

THE TIME-CLOCK

BY JONATHAN THAYER LINCOLN

LABOR is a commodity just as is cotton, coal, or any other material making up the cost of production, but there is added to it the human element, and out of this fact arises the labor problem. This problem includes every question at issue between employer and employee, whether it concerns wages, hours of labor, or sanitary conditions; and, rightly analyzed, is a matter of bargain between the man who buys and the man who sells labor. To understand the labor problem, we must first know something of the factory system which has contributed so largely to our present social unrest.

In the beginning the factory was the creation, not of capital, but of labor; not of the employer, but of the workingman. It was a natural growth out of the home system of manufacture, under which raw material, bought either by the workman himself or given out to him by a second party, was manufactured into the finished product in the home. The transition from the home to the factory system may be studied at first hand in some countries to-day. In Japan, for instance, practically all the spinning of yarn is done in factories, while the larger part of the cloth is made on hand-looms in the homes of the weavers. The first spinning mill was undoubtedly built by some thrifty spinner who, obtaining more work than he could well do with his own hands, hired a few less capable workmen to assist him; afterwards he hired others, until the rooms of his house were too small to contain them and the machinery; then he built a shed devoted to his business, and this shed became the first cotton factory of Japan. Our own industrial development has been similar, and the conditions which we may observe

to-day in Japan once existed in America.

In the early days of the nineteenth century a machinist's apprentice became a journeyman and received from his master, as was the custom in those days, a new suit of clothes and fifty dollars in money. He left the town in which he lived and sought employment in a neighboring village, where several cotton mills had been built. The mill in which he found work would be of interest to one familiar with the great plants of to-day; the owners, the superintendent, the workers, were all New England folk, among whom there was no social distinction. Tradition says that the weavers sat in rocking-chairs beside the newly-invented power-looms, and that some brought knitting to the mill to occupy their spare time, while others cultivated flowers in window-boxes; but rocking-chairs or no, employer and employee began work at the same hour each morning, returned home at the same hour in the evening, and after they had "washed up" and the supper dishes were put away, spent their evenings together.

The power-loom seemed a marvel of ingenuity to the young machinist; he watched the machines turning out their useful products, and repaired them when they failed to work. Then the thought occurred to him that some day he might build looms and sell them to the cotton factories. He became acquainted with another machinist, who had already made a start in this direction, and the two young men formed a partnership, built a small shop, and commenced business. They associated with them a few other machinists, and from bell-hour to bell-hour, employers and employees worked side by side at the bench and lathe. The

owners of the shop and the men who worked with them were friends and neighbors, who went to church and singing-school together, and in social life met as equals. In the shop disputes would arise concerning the hours of labor and the amount of work which might reasonably be expected from each man in his twelve hours of daily toil, and these questions were quarreled out in the evening.

As years went by and the business grew larger, the employers ceased to work at the bench and lathe. One became superintendent, and devoted his time to overseeing the work of the men; the other became treasurer, and attended to financial affairs, keeping the books, buying the iron, selling the machinery, and other matters incident to the general management; but this change in occupation did not alter the close personal relation between them and the men in their employ.

The shop produced a great variety of work: not only power-looms, but steam-engines, turbine water-wheels, machine-tools, shafting, hangers, pulleys, and other appliances for the transmission of power, hydraulic presses, and, as is impressively stated in an advertisement of the day, "machinery generally." Twenty men working together in the little shop were able to produce this vast array of mechanical devices; but each of these twenty men was a machinist who had served an apprenticeship of from five to seven years. He knew each machine he operated, and could make the machine with his own hands; the age of specialization — division of labor, it is called in the factory system — lay in the future.

The machinist's son became associated with him in business. He did not learn the trade, for by this time ability in finance was as essential to the success of the concern as mechanical skill; and the conditions which the son faced were more complex than the conditions the father knew, for the little machine shop had become a modern manufacturing establishment. The treasurer sat at his desk in the office; the superintendent had his desk,

and under him were foremen who were responsible for the several departments of the plant. The traditions of an older day were still vital, a close personal relation existed between employer and employee, but the organization was more complex and the possibility of misunderstanding proportionately increased. Moreover, industrial conditions were changing: competition was becoming keen, the era of small profits and large volume of business was commencing.

In the later days of the century a grandson of the machinist sat at the treasurer's desk. His task would have been unimaginable to the machinist; there were letters to be dictated to a stenographer, not written out in a bold, round hand; there were cost-sheets to be examined — they had not been so particular as to the costs in the old days; the market reports had to be studied — there were no market reports in the days of the machinist. The grandfather once sold a few water-wheels in the southern states and made two tedious journeys, much of the way by stage; the grandson received daily inquiries for machinery from the South by mail and telegraph, and sometimes closed the bargain by telephone. Steam and electricity had annihilated distance; the old order had passed, giving place to the new; division of labor became a necessity.

Inside the factory, conditions were quite as changed as in the office. One man bored holes, another turned studs, each had his little share to contribute to the finished whole. One hundred men, each making a whole machine, might in a year build one hundred small steam-engines, but one man could bore many hundred cylinders, and another could turn many hundred cranks, and thus under the changed conditions a hundred engines could be built in the time formerly required to build one. The machinist gave seven years of his life to learning his trade; he was taught how to run a lathe, standing before it sometimes fourteen hours a day; hand and eye were

trained by countless repetitions of the same process, until the man and the machine became one; meanwhile he had learned to sharpen tools. In a modern shop, tool-sharpening is specialized: day in and day out men point bits of steel; but after a time the apprentice knew this trade as well as the best tool-sharpener. Specialization has increased the efficiency of the shop as an organization, but it has decreased the efficiency of the individual worker as a thinking creature. Under the factory system, the individuality of the worker is lost in the great organization of which he is a part; officially he has ceased to have a name.

Much of our industrial discontent arises from the time-clock, or rather from the thought for which the time-clock stands. Wherever the time-clock is in use, each worker is known by a number. He pushes a button on the clock-door when he commences or quits work, setting the mechanism in motion: the gear revolves, a little lever falls and prints, in blue or red ink, the information that "207—6.59" or "207—7.01;" which means that Christopher Cassidy, a citizen of the United States of America, and in the employ of the Union Steel Company, came to the factory that day at one minute before seven, or else that he was one minute late, for which offense the time-keeper is to dock his pay a quarter of an hour.

Now, while it is quite right to fine a man for being a minute late in getting to his work,—if it has become a fixed habit,—it is equally wrong to rob him of his name if the crime may be avoided. To condemn the use of the time-clock would be absurd, for this ingenious instrument has become a necessity in thousands of factories where great numbers of workmen are employed; and no toiler can complain that the record it prints is incorrect, for when he presses the button he becomes his own time-keeper; yet the relation between the employer and the employee which the time-clock symbolizes is wholly bad. This relation is graphically set forth in a circular I once read advertising these

machines. "Do you employ one hundred hands?" it asked. "Do you realize what the loss of five minutes a day by each man means to you in loss of profits in one year? Suppose your average wage is two dollars a day; fifteen hundred hours at twenty cents an hour. Three hundred dollars! Think of it! And if you employ a thousand hands, your loss will be three thousand dollars. Can you afford this?" At first it would seem that the only answer to the question must come in the form of an order for clocks, but upon reflection the employers may reply, "Possibly I can and possibly I cannot. If I consider each man in my employ as a machine which the overseer sets in motion each morning, as the operative starts his loom, by pressing the shipper-handle, I cannot afford it. But if I look upon the worker as a man capable of infinite growth, then the three hundred or three thousand dollars may be as nothing in my cost of production. The day does not begin at any particular moment; a man may press the button on the time-clock promptly at seven every morning in the year, yet the same man may cheat me out of three hundred hours every twelve months."

The amount of work which each man accomplishes during the day depends upon other factors than the mere hours of labor, and the most important of these factors is the spirit in which the work is done. The spirit of the day's work will depend upon the personal relation which exists between the office and the workshop. If the employer is known to be interested in the welfare of his men, they will be, more truly than otherwise, his retainers, more zealous for the prosperity of his business; but if his relation to them is that of a taskmaster, they will be his slaves merely, and quite capable of any treachery. The effort of the employer who would gain the loyal service of his men must be to preserve in every possible way the individuality of the employee, to emphasize his manhood, and thus to increase his self-respect.

A friend of mine employs several thou-

sand hands in his factories; he is a man who knows from his own experience the meaning of the day's toil, for he worked at the trade in his youth and belongs to that class of "risen workmen" that Shadwell calls hard taskmasters; he, however, is a most humane employer. Understanding from experience "time-clock" conditions, and knowing that the industrial value of a man is increased with the belief in the importance of his own work, this employer has adopted every means to develop in his employees a sense of their individuality. This is illustrated by the system of fines which is enforced in each department of his works. The man who in a week makes the most imperfect parts, loses a small percentage of his pay, and his loss goes as a prize to the man who makes the least bad work. In the main office a chained book is hung, and in it are recorded the mistakes made by the clerks; no penalty is exacted for these mistakes, but each clerk, by reading the record, may profit by the errors of the others; and it has come to be considered a fearful disgrace for one to have his name entered in the book, so vitally does the plan appeal to the individuality of the employee.

This employer also knows that the care of the body is the first step toward developing a sense of self-respect, and he has provided proper bathing facilities for his workers, means for warming the dinners brought to the factory in a thousand dinner-pails, a playground for field sports on Saturday afternoons, and he has spent many thousand dollars in improving the sanitary conditions of his plants; but more than this, he is easily accessible to his men. His private office is carefully guarded, for his time is too valuable to be wantonly wasted. I have seen a dozen men sitting outside his door waiting their turn to be received: trusted representatives of great selling houses, buyers of goods seeking to establish business relations with his firm, perhaps a wealthy philanthropist collecting funds for private charity, and all men of no little

consequence as viewed by the laborer who diffidently enters the office; but this same laborer has only to write his name on a piece of paper and the busy man promptly receives him — so firmly does he cling to that spirit of equality which characterized, in a marked degree, the early days of the factory system.

Side by side with the industrial development of the factory system, there went a "social" development, using the word in its narrow meaning as referring to that body of the elect which worships at the shrine of Fashion. Even to-day the stratification of "Society" is one of the most interesting phenomena to the student of social conditions in a manufacturing community. The factory system is indeed, as Arthur Shadwell has said, "the history of workingmen rising to be employers;" and in the process, by the acquisition of wealth and a degree of leisure, there comes a change in the manner of living. On the surface it is a small matter — the bean-supper becomes a dinner party; the public ball, a dancing party; and the morning bath supersedes the Saturday night tubbing; but to the student of social conditions all this has a real significance.

The machinist who founded the corporation, the development of which we have just traced, lived simply, as did the men in his employ; his wife was cook, parlor-maid, and seamstress, and it was owing to her frugality, more than to any other factor, that he was able to create an establishment which to-day furnishes employment to several hundred machinists, each living under social conditions similar to those he knew. His son never wore overalls and jumper, never worked at the bench and lathe, and he was given an education which made his father's associates shake their heads and prophesy certain failure in life for the boy; so great was their distrust of "book-learning." The grandson of the machinist went to college, and his business failure was predicted. It would be difficult for one unfamiliar with the conditions to realize the con-

tempt with which the old-time machinist, trained under the apprentice system, looks upon a young man educated in a technical school, or how firm is his conviction that a college-bred man must fail hopelessly if he enters business. Machinists of this class may be found in any large shop; they are the survivors from an older day before imagination came to be the first essential to commercial success, and from the human links which unite the age of steam to the days of the stage-coach; in their reminiscences we may trace with authority the changes which have taken place in the relation of employer and employee with the growth of the factory system.

The social world in which the grandson lived had, like the industrial conditions, become complicated. If the machinist by some unlucky chance put a steel knife to his mouth, he might still be invited to the next bean-supper; but should the grandson fail to call either in person or by pasteboard on his hostess of two weeks before, his name might be dropped from her list. This social aspect had its influence in creating the labor problem, for the personal touch between employer and employee necessarily became weaker and weaker with the progress of social development. Moreover, an aristocracy of wealth arose, in which the heartless condescension of an aristocracy of blood was emphasized by a sort of *reductio ad absurdum*. It is no less a sin to look down upon a man because his grandfather did not live on Beacon Hill than to despise him because he earns his daily bread by the sweat of his brow, but the latter sin is the more obvious.

I sometimes look out of my window when the bell rings from the school-house across the street. The children who come up the hill are ragged, some of them, while some who come in the opposite direction are brought in fine carriages driven by liveried coachmen. On the surface they belong to different classes, yet their fathers are engaged in the same business — the making of cotton cloth.

It is true that their fathers go in different social "sets," yet in the mill the labor of each is essential to the welfare of the industry. The children, however, are of the same "set," and, in the democracy of the school-yard, mingle in their play, for as yet they have not learned the tremendous significance of clothes. The father of one of the children, who came to school in a motor-car, was offered a position of trust in a cotton factory, and his little daughter, when she heard the news, cried because she feared she might be asked to carry his dinner to him in a pail. When the girl is grown to be a woman she may laugh at this incident, yet it is full of significance. There are many families in every manufacturing town which conform to the democracy of the school-yard — men and women who, in their attitude toward the toilers, foretell that better understanding between the man who buys and the man who sells labor, which is the solution of the present problem; because they have not worked with their hands, they are better able to view the complex life of the community in true perspective; but during the process of rising from bench and lathe to leather-bottomed chair and desk telephone, the working man is apt to view the problem with distorted vision.

The history of the machine-shops which we have here briefly considered, is the history, I believe, of nearly all similar manufacturing companies in the country, and the facts in the development of the factory system which we have observed in a particular case, are applicable also to other industries.

In the history of the factory system two main factors appear, which have a direct bearing on our modern industrial unrest, both tending to minimize the importance of the individual worker and to create a laboring and an employing class. Division of labor is the first of these factors — the expression in the industrial world of that specialization which in scholarship has replaced the broader culture of our fathers with the more precise learn-

ing of to-day, and in the professions has given us doctors of medicine whose knowledge of anatomy is confined to a single organ, lawyers who are unable to address a jury, and clergymen who cannot preach sermons. I am not arguing against this specialization; there is much to be said to its advantage, but it has a tendency, in the professions, to a narrower culture, and in the workshop, to the elimination of the individuality of the worker.

Division of labor was made a necessity by the discovery of the power of steam and electricity, which united nation with nation, thus creating a world-market. It was the need for a larger production which compelled the son of the machinist, quite unconsciously, to adopt the new system; and the moment he adopted it, the individuality of each worker in his employ counted for less. The loss of the individuality of the worker under the factory system was, I believe, the direct cause of unionism. The worker could no longer approach his employer directly, as man to man, and in order to make himself of force he was compelled to combine his efforts with the efforts of others, and unionism was the result.

The value of trade unions is a subject too broad for our present discussion, but that the movement is of value to the workman, cannot be denied. That it may serve the employer in his relation with the employee, I believe is likewise true. Grave mistakes have been made by organized labor, such as opposition to the introduction of improved machinery, the attempt to limit the number of apprentices, and the many abuses in vogue in union shops; but the movement is growing in strength, and, as it grows, becomes more conservative. It is hard to believe that less than a century ago any combination of workmen was punishable by imprisonment, yet such is the fact. Today, not only is the right of combination encouraged by law, but privileges are

granted workmen to further the principle of collective bargaining — a movement which seeks to place the worker in the same relation with his employer as that which existed between them in the beginning of the factory system; a movement which recognizes the dignity of the workman as an individual.

The labor problem in one aspect is, how justly to divide the profits of industry between the man who buys and the man who sells labor. This division of profits must accomplish two things — first, the employer must receive a fair return on his invested capital; and second, the employee must receive a living wage. This condition obtained in the old days when master and man worked side by side in the shop, and it is to-day the condition by which a more equitable industrial order may be established. Professor Ryan has pointed out the possibility of a distribution of profits under which every capable worker may receive a living wage; the method by which he would accomplish this result — by act of legislature — we need not here consider; but, granting the possibility of a living wage, one way to establish it is by collective bargaining, based on the fact that no trade is a good one, nor in the long run profitable, unless both parties to it are satisfied. No combination of employers can long continue to conduct an industry in which the workers are with reason discontented, and no combination of workers can continue to demand and obtain an undeserved share of the profits.

The problem involved in collective bargaining is the same problem which master and man faced when they quarreled out their differences as they worked side by side in the shop, only multiplied many times; and its solution lies in the same fairness and mutual respect which, in an earlier day, restored harmony between two antagonistic shopmates — the parties to an individual bargain.

THE WHITE PEACOCK

BY ESTHER B. TIFFANY

ALTHOUGH in staying at the Rodneys' one takes one's life, or at any rate one's digestion, in one's hands, a resultant case of chronic dyspepsia would be a light price to pay for the pleasure of their society. Meals in their big, ramshackle wreck of a colonial mansion by the sea, are served when it pleases Providence, or the whim of such unwilling handmaids as have been enticed down to this lonely retreat on the dunes; and any repast is likely to be tintured with a sub-taste of cobalt, rose-madder, or whatever particular pigment that exasperating young couple, Bob and Hallie Rodney, are especially bedaubed with at the time, in the creation of their exquisite marines.

It must not, therefore, be charged too heavily against the account of Will Rogers, that, as he strode vigorously along the beach, his appetite sharpened by the keen, salt air, he should reflect a little ruefully on the morning coffee, and the evening roast, of the week which he was to spend with his former college chum. But then, not to mention Bob and Hallie, there was the glorious hope that this time he was really to meet — could she be torn from the custody of two dragon maiden aunts — Hallie's bosom friend, the sequestered, the gazelle-eyed Kathleen Graham.

"Hallie," asked Bob some hours later, after a repast quite in keeping with his wife's reputation as a provider, "where are you going to stow Billie to-night?"

"Oh, I don't know; wherever he likes," replied Mrs. Rodney absently. "Just listen to that wind!"

The Rodneys and their guest were gathered by a glorious driftwood blaze in the living-room, listening luxuriously to the howl and beat of the maddened

wind and rain. In the flickering glow Hallie's yellow, tousled head gleamed bright above her open-throated painting blouse, and the somewhat pronounced ruddy bronze on the noses of the two men was pleasantly softened.

"Well, all I can say is," continued Bob, with a comfortable yawn and stretch, "that on a night like this every blessed room upstairs leaks like a sieve. You'll have to put Billy down on this floor in the garden-room. Where —" sweeping his hand along the shelf of the high mantelpiece in a fruitless search — "where in thunder are the candles?"

Mrs. Rodney, suddenly called down to confront one of those ever-recurring domestic conundrums, wrinkled her forehead.

"I just remember, Norah told me today we were completely out of candles and kerosene oil, too. That's why we've been sitting so long in the firelight."

"Oh, was that it? I supposed it was to add to the glamour of the romantic descriptions you have been giving Will of Kathleen. Well, she certainly did a mighty plucky thing last week when she pulled that young rascal out of a briny grave."

"Oh, what was that? You never told me about that? What young rascal?"

"What, did n't we tell you about that? Why, we were out walking one day, and Hal and I saw a subject for a sketch further on, and left Kathleen on the pebbly beach. Suddenly she heard a sort of a gasping, strangled cry, and looking out into the surf, she saw something dark and shiny like a seal's head bobbing up and down. But seals don't make that kind of noise; she looked again and then