owners and wage-workers, to play the ostrich with respect to the elements of class warfare that dart like summer lightning through our American industrial and economic life, is as great a stupidity as the jehovah complex of the hard-boiled industrial autocrat or of the radical who dreams of himself as riding the revolutionary whirlwind. But when we have recognized the existence of the problem, the question arises here, as it does in international relations, whether we shall spend our energies girding ourselves for battle, or whether we shall subject the problem to intelligent and objective scrutiny, bring the method of science to bear upon it, and seek the basis for a concert of classes, as of nations, grounded in reason, justice and goodwill. This is what the more thoughtful followers of Taylor, members of the society which bears his name, to whom science is not a catch-word but the breath of life and the hope of peaceful progress, have during recent years, under the leadership of their managing director, Harlow S. Person, been attempting to do.

What is the point of effective concert between Capital and Labor, between management and men? What is the channel of creative cooperation through which the latent division between them, instead of festering into factions and feuds, can be turned to the benefit of the republic? Mayo's conclusion that the happy future of American industry "would seem to depend upon the intelligence of employers and employers' associations" in "anticipating the unionization of industry, by making it unnecessary" seems to me without scientific warrant, a psychologically unsound concession to the still dominant temper of American, and especially pioneering American, public opinion. The same logic, the same inherent functional urge that produces employers' associations, have produced and will continue to produce associations of wage-workers. To ignore this is to fail to take account of all the elements in the total situation.

Employers' associations, like trade unions, are by origin and current policy militant organizations. The same is true of nations. But peace and creative cooperation between two nations is not likely to come about by the adoption by one nation of a policy designed to eliminate the other. If we make our approach to the problem of industrial peace by urging one of the major parties to industry to adopt a policy designed to do away with the self-governing associations of the other, we shall but pour oil on the fires of obsessional irrationality. There are conflicts of interest between them. There are also common interests. The most obvious of these is the elimination of waste through efficient production.

The key to the problem is the objective science of management, where the science concerns itself not only with things, but also with men. The engineering technician holds the key. It is through him that a circular response may be set up between the two parties through which they will achieve, not the elimination of one by the other, or the adjustment of one to the other, but an integration which will yield what Mary Follett calls "the plus values of conflict."

One could feel these plus values emerging at the historic meeting of the Taylor Society to which I have referred. The discussion was opened by Geoffrey C. Brown, consulting industrial engineer, with a paper on Scientific Management and Organized Labor Today—An Example of Cooperation Between Management and Organized Labor Which Indicates One Direction of Industrial Progress. The speaker was obviously conscious of a certain temerity in what he was about to say. He was uncomfortably aware of the ambiency of the Great Obsession—on the part of scientific management employers against the trade unions, on the part of trade union leaders against "Taylorism." In a foot-note to his rangy title, he hastened to explain that by "scientific management" he did not intend to imply any particular system or group of functions, but rather management conducted in the light of scientific inquiry and knowledge, "management based on facts."

He began by taking note of the accumulating evidence that organized labor is withdrawing from its old attitude of hostility to the introduction of scientific methods into industry. Then he made a statement which hardly ten years ago would have made many of his professional colleagues bristle. Coming from a disciple of Taylor, proclaimed in a meeting of the Taylor Society, it made many of those who heard it sit up and take notice.

> I believe [he said] that those managers are most progressive who now concede the right of labor to organize and to bargain collectively through accredited representatives on questions of wages, hours of work and working conditions. Not to concede this right is, if we reverse the situation, similar to, and about as logical as a refusal on the part of labor to negotiate with management, the accredited agent of an organized group of investors. But if this bargaining or arrangement of terms is to be conducted intelligently and with, as it were, all the cards on the table, labor must comprehend the aims and to a considerable degree the technique of management, while management, in its turn, must be equally alive and sympathetic to the spirit of the labor movement. Otherwise the two are working at cross purposes and any attempt at bargaining degenerates into an effort on the part of each to hoodwink the other.

As an abstract statement, this might have been interpreted by the skeptical as a pious and conciliatory platitude; as a conclusion derived from experience in wrestling with the Great Obsession it acquired the freshness of a new day.

There is probably no group in the industrial world that has been more constant and courageous in devotion to science in management than these disciples of Taylor. They have followed the Great Obsession to its lair; there was a time when they were more or less under its domination; they have wrestled with it; they are well on the way to its mastery. Mr. Brown gave reports of his encounters with the black-winged Apollyon.

In the autumn of 1923, for example, he was called into consultation by the owners of a small New York factory, dedicated to the manufacture of mirrors. He found conditions there which those who have explored American factories of the old individualistic tradition generally expect to find—no adequate stores-keeping, no method of scheduling orders in advance in relation to the plant's manufacturing facilities, no vestige of a cost system. If the owners of such plants found their kitchens in such a state of general confusion and clutter, they would berate their wives for thriftless slatternliness. Such employers hate to have their habits disturbed. They know their business. They have gotten along well enough for years. They are practical men. Why should they change? When business falls off and they lose money, the fault is not with them but with the ruthlessness of their competitors, the selfishness of the money lenders, with the irrational caprices of nature, especially human nature. Under pressure of adversity they lay off men with little or no notice, cut wages, lengthen hours. Then the walking delegate stalks in upon them—and suddenly becomes the symbol of all the evils by which they are beset. Words are exchanged, the sound of the tom-tom beats through their subconscious memories. Presently both sides act under the irrational influence of the Great Obsession.

This was the situation in Mr. Brown's mirror factory. The problem, as he explained, would not have presented extraordinary difficulties if it had consisted merely in affecting a physical reorganization of the business. It was this psychological obstacle, the emergence of the Great Obsession, that made the path of the investigating engineer a hard and dangerous one to travel. The workmen in this open shop were strongly organized in a trade union affiliated with the A. F. of L. There the union was, as a matter of fact, though the management refused to recognize it. Three times in ten years the plant had been brought to a standstill by strikes. But rather than enter into cooperative relationship with the union, "the management had grown so accustomed to this expensive type of interruption that they frequently referred to it as an unfortunate but inevitable condition of manufacture."

The workers as trade unionists were in a similar state of irrational opposition to change. Anything suggesting "Taylorism" was taboo — immediately evoked the Great Obsession. After Mr. Brown had succeeded in inducing the employers to install a modern cost system, he attempted to introduce a system of scheduling orders in advance through the factory, so that work could be systematized and the machines could be uncluttered. Of course no such system could be made to work effectively until the standard time and cost of each operation had been determined. The workers, too, were creatures of habit. They wanted to be left alone to do their work as they always had done it. They, too, were practical men. If one of these outside experts said that they were doing their work wastefully and inefficiently—well, he was simply a theorist, who would be better off, perhaps, for a little practical experience. But the plant could not be saved from bankruptcy without the accurate determination of the standard-output capacity of each manufacturing operation. This involved time study, and, to the ordinary workman time study is "Taylorism," and that is taboo.

Mr. Brown's initial attempts in this direction caused an incipient strike. Under ordinary conditions, this threat of strike would have provoked a lockout; rather than have the union "dictate" to him, the employer would have preferred to shut down the factory, even to liquidate his business. But a consulting engineer had been hired and the problem was turned over to him.

[Here follow excerpts from Mr. Brown's article in the June BULLETIN which explain how he secured the cooperation of shop steward and walking delegate and the local's approval of his investigation.]

Conference, discussion, patent open-mindedness finally prevailed. . . . [His two years' experience] led