THE MACHINE-MADE PEACE PATTERN

Scissors picture by Martha Bensley Bruère

Democratizing the Boss

By ROBERT W. BRUÈRE

Scissors pictures by Martha Bensley Bruère

A SMALL make-shift shop in the second story of an old building, dedicated to the manufacture of electrical measuring instruments for a market still so largely hypothetical that its first owner, facing bankruptcy, was glad to have Morris E. Leeds take it off his hands—that was the beginning of the modern Leeds & Northrup works in Philadelphia, which are the scene of my encounters "with a Quaker Employer in his Factory."

One of the workmen who was there at the time, remembers the place as comically crude. Only a few shelves separated the shop from the chief executive's office. There was almost no machine equipment, and no organized flow of work through the factory. "My first assignment," he tells me, "was to finish a job that a former employe had started on twenty-five independent vibrators. I was amazed when I got that job. Five or six of the vibrators had been finished. They had been made and put together by one man, one at a time. Similar parts had been made all different sizes, shapes and forms. I found I needed a pair of small bench-lever shears; there wasn't one in the shop. We didn't have any kind of machine for sawing metal or insulating sheets; we had to use a carpenter's saw. There was an old punch press but somebody decided it was no use and it disappeared. There were practically no standard parts. If an instrument got out of order, the customer had to send it back for repair. We had no standard parts to send him.

Of course, he went on to explain, there was no mass production, no systematic coordination of effort, no team work. Today, hundreds of men and women in the new factory with its full machine equipment, while they work on separate standardized parts, work in unison like the members of an orchestra.

These impromptu reminiscences of Mr. Roth, who is now shop engineer in charge of production methods, epitomize the history of machine industry during the past 150 years. His description of the life in the first Leeds & Northrup factory reveals that splitting up of the skills of the all-around craftsman which has been the central preoccupation of economists from Adam Smith's day to our own. Because the machine not only destroyed the traditional all-around craftsman but also undermined the culture which we associate with him, it acquired the reputation of a monster with a diabolic biological existence independent of the will of man and dominant over him. Only recently have we begun to take account of that process of human reintegration which Mr. Roth identifies with the factory of today and in which some of us see the hope of our industrial civilization.

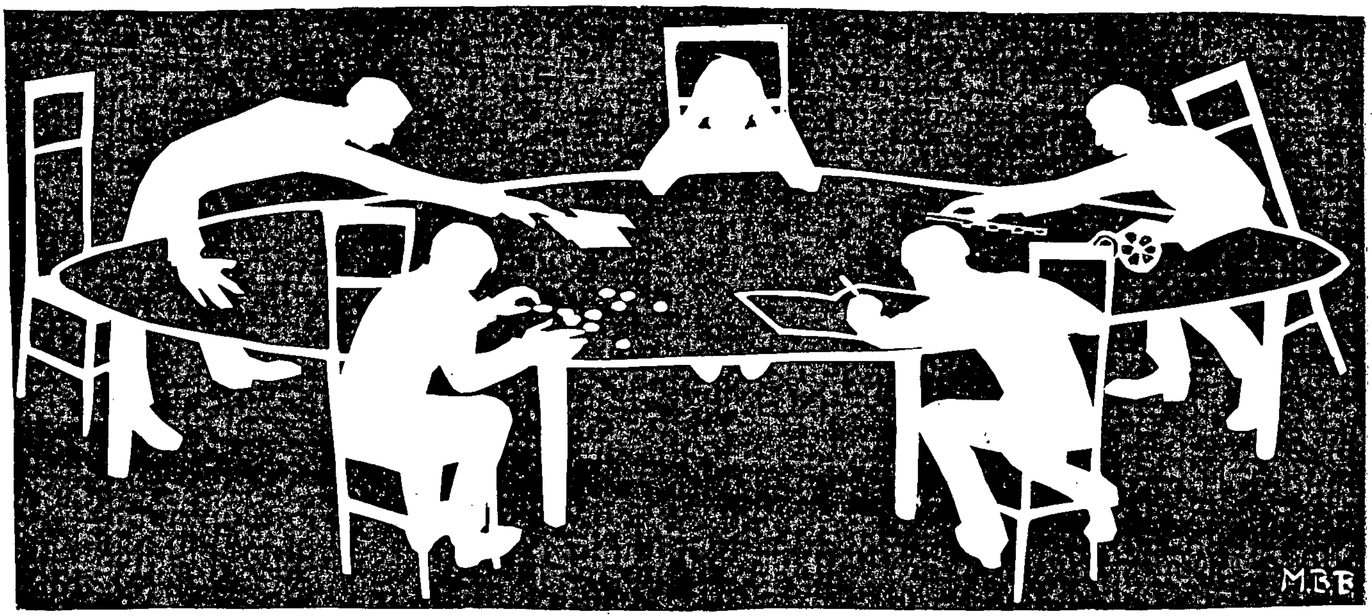
That century-long process of division and reintegration which we associate with the machine, finds its most striking illustration in the case of the chief executive. For it is not the skills of the old-time craftsman only that have been affected by the increasing use of machinery; the executive brain has also been subdivided, functionalized and reintegrated.

When he first went into business for himself, Morris Leeds as owner-manager was his own factory superintendent, his own treasurer, his own purchasing agent, his own salesman. Today, each of these major executive functions, as well as many minor subdivisions of them, are exercised by separate individuals. The men who perform parts of his total executive function are like externalized lobes of his own executive brain. They are separate individuals. To be effective, they need to have a large degree of freedom and initiative, and yet unless they work and think in perfect adjustment to himself, his own initiative and effectiveness are paralyzed.

It was the painful consciousness of this vivisection of his own executive authority that at first worried him much more than the dismemberment of the old craft skills, and made him suspect a serious lack in the scheme of ideas of the English Quakers, who, when they preached industrial democracy, "visualized an ownership and visualized wage workers but said nothing about the in-between group—factory superintendents, accountants, planning engineers, foremen—who, if you were going to proceed in the direction of democratic management, were the ones who would logically be the first to be taken in."

This approach to industrial self-government from the executives at the top instead of from the rank and file at the bottom, runs counter to the cardinal principles of democratic fundamentalism. It is finding some dramatic illustration in the world of political government today. What are the practical arguments adduced in its support? By what means is it being put into operation? The devices with which Morris Leeds has experimented—partnership arrangements, employe stock-ownership, profit-sharing through executive bonuses—are not unique. Other employers have adopted similar devices, some more, some less far-reaching than his. Their significance is not in their uniqueness, but in the fact that they illustrate a general trend set in motion not by a philosophy of government but by the practical exigencies of mechanized industry.

MORRIS LEEDS was very young when he began his independent business career, inexperienced in the ways of the industrial world, somewhat terrified by the unpredictable hazards of a new manufacturing venture. He entertained no neat formulations of ways to start a democracy in industry or anywhere else. As a member of the Quaker community, he was conscientiously concerned to manufacture things socially useful, and as a man of distinct scientific bent, he was impatient to harness knowledge to social purpose. But his first job was to get his factory onto its financial feet, to discover the market for electrical measuring instruments, to make instruments that would be their own best salesman at a fair margin of profit. Strongly against the grain of his temperament, he decided to explore



Discussing the business with his assistants, the executive is, at it were, discussing it with himself

the market for himself, to become his own sales department. This meant that he needed a person to manage the shop in his absence. Thus, even before he had developed a sufficient volume of business to warrant the large machine equipment required for mass production, he had to divide his executive brain and entrust one section of it to a partner. Straightway the germ of his later conception of the way to start a democracy in industry was born. Its growth was to be as slow and as hard beset by unforeseen difficulties as the growth of a child.

HIS own first contact with business, he had made as employe of an instrument-importing and manufacturing concern. He liked dealing with scientific instruments because their manufacture and sale kept him at the crossroads of education and industry. He wanted his life to take root in the business and so he prevailed on his father to lend him money to enable him to become a minority stockholder. This first experience as an investor gave his sense of justice a jolt from which it has never completely recovered.

"It is a curious thing, the psychology of ownership," he reflects. "I was very anxious to have that investment. I had no idea that the money my father put in there for me would give the company a stronger hold on me than it would give me on the company. It was not well managed. My investment shrank like wool in the rain, but there was nothing a small minority stockholder could do about it. When I went into business for myself and needed that money, I couldn't get it. Young men keep coming to me wanting to buy shares of our stock. I always tell them about my experience. But it has little influence upon them. They want to be owners."

The man who joined him when he became his own salesman wanted to be an owner too. Morris Leeds was determined that he would not deal with his new partner as he had been dealt with. In the event this minority stockholder should ever want to withdraw, he promised to buy his stock; and to safeguard his investment he proposed an arrangement by which, if they should disagree as to the value of the stock, they would call in an arbiter and abide by his decision. After some years but while the business was still feeling its way, his partner did decide to withdraw. They did disagree. They went to arbitration. It proved a time-wasting, nerve-racking, unsatisfactory experience, especially to Morris Leeds, who felt then, as he still feels, that the price fixed by the arbiter was unjustly high—a split-the-difference sort of decision, rather than one based on a true appraisal of the equities.

But he could not build the business alone. Machine industry makes it necessary for the owner-manager to go on dividing his executive function. He needed to have other men to work with him, to share his responsibilities; and this required a certain division of his own executive brain—a paradoxical problem—if he were to democratize it and still, as the principal owner and chief executive of the business, keep mastery over it. How could this be done?

He was still thinking in terms of property and the ownership of property rather than in terms of work. He had not yet clearly defined to himself why it was that he felt it important to share ownership with those with whom he found it necessary to share responsibility. He had not yet discovered that in our mechanized age, in our age of techniques as highly specialized as the new machines themselves, power ultimately vests in those who are masters of these techniques rather than in those to whom the traditional law accords titular ownership. So at least it seems to me as I study the record.

ACCORDINGLY after examining the experience of other concerns he consulted not a management engineer but a lawyer. "What I wanted," he explains, "was a partnership arrangement organized in the form of a stock company. I wanted to share ownership but I didn't want to be under compulsion to offer stock to everybody who by position was in the eligible class, nor to pro-rate stock according to salaries. It seemed wiser to have the chief owners select the people whom they wanted to have own stock and determine how much should be offered them, and then sell the stock to these selected people, not give it to them in the form of a bonus or anything else."

What the lawyer proposed was a trusteeship under which a few trustees acquired all the stock of the corporation, which they might reissue to selected individuals in three distinct forms: investors' shares which, like ordinary preferred stock and bonds, are without voice except when the business fails to meet guaranteed dividends or interest; employe shares issued only to individuals actively engaged in the business; and converted shares into which employes leaving the business must convert their common shares at a price mathematically pre-determined by the average earnings over a period of years immediately preceding their conversion. These converted shares draw a fixed and preferred dividend but, like the preferred, have no vote except when the dividend is not paid. This arrangement satisfactorily solved the problem of justice to the minority stockholder who wants his money when he withdraws from the business, but it left unsolved the larger problem whose felt, but ill-defined, pressure was the real occasion for the sharing of ownership.

Morris Leeds had imagined that under this trustee arrangement those who most intimately shared his executive function would acquire stock rapidly enough to make their dividends satisfy their sense of what was due them beyond their salaries as sharers in the owner-manager's responsibilities. "But," he told me, "I very promptly had the experience that this did not happen. The stock distribution lagged behind the ***contribution to management*** which the individuals made and the right which they thereby acquired to a larger share of profits than would come to them through their stock."

HERE was a new phase of the problem; not a matter of abstract justice, but something inherent in the realities of divided management.

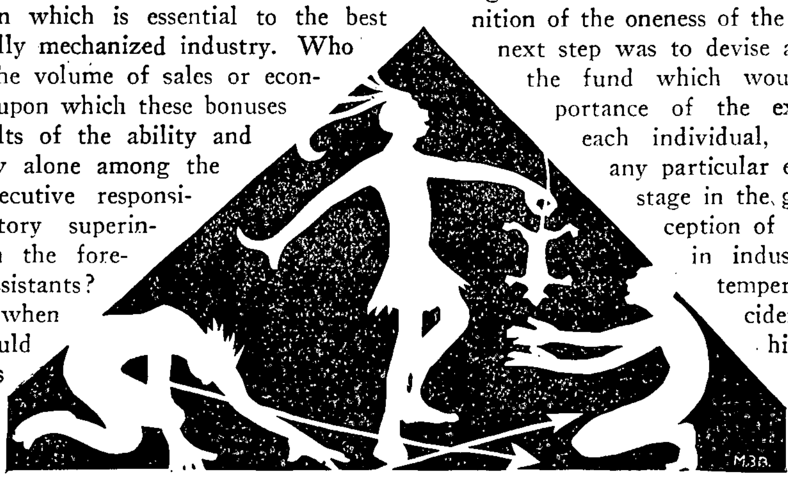
His next step—the next step in the formulation of his conception of the way to start a democracy in industry—was to develop a bonus plan which he had already started in a tentative way with the three or four men who most obviously shared his major executive responsibilities. But again these bonuses, as it seems to me, were conceived in terms of property rather than in terms of function, although Morris Leeds raises a question at this point. They were related to the amount of money which these salaried executives figured they made for the business rather than to the character and weight of the executive responsibilities they carried. They represented the kind of profit-sharing that a wise Hunting Age chieftain might have practiced with his ablest lieutenants in war and the chase. They awakened envy, the spirit of rivalry, inter-executive competition, and failed to inspire that cooperation which is essential to the best conduct of a scientifically mechanized industry. Who could justly say that the volume of sales or economics in manufacture, upon which these bonuses were based, were results of the ability and enterprise of these few alone among the many who shared executive responsibility, from the factory superintendent down through the foremen and their shop assistants? What would happen when these favored ones would have to pass on policies good for the whole organization in the long run, but which, for the time being, would cut down the size of their bonuses? When, due to the rapid growth of the business during the War and the years immediately following, the bonus figures got wildly out of proportion to salaries, the stockholders groaned and the minor executives waxed sore. For the first time in the history of the factory, the foremen who had no share in these bonuses, held meetings outside the factory and showed symptoms of incipient revolt.

INASMUCH as these foremen were receiving incomes that compared very favorably with those of foremen in similar factories in the Philadelphia market, Morris Leeds was perplexed at their action. "But," he told me, "we had an evening together. I heard their statement of dissatisfaction but could not make anything very definite out of it, except to realize that there was dissatisfaction. I was at a loss to reply and so waited for two or three weeks and then had another meeting with them. I told them then that in comparison with other foremen in Philadelphia they were being well paid, that their jobs were relatively light because of the comparatively small number of people they had to manage, that they were the interpreters of the policy of the management to the people under them, and that the only suggestion I had to make in order that they might feel more satisfied with their jobs was squarely to put it up to them to see that their own jobs were better done and that a better feeling was maintained throughout the plant. As I recall it, I got practically no come-back to that statement. Nothing specific was done; yet from that time on the situation began to clear up."

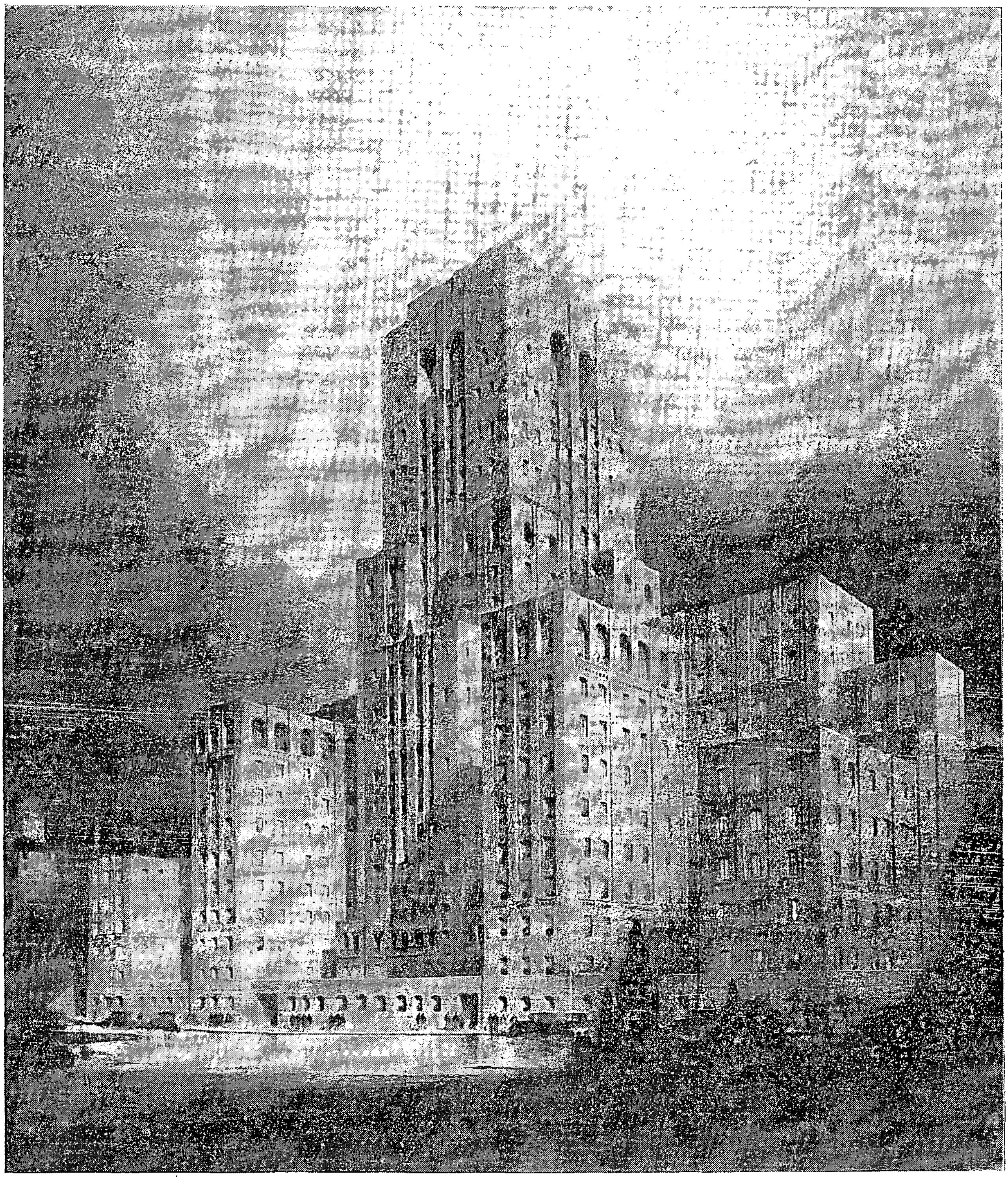
"But," I asked, "you did later reenforce your statement by bringing to bear upon the dissatisfaction of the foremen the modified bonus plan?" His answer was, "Yes."

In meeting this crisis, Morris Leeds now took counsel not of a lawyer but of the going functional constitution of the factory as it had been shaped by the use of machines, by mass production, by the division of work and the corresponding division of the executive brain. With the center of his attention shifted from ownership to functional responsibility, it became inevitable that sooner or later every one in the organization, from the president and general manager to the foremen and their assistants, who exercised executive functions, would have to be included in the executive bonus group, and that the bonuses would have to bear some clear relation to the weight of executive responsibility which each recipient carried.

His first step was to discontinue individual bonuses altogether and to establish a single bonus fund in recognition of the oneness of the total executive function. His next step was to devise a formula for the division of the fund which would express the relative importance of the executive responsibility which each individual, or group of individuals at any particular executive level, carried. This stage in the growth of Morris Leeds' conception of the way to start a democracy in industry was not without high-temperatured growing-pains. "Incidentally," runs the record of his answers to my questions, "that was one of our rather searching experiences. I wrote a note on the matter to those of my associates (*Continued on page 200*)



A Hunting Age chieftain shares profits with his lieutenants



Drawing by Hugh Ferriss — Sullivan W. Jones, State Architect

A SKYSCRAPER OF HEALING

TOWERING above Riverside Drive at 168 Street, the New York State Psychiatric Institute and Hospital is one of the most picturesque buildings of the new Medical Center, furnishing an example of that necessary medical cooperation discussed by Mr. Davis on the following pages: "Hospital and clinic have moved into the foreground of late years, not only as a place where patients are to be served but as the organization through which physicians learn to use their tools, to keep them sharp and devise new ones." Other units in the Medical Center include the College of Physicians and Surgeons and the School of Dental and Oral Surgery of Columbia University, Presbyterian Hospital and its School of Nursing, the Neurological Institute, the Squier Urological Clinic, Vanderbilt Clinic, the Babies' Hospital, Sloane Hospital for Women, and the finely equipped Harkness Pavilion for private patients.