. By a "living wage" is meant the amount which will maintain in decency and comfort both the incumbent of the position and his dependents.

There are certain positions which are ordinarily occupied by young men and women who are starting on their life work, and who have not yet assumed family responsibilities. In so far as the incumbents of these positions fill them temporarily as a means of advancement to positions of greater compensation—in effect serving as apprentices—the living wage need not be based on a "family" standard.

When, however, any position is likely to be occupied more than temporarily by individuals of an age at which they should naturally assume family responsibilities, the minimum salary for the position should not be less than that necessary to maintain an average family in respectability.

#### Engineering Work Inadequately Paid

Unfortunately, there has been for fully a decade a tendency to lower the pay of engineers. The law of supply and demand has operated to reduce the pay of engineers in many branches of the profession far below the standards of decent living.

This has not benefited the public. On the contrary, by paying too low a rate for engineering service, the inevitable tendency has been to lower its quality. This has been especially marked in the case of engineers in federal, state and municipal service. Here the inertia which prevails in all public affairs has prevented the engineers from receiving more than a trifling part of the increase in pay, measured in dollars, that is required to offset the shrinkage in the dollar value.

The obvious result has been to drive out of the public service the best and ablest men, who can obtain better positions elsewhere, and to leave only the men who by reason of age or inferior ability cannot make such a change.

#### Waste and Danger

It cannot be too strongly emphasized that the public losses through cheap engineering service many times the amount it may seem to save through lower salaries. The professional engineer in a responsible position in designing, constructing or executive direction of important work should have initiative, sound judgment, broad knowledge and executive ability. Lack of these qualities often results in great loss of money, often by needlessly increasing the cost of work of which the public never knows. Safety of life and limb is also so frequently dependent on the skill and fidelity of the engineer that danger is incurred when the quality of engineering service is sacrificed through a false idea of economy. The investigation of the Quebec bridge disaster of 1907 showed that the engineer primarily responsible for the safety of its design was being paid at so niggardly a rate as to be unable to provide a sufficient and competent staff to properly supervise the work.

The movement, therefore, to give engineers just compensation for their services is not merely a movement for the benefit of the engineering profession. It is even more a movement to benefit the public by securing for it a high quality of engineering service.

This matter deserves emphasis here because where readjustment of salaries has taken place to compensate for the changed value of the dollar, it has been common to confine the increase to the lower-paid men, and to do little for