

thorough and universal organization and discipline.

"Every large machine industry—which is the material productive source and basis of socialism—requires an absolute and strict unity of the will which directs the joint work of hundreds, thousands and tens of thousands of people. This necessity is obvious and has always been recognized . . . and we, the Communist Party (the Bolsheviks), which gives conscious expression to the aspiration of the exploited masses for emancipation, . . . should be in the front ranks of the weary masses which are seeking a way out and should lead them along the right road—the road of labor discipline—harmonizing the problem of holding meetings to discuss the conditions of work with the problem of absolute submission to the will of the Soviet director, dictator during work."

### SOME ENGLISH OBSERVATIONS ON SCIENTIFIC MANAGEMENT

A REPRINT FROM *GREAT BRITAIN AFTER THE WAR*, BY SIDNEY WEBB AND ARNOLD FREEMAN, OF SEC. D, "SCIENTIFIC MANAGEMENT," OF CH. VIII, "HOW SHALL WE REORGANIZE OUR MANUFACTURING PRODUCTION," BEING FACTS AND FIGURES. QUOTATIONS AND QUERIES, SUGGESTIONS AND FORECASTS, CLASSIFIED TO HELP INDIVIDUAL INQUIRERS AND STUDY CIRCLES.

OF later years a new panacea has been boomed, especially in the United States, entitled "Scientific Management." "So far the tremendous significance of 'scientific management' has not been fully recognised. Properly understood, it is the complement to the Industrial Revolution, which, by the more extensive use of machinery, etc., increased the efficiency of capital. The present movement aims at a similar increase in the efficiency of labour as an agent of production. The present movement aims at a similar increase in the efficiency of labour as an agent of production. The new revolution in industry has as yet merely begun, because employers, in spite of the motive of self-interest, are conservative; but it will receive an enormous impetus from the conditions arising out of the war." (Arthur Greenwood; "War and Democracy.")

London: George Allen and Unwin, Limited, Ruskin House, 40 Museum St., W. C.

"The 'meeting holding' is ridiculed and more often wrathfully hissed at. . . . But without the 'meeting holding' the oppressed masses could never pass from the discipline forced by the exploiters to conscious and voluntary discipline. 'Meeting holding' is the real democratism of the toilers, their straightening out, their awakening to a new life, their first steps on the field which they themselves have cleared of reptiles, and which they want to learn to put in order themselves, in their own way, in accordance with the principles of their, Soviet, rule."

"Our aim is to attract every member of the *poor* classes to practical participation in the management, and the different steps leading towards this end (the more diverse the better) should be carefully registered, studied, standardized, verified on broader experience and legalized."

"That these principles are certain to come into general use practically throughout the civilised world, sooner or later, the writer is profoundly convinced, and the sooner they come, the better for all people." (F. W. Taylor: "Principles of Scientific Management.")

#### WHAT IS "SCIENTIFIC MANAGEMENT"?

"Fundamentally, Scientific Management consists (1) of an improved system of piecework remuneration, with rates 'scientifically' fixed upon a minute and prolonged 'time study' of each operation, and 'therefore' incapable of alteration to the detriment of the workmen whom it may have tempted to enlarged output; (2) of the utmost possible standardisation of tools, equipment, operations and products, so as to permit of maximum production; (3) of elaborate 'motion study' so as to discover how exactly the workman should use his muscular force, with what intervals, and for what length of time, in order to produce the greatest result; (4) of 'routing and scheduling,' and directing by 'instruction cards,' not only every movement of material, tools, components and product within the factory walls, but also every movement of every workman to the same end; and (5) of the adoption of 'functional foremanship,' replacing the old-time single foreman by half-a-dozen specialized directors and instructors—the 'gang boss,' the

'speed boss,' the 'repair boss,' the 'route clerk,' the 'instruction card clerk,' the 'time and cost clerk,' the 'shop disciplinarian,' and the general inspector." ("The New Statesman," June 17, 1916.)

#### 1. The Case for "Scientific Management."

(Our quotations are in the main from Dr. F. W. Taylor's "Shop Management" and "Principles of Scientific Management.")

The advocates of "Scientific Management" declare that it is possible by scientific investigation to find out the one "scientific" way of doing each job, the right sort of man for each kind of work, and the most effective methods of coöperation between managers and men. It is claimed that as a result of "Scientific Management" production will be largely increased, shareholders will secure larger dividends; employees can be paid greatly increased wages and allowed shorter hours, and will enjoy the satisfaction of "doing a good day's work"; and that the public will get "more commodities and better commodities at a reduced 'real cost of production'" (e.g., your pig-iron handler loads 47½ tons a day instead of 12½; your laborer shovels 59 tons instead of 16; your bricklayer lays 350 bricks an hour instead of 120, and in general the output per man is at least doubled; and cost of production is, of course, greatly reduced). Dr. Taylor further claims that "Scientific Management" has solved the "Labor problem." "At least 50,000 workmen in the United States are now (1911) employed under this system. . . . In place of the suspicious watchfulness and the more or less open warfare which characterizes the ordinary types of management there is universally friendly coöperation between the management and the men."

In justice to this new method of production, we should note: (a) That it is not merely a "capitalist dodge," but claims to be a system basing itself on exact science (e.g., "What constitutes a fair day's work will be a question for scientific investigation instead of a subject to be bargained and haggled over"); (b) that if employers, instead of introducing these methods chivalrously, try to make of them a mere profit-making device they are not introducing "Scientific Management," but a perversion of it, which, as experience in America has amply proved, can only end in failure. Mr. W. T. Layton goes so far as to say that "Where this system is worked with proper care for the consideration of the worker's interests, it would seem to be wholly good." ("Capital and Labour," p. 22); (c) that it is illogical to press the ar-

gument that "Scientific Management" will make the worker an automaton. Is he not an automaton already? Does not the evolution of our industrial system inevitably involve an increase of automatic labor? Is the worker more of an automaton when he is working rapidly and efficiently than when he is working slowly and clumsily?

#### 2. The Case Against "Scientific Management."

Examination shows that the claims made for "Scientific Management" are not borne out by inspection of the establishments where it has been introduced—(See Hoxie's "Scientific Management and Labour")—perhaps because American employers, like those here, have seldom brains enough to carry it out as its inventors designed! Its good points are the insistence on efficient organization of the factory, use of the best machinery, prevention of any loss of time, and prompt application of labor-saving appliances. All this means only more intelligence in our employers, together with production on the most economical scale with larger factories and regularizing demand. It emphasizes the importance of (a) discovering, and (b) applying universally the best way of doing each job, instead of letting each man blunder for himself. It may teach our employers a great deal as to the economy of (a) short and regular hours; (b) intervals for rest and refreshment; (c) ascertaining precisely the most suitable tools for each job and each man (much more can be shovelled if the spade is exactly the right shape for the material and the right length for the man who wields it). All these are lessons for the manager.

But it fails altogether as to the share of the wage-earner. It is probably right in insisting on the necessity for Piecework Wages; but it refuses (a) to let the Standard Rate be settled by Collective Bargaining or law; (b) to make the Piecework Scale, once fixed, not subject to reduction at the will of the employer alone. It affords, therefore, no security against the rates being "cut" (as they have repeatedly been). Nor does "Scientific Management" throw any light at all on how the product should be shared (how high the Standard Rate should be). It is not in the least scientific from the standpoint of the economist; by science it means only exact measurement of the workers' effort by the stop-watch!

Scientific Management is opposed to increased Democracy in Industry, in the sense of the manual workers having any participation in the management. It does not seek to make the part of the manual worker