

table, the china, the glass, the ice in the water, and even the water itself. It was a continuous industry which supplied the gas for cooking, the electricity for lighting, the plaster for the walls, paper to cover them, perhaps the very colors in the paper. We can think of no other industry which serves so many purposes in almost every interior. Note the place which the products of the continuous industries occupy in the more general framework of a city. Consider steel, concrete, brick, glass, terra cotta, cement, paving brick, steel rails. Consider such services as those of police and fire protection; watchman service; electricity, communication; and transportation. To secure data with respect to the shift in this wide range of industries, Dr. Drury traveled from New York to Pueblo, from Atlanta to Buffalo, visiting more than forty-four cities and industrial centers. A complete census was impossible, but so far as he could determine, there are "between 500,000 and 1,000,000 American wage-earners on shift work. Of these, probably 300,000 or not far from that number, were, at the close of the last period of normal industrial activity, still working twelve hours." In their analysis and summary of Dr. Drury's evidence, the committee of engineers state that "on the part of an overwhelming majority of the plants which have changed from two- to three-shift operation no technical difficulties have been encountered. There is usually no change in the length of the shift. The effect of the eight-hour as compared with the twelve-hour shift operation on the quantity and quality of production has been satisfactory where good management and cooperation of labor have been secured. In practically every major continuous industry there are plants which have increased the quantity of production per man as much as twenty-five per cent. In a few exceptional cases the increase has been much higher. Evidence shows also an improvement in quality of production following the reduction in the length of shifts."

What Dr. Drury found with respect to the twelve-hour shift in continuous industries in general, Mr. Stoughton found in steel. There are no technical or valid economic reasons why this survival of barbarism should persist. He quotes the management of the Ford Motor Company to the effect that although their blast furnace operates on the basis of eight hours per day and forty-eight hours per week per man, and labor is paid seventy-five cents and upwards per hour, as compared with twenty-seven and thirty cents per hour and upwards in other plants he visited, the Ford Company make pig iron cheaper than they can buy it. He cites the testimony of Mayor Robert A. Bull, twice President of the American Foundrymen's Association, to the effect that the savings in the cost of operation, quality of product and uniformity of operation and output, fully compensate for the expense of working the continuous operation laborers on three instead of two shifts. He gives instances where the change from two to three shifts actually resulted in lower labor costs. The conclusion of Mr. Stoughton's detailed and workmanlike examination of all the questions involved in the change from twelve hours to eight is emphatically in favor of the shorter work day.

Why then is it not generally adopted? Are the workers opposed to it? Yes, in those cases where wages are low and the reduction in hours is accompanied by a further reduction in wages. Dr. Drury points out that the change to the shorter shift has come most rapidly where the workers have organized. Mr. Stoughton, stressing the importance of labor's cooperation, says that "if there is entirely frank discussion, in advance, of the change; if the past record of the management is such as to inspire the men with confidence in their sincerity; if the men learn that they may themselves speak freely without exposing themselves to being discriminated against . . . all this not only facilitates the change, but it helps over the rough places, reduces labor turnover, and makes the daily work more attractive to all." It is not because of labor opposition that the three-shift system is not adopted. It is because the U. S. Steel Corporation, which dominates the steel industry, has set its face like flint against the change. In this matter of the humane and

civilized dealing with labor, as in the matter of technical advances, the steel industry lags. "The American iron and steel industry is at a disadvantage," writes Mr. Stoughton, "in answering some of the technical questions involved in the proposal for shorter shifts, because it never has had a well-developed research department upon which executives could predicated changes in practice. Thus, most of the important technical advances of great magnitude, even though invented in America, have had to be tested and exploited in foreign countries before they were generally adopted in America." It is this inertia, this scientific backwardness of the dominant unit in America alone among civilized nations of an institution which is not only without technical or economic justification, but which is also, as the engineers state, contrary to twentieth century ideas as to the proper conduct of industry.

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Harvard Business Review. Edited under the direction of the Faculty of the Graduate School of Business Administration of Harvard University, Cambridge, Mass. Quarterly.

The University Journal of Business. Published by the Students of the School of Commerce and Administration of the University of Chicago, Chicago. Monthly.

These two periodicals are issued under the supervision of the staffs of schools of business administration for the promotion of the interest of the students and faculties of the schools and the publishing of information of current value on business subjects. *The University Journal of Business* is published by the students of the School of Commerce and Administration of the University of Chicago in co-operation with the students of the schools of business of six other middle western universities. *The Harvard Business Review* is published under the direction of the Faculty of the Graduate School of Business Administration of Harvard University. The latter seeks to interest primarily the business man; the former seeks to interest primarily the students of business administration in American universities.

Both periodicals, of necessity, largely rely on contributions from faculty members of the schools which are publishing the magazines, but *The University Journal of Business*, in addition, expects to supply a large number of its manuscripts from the ranks of students of the colleges. This latter publication has as its editorial and business staff students of the universities, whereas the *Harvard Business Review* has as its editorial staff members of the faculty of the institution. Both periodicals present short articles which indicate the newest developments and thought in the field of applied economics, including finance, sales and business management.

These publications seem to afford an excellent opportunity for the presentation of the latest collegiate thought on business subjects and should be particularly valuable in that they will be able to present continuing estimates of future business conditions. *The University Journal of Business* should be particularly valuable inasmuch as it will afford an opportunity for the presentation of the best student work from seven middle western universities. *The Harvard Business Review* should be particularly valuable because it will publish the current experience of the faculty of one of America's leading business schools.

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