

which is accordingly vitally interested in having all prices, including the wage item in prices, proportionately reduced."

As for the relative merits of these opposite points of view, the National Metal Trades Association issued their bulletin of May 10th requesting all members to give careful consideration to this principle as well as the others covered in the Referendum, and then in the bulletin of May 17th went on record as opposed to this principle for the following reasons:

- (a) "Incomplete form in which the principle is stated.
- (b) There is no reference to production. Wages must first of all be based on production—we must produce before we can divide or exchange. Fundamentally, wages must be based on production, and if there is enough produced, then it may be possible to carry out the provisions recited in the principle.
- (c) As the principle reads, it seems based on the inclination of the employer or the employee, or upon possible legislative enactment without regard to where the money is coming from. The objects aimed at in this principle are very desirable provided they can be earned by individual production. To satisfy them otherwise, is a plain violation of natural laws."

It is not our purpose to go deeply into the economic phases and aspects of this problem, but merely to state that cost of living is the great cause of dissatisfaction throughout the world to-day. In Central and Eastern Europe it is the difficulty of getting food, regardless of the nominal price, but that is only another phase of the same problem, for high prices are partly at least a result of scarcity. European cables have monotonously reported strike after strike, the cause of which was cost of living or scarcity of goods.

It is said to be first of all a problem of scarcity, and there is no possible way of correcting scarcity except through greater production. Every interference with production, by strike or otherwise, obviously merely aggravates the trouble. When workmen go on a strike and cease producing goods, as a protest against the scarcity of goods, they are simply intensifying the condition they protest against. *Production is the only possible remedy. Every interference with production makes it more difficult for people of small means to get stable goods.*

The universal recognition of this fundamental fact will come only with an educational campaign, broad enough in its scope to reach the minds of all concerned with the main problem of production. There is no better place to begin such a campaign than in our own factories and among our own workmen, and it is plainly up to the management to take the initiative. This means a careful analysis of the wage-conditions, due regard being given to the current purchasing power of the dollar, and practical application of our findings to the solution of our own problem. We believe it fair and practical to "give more in order to get more," and in the recognition of the relative increase in living cost, as compared with the relative increase in wages in any given period, we are only laying the foundation for better conditions and better relations between men and management, which in turn will lead to the ultimate end of maximum production from any given set of conditions or facilities; and for the coincident results, such as maximum wages, minimum costs, low labor turn-over, equitable profits on capital invested, and mutual success and satisfaction to all concerned, viz; the worker, the manager, the owner, and the community of which these three are members.

If we do not recognize this factor in our wage relations, then we are bound to pay for it one way or another. Briefly, when an individual finds his income does not permit him to maintain the standards of living to which he has been accustomed (to say nothing of reaching the higher standards which human nature inherently desires as men advance in years), he soon gets into a frame of mind where he is torn between (a) lowering his standards of living by omitting certain articles of diet—making the old suit last another year, moving to cheaper quarters, or practicing other economies or substitutions—and (b) "hitting the boss for a raise."

It seems that the individual does not let himself be "torn" very far in either direction. He quickly acts in the direction of "b", and if the answer is not favorable or not promptly given, individual dissatisfaction soon arises, and like the proverbial bad apple in a barrel of otherwise good ones, he soon contaminates the others. The manager soon sees an element of unrest increasing; strikes may, and in fact, do follow as witnessed by the hundreds of them occurring of late, all of which have had as their motive, or at least a part of that motive, the "recognition in wages of the increasing cost of living." Why then should we overlook the obvious, or dodge the inevitable? Should

we not expect to meet the increasing cost of labor as we do the increasing cost of raw materials by providing in the selling price of our respective products a suitable margin for increased labor costs, which in the main will, and do result, more from increased cost of living than from any other cause?

In our work at the Holt Manufacturing Company we have attacked the problem from the foregoing angle, and in the following description of the work done, it is our effort to establish:

- (a) A fair and logical method which can be standardized and used as a basis for future action;
- (b) A true regard for the facts in the case;
- (c) A policy of dealing with our labor in such a manner that neither they nor we can take any action likely to disarrange the harmonious relations between management and men, without knowing before such action is started that it is detrimental to, if not "suicidal" for, the side that starts it.

## II. OUTLINE OF METHOD

1. Reference reading on the subject.
2. Determination of base year.
3. Determination of items entering into basic cost of living.
4. Preparation and submission of questionnaires to workmen.
5. Determination of size of average family.
6. Determination of kind and quantity consumption of articles entering into each item of basic cost of living for average family.
  - (a) Food.
  - (b) Clothing.
  - (c) Fuel and Light.
  - (d) Shelter.
7. Computation of cost of living from results of operation No. 6.
8. Tabulation of results of operation No. 7.
9. Computation of average wage rate for years considered from Holt pay roll records.
10. Tabulation of results of operation No. 9 according to average rate of wages and years.
11. Computation and charting of results of operations No. 9 and No. 10 on percentage basis using base year as zero point.

## III. DESCRIPTION OF WORK DONE

### A. GENERAL DATA

#### 1. DETERMINATION OF BASE YEAR

Determining the cost of living with the idea of using it as a basis for wage adjustments, involves the following principal steps:

- (1) Determining the relative increase or decrease in cost of living;
- (2) Determining the relative increase or decrease in wages;
- (3) Comparison of the trend of cost of living and trend of wages;
- (4) Adjustment of wages in instances where wages have not advanced as rapidly as the cost of living.

In the problem of determining the cost of living, the point that must be settled before steps may be taken towards the solution with any degree of certainty, is that of finding the base year. It can readily be seen that no progress can be made towards drawing a comparison of cost of living and wages, until a time can be found as a starting point, when the two factors were equitable.

The ideal date would be that time when the cost of living and wages were stabilized and equal. However, until the investigation has actually been made, and the two factors are known, the exact date on which they were equal cannot be determined. There are certain conditions, however, which would reflect such a time. Such a time would exist only—

- (1) When conditions are normal;
- (2) When wages are settled and employment regular;
- (3) When workmen are apparently satisfied as indicated by the absence of strikes and other disturbances;
- (4) When prices of food and other essential items of living are neither excessive nor fluctuating.

The above conditions must be considered first generally and then locally.

The Holt Manufacturing Company's plant in Peoria has been in operation only since 1910, and production was hardly begun until a year later; the further fact that factory records were incomplete until about the beginning of 1912, makes it impracticable for our purpose to attempt to analyze conditions prior to 1912.