

daily earnings for the two years, 1913 and 1919, respectively; i. e., there was a proportionately greater number of low-rated men in the 1919 average than in the 1913 average, and that has had its effect in reducing the average wage for 1919 although all classes of labor have as "classes" the same relative increase of 81.6 per cent over their 1913 average daily wages.

which it was given, were highly pleased with the company's attitude. Many of them expressed their personal satisfaction to their foremen, to their fellow workers, and to their friends in neighboring plants.

(2) It further established their faith in the watchfulness of the management over the conditions

TABLE SHOWING RELATIVE LIVING COSTS & WAGE RATES FOR 1913-15-17-18-19

ESSENTIAL ITEMS OF LIVING COST.	1913	1915	1917	1918	1919	DESCRIPTION	RELATIVE WEIGHT OF FACTORS IN THE DAILY COST OF LIVING AS FOUND IN HOLTS SURVEY	RELATIVE WEIGHTS ETC. AS FOUND IN FRANKLIN SURVEY
1 FOOD (DAILY COST)	1.9534	2.2538	3.1025	3.5164	3.8939	AVERAGE DAILY COST OF TYPICAL MENUS FOR THE FOUR-MID-SEASON PERIODS.	50.98 %	52.45 %
(PER CENT OF DAILY TOTAL)	48	50.1	54.3	51.8	52.7			
2 CLOTHING (DAILY COST)	1.205	1.328	1.65	2.125	2.396	AVERAGE DAILY COST FOR PRINCIPAL ARTICLES FOR TYPICAL FAMILY.	29.95 %	24.42 %
(PER CENT OF DAILY TOTAL)	29.6	29.5	28.9	31.3	31.6			
3 FUEL (DAILY COST)	0.353	0.364	0.363	0.483	0.463	AVERAGE DAILY COST FOR FUEL FOR TYPICAL FAMILY.	7.25 %	7.78 %
(PER CENT OF DAILY TOTAL)	8.7	8.1	6.4	7.1	6.3			
4 SHELTER (DAILY COST)	0.555	0.556	0.597	0.659	0.691	3/64 TIMES THE DAILY COST OF TAXES FOR SHELTER	11.83 %	15.35 %
RATES OF COST OF RENTING TO COST OF OWNING	3	3.04	3.08	3.33	3.37			
(PER CENT OF DAILY TOTAL)	13.7	12.4	10.5	9.7	9.4	DAILY LIVING COST OF THESE ESSENTIALS FOR TYPICAL FAMILY.	100 %	100 %
5 TOTALS (DAILY COST)	4.0664	4.5018	5.7125	6.7834	7.3839			
(PER CENT TOTAL)	100	100	100.1	99.9	100			
6 INCREASE OVER 1913 LIVING COST	USED AS BASE	0.4354	1.6461	2.7170	3.7175	DIRECT SUBTRACTION OF 1913 COST FOR YR. CONSIDERED		
7 PER CENT EXPRESSING RELATIVE INCREASE IN LIVING COST.	0	10.7	40.5	66.8	81.6	USING 1913 AS THE BASE YEAR.		
						BEFORE ADJUSTMENT OF 5-28-19.		AFTER ADJUSTMENT OF 5-28-19
8 AVER. DAILY WAGE-PROD. LAB.	2.44	2.53	3.03	3.27	4.00			4.37
9 " " " NON " "	2.53	2.49	3.07	3.35	4.31			4.46
10 " " " BOTH CLASSES	2.48	2.51	3.05	3.31	4.15			4.41
11 PER CENT INCREASE IN PRODUCTION LABOR.	0	3.6	24.2	34	63.9			79.1
12 PER CENT INCREASE IN NON PRODUCTION LABOR.	0	1.7	21.3	32.4	70.3			76.3
13 PER CENT INCREASE IN BOTH CLASSES.	0	2.75	22.7	33.2	67.1			77.7

FIGURE 3

In calculating the result of this voluntary action on the part of the management, we are satisfied that we have gained much desirable ground in our efforts to insure the stability of labor conditions in our own plant.

(1) The majority of our men when they received this raise, and knew the circumstances under

affecting the workers, and showed the workers that it was not necessary for them to resort to the prevalent methods of securing attention or recognition.

(3) It paved the way for further action on the part of the management in its work of installing scientific management principles to the operation of the business, and through this practical demonstra-

tion of the interpretation of Taylor's statement that the "principal object of management should be to secure the maximum prosperity for the employer, coupled with the maximum prosperity for each employee," our men have taken hold in a hearty manner and are assisting in many ways to achieve the ideals so admirably set forth in Taylor's *Principles of Scientific Management*.

Dr. Taylor says: "Scientific management has for its very foundation the firm conviction that the true interest of the two (employer and employee) are one and the same; that prosperity for the employer can not exist through a long term of years unless it is accompanied by prosperity for the employee, and vice versa, and that it is possible to give the worker what

There are, of course, many other factors in the wage problem, such as the recognition of the relative value of each worker.¹ This is evidenced by his output or rate of production; his spoilage, or degree of inaccuracy in his work; his attendance record; his versatility as indicated by the variety of major processes which he can do or operate without instruction; his years of continuous service; and further, his conduct and coöperation; and we are working now to establish recognition of these factors in the rating of each of our workers. These, however, must be reckoned with on the individualistic basis, and should be applied only after cost of living has been considered. It is absurd to expect workers to produce more and maintain a high quality of production, or even be content to stay with any company where the wages paid to him do not permit him to approach the standards which he sets for himself in regard to what he shall eat, what he shall wear, and how he shall live.

The cost of living has come to stay as a factor in the present day wage problem; and the sooner it is recognized, studied, and acted on, the sooner we will all see reduction in the present unrest and a return to more stable conditions.

VI. SUPPLEMENTARY

A. CHECKING WITH OTHER AUTHORITIES

1. U. S. DEPARTMENT OF LABOR

Figures of U. S. Department of Labor made public August 16, 1919, in an Associated Press Dispatch, show that the average general increase for the essential items of living costs, i. e., food, clothing, fuel, and shelter, advanced 80 per cent from December, 1914 to June, 1918. The dispatch referred to reads as follows:

"Cost of living goes up 80 per cent since December, 1914. Washington, Aug. 16—General increases of about 80 per cent in the cost of living during the period from December, 1914 to June, 1919, were shown in tables made public here today by the department of labor. The tables were based on investigations in various representative cities over the country. In every instance, greatest increases were recorded in the prices of clothing and house furnishings. Food advances were of third importance. Figures for the period December, 1917, to June, 1919, show general average increases of about 20 per cent.

Total increases in the two items of food and clothing, without considering other items in family budgets, showed enormous increases from December, 1914 to June, 1919; the advance in the case of Chicago being 157.07 per cent. The same items went up 125 per cent in Detroit, 125 per cent in Cleveland, 140 per cent in Buffalo, 103 per cent in Portland, Me., 137 per cent in Boston, 151 per cent in New York, 135 per cent in

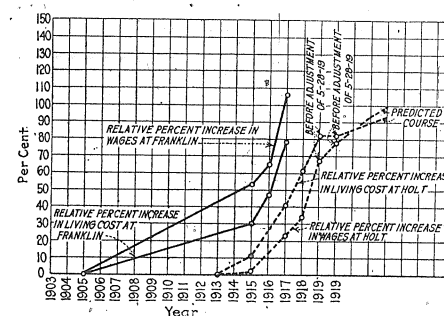


FIGURE 4

he most wants—high wages, and the employer what he wants—low labor cost for his manufacture."

The cost of this increase, as distributed over our annual production, will be relatively insignificant, for while this wage increase averaged .0364 cents per hour applied to each of 1184 men, or expressed otherwise, it was approximately 10 per cent increase in its net effect on our annual payroll, we can see wherein the reduction of wasted effort and the practice of other economies as the result of improved methods of management will more than compensate for this increase.

But this is not the end of it all! By standardizing our method, and by semi-annual or quarterly review of the changing prices, we will continue to make adjustments in recognition of the cost of living whenever conditions warrant such action. In other words, it will be treated as a perfectly proper and legitimate factor in our business affairs.

¹Cf. Babcock's *Taylor System in Franklin Management*.