

- Labor Turnover*—By George J. Eberle. The American Economic Review, pp. 79-82, March, 1919.
- Methods of Reducing the Labor Turnover*—By Boyd Fisher. Proceedings of Employment Managers' Conference, Minneapolis, January 19 and 20, 1916. Published in Bulletin of the U. S. Bureau of Labor Statistics, whole No. 196, May, 1916.
- The New Apprenticeship as a Factor in Reducing Labor Turnover*—By Charles A. Prosser. Proceedings of Employment Managers' Conference, Minneapolis, January 19 and 20, 1916. Published in Bulletin of the U. S. Bureau of Labor Statistics, whole No. 196, May, 1916.
- Employment Managers Solving a Business Problem*—By Dr. Ernest Fox Nichols. The Nation's Business, pp. 14, 15 and 17, March, 1916.
- Methods of Reducing the Labor Turnover*—By Henry S. Dennison, of the Dennison Manufacturing Co. Bulletin of the United States Bureau of Labor Statistics, whole No. 202, pp. 56, 57, 58, 59, September, 1916.
- The Cost of Labor Turnover*—By Magnus W. Alexander, of the General Electric Co., West Lynn, Mass. Bulletin of the United States Bureau of Labor Statistics, whole No. 227, pp. 13-28, October, 1917. Also, same Bulletin, *How to Reduce Labor Turnover*. By Boyd Fisher, Vice President, Detroit Executives' Club, pp. 29-47. Also, same Bulletin, *The Tabulating of Labor Turnover*. By E. H. Fish, Employment Manager, Norton Co., Worcester, Mass.; Chairman Committee on Labor Turnover of the Employment Managers' Association of Boston, pp. 50-55. Also, same Bulletin, *Determining Cost of Turnover of Labor*. By Boyd Fisher, Vice-President, Detroit Executives' Club, pp. 60-66. Also, same Bulletin, *An Actual Account of What we have Done to Reduce our Labor Turnover*. By J. M. Williams, Secretary, Fayette R. Plumb (inc.); President, Philadelphia Association for the Discussion of Employment Problems, pp. 173-190.
- Handbook on Employment Management in the Shipyard*. Special Bulletin, *Labor Loss*, Employment Management Branch, Industrial Relations Division, United States Shipping Board Emergency Fleet Corporation, Philadelphia, 1918.
- Hiring and Firing*—By Lee K. Frankel, Ph. D., Supervisor, Welfare Division, with the cooperation of Laura S. Seymour. *Suggestions for Employers*, Industrial Service Bureau Bulletin No. 1. Metropolitan Life Insurance Company, New York, 1918.
- Absenteeism*—Reports from plants in different localities. United States Department of Labor, Information and Education Service, Washington, 1918.
- Reducing Labor Turnover in our Shops*—By Fred H. Colvin. American Machinist, pp. 27, 28, 29, January 3, 1918.
- The Employment Manager and the Reduction of Labor Turnover*—By Thomas T. Read, E. M., Ph. D., New York, N. Y., Technical Department, New Jersey Zinc Co., Bulletin No. 130 (October, 1917), 1833. Transac-
- tions of the American Institute of Mining Engineers (subject to Revision), (New York Meeting, February, 1918).
- Standardization of the Causes of Leaving Jobs*—By J. D. Hackett. Industrial Management, pp. 233-234, March, 1918.
- Labor Factors in Our Shipping Program—How to Procure and Maintain Shipyard Workers and Hasten the Building of our Emergency Fleet*. By Roy Willmarth Kelly, Industrial Management, pp. 210, 217, March, 1918.
- Methods of Arriving at Labor Turnover*—By J. M. Van-Harlingen and T. J. Dwyer. Employment and Labor Maintenance, pp. 319, 320, April, 1918.
- How to Reduce the Turnover of Labor*—Methods successfully applied at an Ohio Steel Works—Get the Right Man for the Job and Advance the Fit Men. By Ernest C. Gould. The Iron Age, pp. 874-5, April 4, 1918.
- The Problem of Labor Turnover*—By M. C. Hobart. American Machinist, Vol. 48, No. 20, pp. 821-822, May 16, 1918. Confidential Report Series, Report No. 1—*An Initial Survey of the Problem of Labor Turnover*. Issued by the National Association of Corporation Schools, compiled in the Office of the Executive Secretary with the Cooperation of the Committee on Employment and Dr. Paul Kreuzpointner, Investigator. Available to Class "A" Members only, May, 1918.
- Keeping Track of Labor Turnover*—By E. H. Fish. In Plants where Semi-Skilled Men Must Be Trained to Meet Labor Needs, a Careful Compilation and Analysis of Turnover Records is Worth Many Times the Expense Involved. Employment and Labor Maintenance, pp. 445, 446, September 12, 1918.
- Computing Labor Turnover—A Questionnaire*. Industrial Management, pp. 239-246, September, 1918.
- Diagnosing Labor Ills*—By William Lamkie. Employment and Labor Maintenance, p. 502, June, 1918.
- Why Men Leave Their Jobs*—By Henry P. Dutton. Employment and Labor Maintenance, pp. 147, 148, August, 1918.
- Absentee Record Forms*—U. S. Department of Labor, Working Conditions Service, Grant Hamilton, Director General, Division of Labor Administration. Circular No. 4, March 17, 1919.
- Proper Systems Reduce Labor Turnover*—Wide variation in Turnover Percentages Due to Factory Methods—Many Plants have over 500 Per Cent. Yearly. Automotive Industries, pp. 619-20-21 and 667, March 20, 1919.
- Labor Turnover and Industrial Training*—Training Bulletin No. 6. U. S. Department of Labor, United States Training Service, Washington, D. C., 1919.
- Labor Turnover in Cincinnati*—By Emil Frankel. Monthly Labor Review, March, 1919, U. S. Department of Labor, Bureau of Labor Statistics, Washington, D. C.
- Some Reasons for Labor Turnover*—By Harry W. Kimball. Industrial Management, pp. 324-6, April, 1919.

(Continued on next page.)

THE workman "is not a mere machine to be kept well oiled with good wages, well tended by not being worked for too long hours, and kept in good going repair by welfare systems, canteens, and good house conditions. He is a complex human being, with all the ambitions, ideals, and mental outlook possessed by the capitalists' in an equal and sometimes superior degree." (Lord Leverhulme, *The Six-Hour Day*, p. 118).

"WE are agreed that the elements in production and distribution are Capital and Labour—I prefer myself to make it a three-legged stool by including Management as apart from Capital and Labour. But sometimes Management is part of the activities of Capital, and at other times must be included with Labour." (Lord Leverhulme, *The Six-Hour Day*, p. 118).

II. METHODS OF COMPUTING LABOR TURNOVER¹

By PAUL H. DOUGLAS²

THE recent discovery of the extent and costs of labor turnover has brought with it varying methods of computation. In order that a standard practice might be adopted, the National Association of Employment Managers at their annual meeting in May, 1918, adopted the following method³ which has since been approved by the United States Bureau of Labor Statistics as the basis for its investigations⁴. "To compute the percentage of labor turnover for any period, find the total separations for the period considered and divide by the average of the number actually working each day through the period."

Before criticising this method it is necessary to determine just what is meant by "turnover." Labor turnover is simply the number of men hired by a given business unit to take the places of men who have left. Turnover in this sense is exactly similar to the use of the term by any retail merchant to indicate the disposal of certain units and their replacement by other units.⁵ Turnover as such does not begin until replacement occurs.

The percentage of labor turnover is the proportion which these newly hired men who actually replace others form of the average force employed in a given period of time. It indicates the percentage of men which it has been necessary to hire in order to maintain a constant labor force. In itself it indicates nothing as to whether the force itself is being increased or decreased.

In the light of this definition (which I believe would be approved by every student of the problem), the

method of computation adopted by the Bureau of Labor Statistics is defective in the following ways:

1. It uses separations rather than replacements as the basis of turnover. The definition of turnover adopted by the Employment Managers Association is indeed as follows:

"Labor turnover for any period consists of the number of separations from service during that period. Separations include all quits, discharges, and lay-offs for any reason whatsoever."

It is true that in a period in which the working force of the given plant is being increased, separations do roughly constitute the amount of turnover which takes place. Men are being hired not only to increase the net working force, but to take the place of those who have left. It is only in the latter sense that they constitute replacements and enter into turnover.

Separations in this case, therefore, do approximately measure replacements. To be absolutely accurate, however, one should subtract the vacated positions which have not been filled from the total separations to secure the number of actual replacements. Such a deduction, however, although ideally necessary may not be practically possible in many instances due to insufficient payroll data.

But the case is different if the labor force is decreasing. Suppose that a given plant decreases its force in a given period of time from 1,000 to 900 and hires no new men. There are 100 separations but no new men have entered the plant. Turnover as such has not occurred. Yet the method adopted by the Bureau of Labor Statistics would show a labor turnover of 100 men. Plainly, therefore, in this case separations do not measure replacements. The number of men newly hired do constitute replacements. It is not correct, moreover, in the case of a declining labor force to deduct the positions vacated but not replaced from the number newly hired since those newly hired have replaced some workers even if they have not replaced the particular ones whose positions are vacated.

The proper method, therefore, of determining replacements should take:

- a. The number of separations actually replaced as the base in the case of an increasing force.

¹Reprinted by permission from *The American Economic Review*, Vol. IX, No. 2, June, 1919, pp. 402-405.

²Emergency Fleet Corporation, Philadelphia, Pa.

³For a full statement of this report see *Monthly Review*, United States Bureau of Labor Statistics, June, 1918, pp. 172-173. That this method did not introduce uniformity may be seen from the symposium on labor turnover in *Industrial Management*, September, 1918, pp. 239-246 and November, pp. 425-26, in which from five to six different methods were advanced, practically all of which, in the opinion of the author, are wrong.

⁴See "Labor turnover in Cleveland and Detroit," by Boris Emmett, *Monthly Review*, Jan., 1919, pp. 11-30; "Labor turnover in the San Francisco Bay region," by Paul F. Brinsden, *Monthly Review*, Feb., 1919, pp. 45-62.

⁵With the exception, of course, that a high labor turnover means an economic loss to the employer, while a high turnover of goods means an economic gain to the merchant.