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A Thirty-Year Experience in Industrial Democracy

by

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HE present article is a simple narrative of the experience of employers and employees in industrial self-government as applied to the stove and heating industry of the United States. These experiences are recounted in the belief that very valuable lessons can be learned from them.

DEVELOPMENT OF THE STOVE INDUSTRY (1)

While cast iron stoves were made in Europe previous to their manufacture in the United States, the production of cast iron stoves and heaters in large quantities is purely an American industry. The first foundry exclusively devoted to stove manufacture was established in Taunton, Massachusetts, in 1829; shortly afterwards similar foundries were established in Albany and Troy in New York State, along the Ohio and along the Mississippi valley from Pittsburg to St. Louis. After the Civil War the industry developed more rapidly. In 1872 it was estimated that the value of the output of stoves in the United States was \$40,000,000; in 1904 it was reported as \$62,000,000, and had increased to \$79,000,000 in 1909, \$89,000,000 in 1914 and \$201,500,000 in 1919. At the present time there are a great variety of products from stove foundries, including furnaces, gas and oil stoves, not manufactured in the earlier years of the industry.

⁽¹⁾ Editorial Note. The historical summary of events leading up to and surrounding the first conference agreements of 1891 is based largely upon a joint study by the author, which appeared as *Conciliation in the Stove Industry*, by John P. FREY and John R. COMMONS, in *Bulletin* No. 62 of the UNITED STATES BUREAU OF LABOUR STATISTICS, Jan. 1906, pp. 124-126.

The number of employees and the number of establishments in the industry has changed very little during recent years. In 1909 the 576 establishments in the industry employed 37,130 wage earners and in 1914 the 551 plants employed 37,325 workers ⁽²⁾. In 1919 the corresponding numbers were 588 and 43,433. It is practically impossible to state what proportion of this number of wage earners consists of moulders. It may be estimated that approximately 23,000 moulders are employed when production is normal. In proportion to the total output of stoves the moulders' work is slightly less than it was in the earlier days, for sheet steel and sheet iron have been introduced into the construction of stoves. However, the moulders' wages still form a large proportion of the manufacturers' cost of production, being variously estimated at from 40 to 50 per cent.

The moulders' trade is still largely a handicraft, though machinery has been introduced to some extent. Because of the character of the industry there are good reasons for believing that for many years to come craft skill and manual dexterity will still be required in the production of stove castings. The labour required is of a most arduous character and the conditions under which it is performed are not the most inviting. When the moulds have been prepared after the physical exertions connected with ramming the sand, the moulder pours the melted iron and shakes the red-hot castings from the moulds in a superheated atmosphere filled with gases and the dust arising from red-hot sand. Men who would earn their livelihood in such an industry are of sturdy physique and possessed of determination. It may be that these characteristics led them at an early date to object vigorously to conditions which they believed to be unfair to them.

ORGANISATION IN THE INDUSTRY

The early history of the industry in the United States is a record of attempts to form militant organisations. There are definite records of individual moulders' local unions as far back as 1836, and there are good reasons for believing that a number of moulders' unions existed previous to that time. The International Moulders' Union of North America was organised on 5 July 1859. It now covers the United States and Canada, and includes, in addition to stove moulders, all grey iron and malleable iron, steel, brass and other mixed metal moulders and core makers. Its present total membership is roughly 61,000, including about 22,000 stove moulders.

It is impossible to ascertain when the first organisation of stove manufacturers was formed, but the records indicate that there was a stove manufacturers' association organised in Albany at least as early as 1859. At the present time employers in the industry in the United States are represented by the Stove

⁽²⁾ UNITED STATES DEPARTMENT OF COMMERCE, BUREAU OF THE CENSUS: Census of Manufactures 1914, Vol. II, pp. 1024-1025. Washington, Government Printing Office. 1919.

Founders' National Defence Association, organised in 1886 as an offshoot of the National Association of Stove Manufacturers, in existence since 1872. The Defence Association was organised as a fighting body, its object being stated as "resistance against any unjust demands" on the part of the employees of members of the organisation and for "such other purposes as may from time to time prove or appear to be necessary for the benefit of the members thereto as employers of labour". The Association includes some eighty-five firms and corporations, which produce about 75 per cent. of the stove output of the United States, while the great majority of the manufacturers operating stove foundries who are not members of this organisation carry out all rules and regulations which are agreed upon between the organised workers and employers in the industry.

EARLY CONFLICTS

A marked spirit of suspicion and hostility existed from the first between the two groups in the industry, as is evident from the record of strikes and lock-outs which occurred repeatedly in the same foundries and localities. Moulders and manufacturers were alternately successful in these disputes, and nothing in the nature of a permanent settlement or an assured prospect of peace was realised. A defeat for either side often meant only a determination not to abide by the result, but to reorganise and retaliate at the first favourable opportunity which presented itself. One of the first important strikes occurred in Philadelphia in May 1855, and led to the organisation of a local union which has had a continuous existence since that time. The panic of 1857 was followed by reductions in wages, and in the succeeding year three strikes occurred to restore the wage rate paid previous to that year, although in some of these strikes questions of apprenticeship and payment in kind also figured in the dispute. A great number of disputes occurred in 1865 and 1866. In 1866 the employers organised the Iron Founders' Association and brought about the great lock-out of 1866. Disputes in 1867 were even more bitter than those of the previous year. Strikes in the following years were generally lost by the unions. The prosperous times of 1872 led to a recurrence of fairly successful strikes, but the period from 1874 to 1880 was a period of comparative quiescence. Beginning with 1880 there was a remarkable revival of activities among the stove moulders' unions with frequent strikes and lock-The dispute which led directly to collective bargaining in outs. the industry was the great strike and lock-out of March-June 1887, which originated at the Bridge and Beach foundry in St. Louis, Missouri, with a demand for an increase in wages, and ended in a general lock-out by the Stove Founders' National Defence Association.

As a result of these strikes and lock-outs both the moulders and the manufacturers had suffered severely. A number of foundry owners had lost the profits of years in a single contest; some had been driven to bankruptcy; and in many instances an owner who had built up a profitable business found his competitors capturing his customers while he was involved in an industrial dispute with the moulders. On the other hand, the funds of the unions had been exhausted; a number of the local unions had been destroyed; individual members had lost their savings and their homes, and some because of their union activities had been black-listed throughout the country, being compelled to work at some other branch of the industry or secure employment outside the country.

During the period of strikes, particularly in 1866 and 1867, various attempts were made by individuals on both sides to bring about an adjustment and to establish an understanding on the merits and justice involved in the points at issue rather than through the exercise of force. In 1866 the President of the International Moulders' Union, Mr. William H. Sylvis, recognised at the time as one of the great labour leaders of America, suggested to the foundry owners' association a conference between representatives of the two associations. The reply to the suggestion was the posting of obnoxious notices in the foundries of the employers' association. In 1876 the moulders' union suggested a policy of arbitration. A definite statement of the moulders' case was prepared and copies posted to all stove foundry owners. Few replies were received to this communication and the effort to secure arbitration on a shop basis was abandoned.

There was one condition which helped to pave the way for the understanding which was finally reached, and that was the fact that some of the foundry owners had at one time been journeymen moulders themselves, and through personal experience understood some of the hardships and injustices which had been forced upon numbers of moulders. The principles of organisation and of brotherhood which they had acquired as members of the union had not been wholly eradicated by their experience as employers. On the side of the Union itself the character of their representative at the time had much to do with the reaching of an understanding between the two forces.

The position for the leaders of both organisations was a difficult one; the members of one organisation had learned to look upon the members of the other with hearty dislike and distrust. But the leaders of the two associations were more or less in contact with each other, and in August 1890 a strike was settled in Pittsburg by the officers of the Stove Founders' National Defence Association on the basis of a written agreement with the local union. The operation of this agreement proved satisfactory both to the foundry owners and the moulders, making it evident that, if an agreement could be reached after a strike, it must be possible also to reach as satisfactory an agreement before a conflict had occurred. Henceforth it became the object of the leaders of both sides to establish some means of continuous consultation.

CONFERENCE AGREEMENT OF 1891

Almost immediately following the Bridge and Beach strike of March 1887, the president of the Stove Founders' National Defence Association proposed an agreement upon a national scale to the president of the International Moulders' Union, but the latter did not feel justified in bringing the matter before his organisation at that time. About a year later, at the moulders' national convention in July 1888, a motion to meet a committee of the employers' associations to fix a scale of prices failed to get any support; but at the convention of 1890 the incoming executive board of the Union was directed to communicate with the representatives of the stove manufacturers' association with a view to meeting them in conference and discussing points of difference.

The newly elected executive board at its first meeting, held in October 1890, sent an invitation to the secretary of the Stove Founders' Association asking for a joint conference. The secretary communicated with the General Board of the Association calling their attention to the fact that "this is the first instance in the history of the International Moulders' Union in which they have sought a conference of this kind and it should receive careful consideration". He added that the president of the Association thought "that as a matter of courtesy we should appoint a committee at conference to meet them and learn what kind of action they wish to pursue, and possibly something may result that will be to our mutual benefit and prevent the causes that lead to strikes". He also expressed the opinion that the moulders "have been taught a very practical lesson, that it is useless for them to attempt to enforce unjust demands, particularly against members of the Stove Founders' National Defence Association, and they may be willing to treat with the Association and more carefully consider the consequences arising from the enforcement of demands that cannot be consistently granted".

Favourable replies were received and arrangements made for a conference which took place at Chicago, Illinois, on 25 March 1891. The members of this conference consisted of the president and secretary of the Stove Founders' National Defence Association, the president of the National Association of Stove Manufacturers (the latter not an employers' association, but organised for trade information purposes and including practically every stove manufacturer in the country), and others. The moulders were represented by their president, a member of the executive board, and three other members of the Union.

The joint committee appointed by the conference after the period of exchanging views had passed outlined a plan for settling all future disputes between the moulders and the foundry owners. First of all, provision was made for a conference committee holding office for a year and consisting of six members, three of whom should be stove moulders appointed by the Union and three persons appointed by the foundry owners' association. It was laid down that any dispute between a member of the foundry owners' association and the moulders in his employ, "when the majority of the latter are members of the International Moulders' Union", should be referred to the presidents of the two associations, who should either consider the dispute themselves or nominate delegates for the purpose. Failing a settlement the two presidents were directed to summon the conference committee by mutual agreement; decision by a majority vote of the committee would be final and binding upon each party for the term of twelve months. No vote should be taken except by a full conference committee or by an even number of each party. An important feature in the plan was that neither party to a dispute should cease work pending the adjudication of the dispute.

Besides outlining a means of adjusting disputes between the moulders and their employers the conference discussed some of the principal points of conflict between the two organisations. Among the most contentious questions had been the apprenticeship ratio, but no decision was reached in the matter other than that an immediate investigation should be undertaken to secure an adjustment of the whole problem upon a reasonable basis. On the question of wages the conference recommended that the two bodies "consider the desirability of annual agreements for the rates of wages".

The decisions of the conference were submitted to the membership of both organisations for their approval. The foundry owners' association met in May 1891 and approved the action taken by its representatives. In the moulders' case it was necessary to take a referendum vote to amend the constitution to comply with the clause preventing strikes pending adjustment of a dispute. On this question 131 local unions voted in favour and 22 against, while on the conference agreement in general 144 voted for and 13 against.

The making of this first trade agreement between the moulders and their employers was recognised by both parties as a turning point in their relations.

ANNUAL CONFERENCES AND THEIR WORK

It will be seen that the resolutions adopted at the first conference created a new form of government for the stove industry with legislative, executive, and judicial powers. The representatives to the annual conferences which followed were elected at the conventions of their respective organisations. When they met in joint conference annually, they came with full power to enact legislation governing their constituents upon all questions affecting the industry. These annual joint conferences were, and are, of a purely legislative character. No local grievance is taken up for consideration or adjustment, neither does the conference discuss abstract questions. The sessions are devoted to the discussion and adoption of resolutions, or, as they should be more properly termed, "laws", to govern the actions and relationship of owners and moulders in the foundries.

Settlement of Disputes

Perhaps one of the most important features of the first agreement entered into was the method adopted for the adjustment of disputes. When a dispute arises in any of the foundries, it is the first duty of those directly concerned to effect a settlement if possible. If this is found impossible, it is the duty of either party to refer the dispute to the officers of his national association, who in turn notify the officers of the other association. Both presidents, or their representatives (these in each instance being a national officer of his organisation), then meet at the foundry where the difference has arisen and, after examining the facts, reach an adjustment of the matter in harmony with the provisions and the specifications of the "laws" enacted at the annual joint conference.

The decision of the two representatives is binding upon both parties. Should one of the parties affected seriously object to the decision because of the conviction that an injustice has been done, there is the right of appeal to what has been termed the "conference committee", which is composed of three members from each association. This special committee, which constitutes the judicial branch, has never played a prominent part, as practically every question which has been referred to the two associations for adjustment has been satisfactorily adjudicated. Since the original agreement was entered into in March 1891 this special committee has been called into session on only three occasions.

The first meeting of this conference committee was in 1892, when one of the foundry owners demanded a 10 per cent. reduction in earnings. This the moulders refused to accept. The representatives of both the associations met at the foundry and, after an investigation, decided that the reduction was unwarranted. This action was not acceptable to the firm and it appealed to the conference committee. This body met in July the same year and unanimously reaffirmed the decision, but shortly afterwards the firm placed the reduction into effect contrary to the findings of the conference committee. As a result, this firm was dropped from the membership roll of the Stove Founders' National Defence Association and a strike was declared at this shop by the moulders, there being no objection to this action by the Association. In another case in 1903 the moulders in one of the New York State foundries struck contrary to the conference agreements. Upon their refusal to return to work under the instructions of the president of the International Union. their union was promptly suspended, although it had been in good standing since 1859. As a result of this action, the moulders gave the question second thought, returned to work, and were reinstated as a local union by the International Union.

Wages

To examine all the problems which have arisen and the "laws" enacted to deal with them would make this article too long. For the present purpose it may be well to chronicle briefly some of the major questions which have arisen and have been adjusted through this form of self-government or democracy in industry.

Since 1892 annual wage agreements have been entered into between the International Union and the national organisation of employers. Piece rates were fixed at the second conference, and are known in the trade as "board" prices. From the time of the first agreement—March 1891—until the conference of 1 April 1899 there were no advances in wages, but since then there have been a number of advances and two reductions in wages. The advances are given, not by increasing the piece or board prices, but by adding a certain percentage to the moulder's piece price earnings. For example, the percentage for 1920 was 125; this meant that for every dollar earned on the board price, the moulder received \$2.25. The following table indicates the date and amount of percentage changes in wages and the total advance on the basic board price.

	Percentage increase on previous rate	Total percentage added to basic board price
1 4	10.00	10.00
1 April 1899		10.00
1 April 1900	5.00	15.00
1 April 1902	5.00	20.00
1 April 1907	5.00	25.00
1 January 1911	5.00	30.00
1 January 1913	5.00	35.00
1 January 1917	18.52	60.00
1 January 1918	5.63	85.00
1 January 1919	10.81	105.00
1 January 1920	9.76	125.00
1 January 1921	15.00 (¹)	91.25
1 January 1922	10.00 (¹)	72.13

(1) Decrease.

From the beginning of relationship between the two associations there have also been changes in board prices. Prices which were considered too low have been increased, so that in addition to the percentage advances shown in the table there have been a certain number of increases in the basic board prices on which these percentages were calculated. It will be noticed that the percentage advance granted in 1920 was only 9.76 per cent., a much smaller advance than those granted to other industries at the same time. The reason for this was a change in trade custom. The moulders had always previously, after pouring off their work, shaken the castings out of the mould and wet and tempered their sand, or else employed someone else to do this for them. At the annual conference in December 1919 it was agreed that from 1 January 1920 the foundry owners would assume responsibility and pay for this work. This change can hardly be given a monetary value, but, as the representatives of the owners' association agreed at the conference in December 1921 not to make the proposed reduction of 10 per cent. in wages if the moulders would re-assume responsibility for this work, we are justified in believing that the agreement for 1920 involved by this provision the equivalent of a 10 per cent. advance in addition to the 9.76 per cent. which was recorded. The 1921 conference which agreed to a 15 per cent. reduction on piece work earnings also fixed a 5 per cent. reduction in the day workers' minimum. This basic minimum day rate was established in 1916.

Among the early problems on which agreement was reached was the abolition of the so-called Berkshire system, or the employment of "bucks". It had been the custom for the foundry owners to compel the moulders to employ unskilled assistants in their work, in order to reduce the number of skilled workers required in the foundry. The system had been one of the causes of serious dispute almost from the beginning of organisation in the industry. It had passed away, however, in a number of foundries, and in 1902 the question was settled by an understanding that the few foundry owners employing "bucks" would discontinue the practice; by 1904 it had been wholly abolished.

Another question of vital importance to the workers is that of discounts for defective work. This arose in the conference of 1891, but the first clause on the subject was put into the agreement of 1896. It was settled partially in 1906 and finally in 1910 by the adoption of the principle that the question of defective work as a result of "dirty iron" constituted a legitimate grievance, to be adjusted by a shop committee of moulders in consultation with the managers of the local establishment, and in cases of inability to agree to be settled by the national officers of both the associations.

Hours

The question of hours of labour has been a subject of discussion since the first conference. The 1908 agreement established a 7-hour day for actual moulding; in 1910 a compromise was made on $6\frac{1}{2}$ hours, making the actual working day in the foundry from 8 to $8\frac{1}{2}$ hours, as a considerable amount of work has to be done after the actual pouring of the moulds is completed. In 1918 an agreement established the 8-hour working day, with payment for overtime at the rate of time and a half.

Limitation of Output

The moulders' experience had been that, when a man earned beyond a certain amount, the invariable result was a reduction in the piece price of that job, and the principle of a limitation on earnings had been adopted as a safeguard to prevent price cutting. Foundry owners complained bitterly against this system, claiming that it was unfair, unsound, and uneconomic, and that every moulder should be permitted to earn as much as his skill and physical powers made possible. The moulders' national convention in 1898 struck from their constitution the clause relative to the limitation of output, but a number of local unions continued the practice.

At the conference between the two associations in 1902 the following resolution or "law" was adopted :

Inasmuch as it is conceded by the members of the Stove Founders' National Defence Association that the earnings of a moulder should exercise no influence upon the moulding price of work which is set according to well established precedent and rule of Conference Agreements by comparison with work of a like kind, the placing of a limit upon the earnings of a moulder in the seven hours of moulding should be discontinued in the shops of the members of the Stove Founders' National Defence Association.

It had previously been agreed that, in pricing work, the foundry owners and moulders should be governed by prices already mutually agreed to and established in the foundry, or, where no comparisons existed, by work of a similar character made by other foundry owners in the district. Prices were therefore set by a well established basis and, as the Association agreed that this basis for comparison should not be disturbed, the protective reasons which had led the moulders to adopt the rule of limitation were no longer valid. There has therefore been no limitation on the moulders' earnings since the adoption of this clause of the agreement.

Price Book System

As stove foundries operate under the piece-work system, and many foundries have thousands of stove patterns, it became necessary that the moulders should have ready access to all the moulding price lists if they were to know that moulding prices were not being tampered with. The first step in this direction was taken in 1896, when the following rule was adopted :

Firms composing the membership of the Stove Founders' National Defence Association should furnish in their respective foundries a book containing the piece prices for moulding, the same to be placed in the hands of a responsible person.

Some of the foundry owners were opposed to the idea of placing a price book in their moulders' hands and the spirit of the clause was evaded by placing the book with the book-keeper or foreman, which interfered with, or wholly prevented, free access to it on the moulders' part. The "law" was later on changed to provide that a price book should be placed in the care of the foreman and of a responsible moulder, and as time passed access to the price book became a matter of such everyday occurrence that the questions which had originally arisen were practically forgotten.

Apprenticeship Ratio

When the two associations met in their first conference the question of the ratio of apprentices was considered. At that time the Union's ratio was one apprentice to the shop and one for every eight moulders employed. The foundry owners claimed that this did not supply a sufficient number of moulders to maintain the industry, but the moulders were unwilling to make any change. As time passed, the question became more serious, the data collected by the foundry owners making it clear that their argument was a just one. Eventually the moulders' representatives were compelled to admit that the figures submitted were perhaps approximately accurate. This led the moulders' officials to gather statistics themselves and these resulted in convincing them that the change was necessary.

As it would be necessary to amend the constitution of the Moulders' Union, the officers agreed to submit the question to the referendum vote of the membership. Notwithstanding the earnest effort which was made by the officers of the Union, the proposed amendment to the constitution was overwhelmingly defeated, only 504 voting in favour of the change and 15,842 against it. This action of the membership tied the officers' hands, and when the annual conference between the two associations met in 1902 a serious crisis had been reached. The situation was, however, temporarily met by the adoption of an agreement that, when a foundry owner was unable to secure a sufficient supply of journeymen moulders, the presidents of the two associations would make a personal investigation, and that, if the dearth of moulders was not due to prices or conditions in the foundry, an additional number of apprentices would be allowed.

This, however, in no way disposed of the question. The Moulders' Union was to hold a convention in 1902, and the officers of the Stove Founders' National Defence Association were invited to attend. They addressed the convention, and later the committee on apprentice ratio submitted a report favouring a ratio of one to six. The delegates refused to accept the committee's report, defeating it by a vote of 107 to 309, and also rejected another effort to adopt a ratio of one to seven. The situation thus created caused grave concern to the representatives of both associations. It was under these circumstances that one of the most vital features of the relationship between the two associations developed. The officers of both associations had learned to respect and to place confidence in the officers of the other association and to believe that education, rather than force, was the only sane, practical method for intelligent men to adopt in the adjustment of their differences.

At the annual conference in 1904 the moulders' representatives placed themselves definitely on record as favouring a ratio of one apprentice to every five journeymen. They informed the foundry owners that the question would be submitted to another referendum vote and that every effort would be made on their part to have the question put before the membership in a convincing manner. During this second effort to secure a favourable vote the strongest of feelings were manifested by the moulders. When the vote was taken it was found that seventy-five local unions had refused to express an opinion, while other local unions sent in a vote equal to their entire membership. The result was 11,308 in favour of the change and 9,028 opposed. In this manner one of the first grave questions which arose between the two associations was disposed of upon its merits, as shown by the facts presented and through the application of educational methods instead of force.

Moulding Machines

Some years later, another question of most serious importance The moulding machine had been introduced into the arose. foundries to take the place to some extent of hand labour. The manufacturers of these machines claimed that they were adapted to stove foundries, and that the skill of the moulder was no longer required; with this went the intimation that the use of the moulding machine would eliminate the Union from the foundries. As the moulding machines were being introduced into the stove foundries, the moulders were made to realise that a profound change was taking place, and the foundry owners were unwilling to enter into any agreement covering their operation. The moulders pressed the question from year to year, but without success. The owners, instead of placing apprentice boys on these machines, employed full-grown adults, and the moulders as a matter of self-protection classified these as apprentices, the result being that the number of apprentices learning the trade, except as moulding machine operators, was greatly diminished in some foundries.

As the question became more acute and threatening in its aspects, unsuccessful efforts were made at the annual conference to reach an understanding, and in 1908 an agreement was entered into which provided a method by which piece prices for work made on moulding machines were to be established. Experience demonstrated that the method adopted was unsuccessful in its practical operation, and probably also unsound. But no solution could be found, and both associations faced the most serious problem which they had encountered. Finally, both associations agreed to the principle that, regardless of what the moulding machine was capable of doing, its operation should not result in reducing the moulder's total earnings, that is to say, the foundry owner should enjoy whatever advantage came through the increased output due to the use of the moulding machine, but that the moulder should suffer no reduction in his total earnings even though the machine price for moulding was lower than when the same work was done by hand.

The adoption of this principle served to allay the feeling of irritation and resentment which had developed among many of the moulders and prepared the way for a final adjustment, which was reached in 1914. Previous to this time, there had been an opportunity for discovering just what moulding machines could do in stove foundries. Statistics had been gathered by the moulders as well as by the foundry owners so that there was a basis of ascertainable facts secured before the final agreement was entered into. In this case, as in that of the apprenticeship ratio, education was necessary.

Following the establishment of the conference agreements, a change of attitude on the owners' part occurred. As the agreements were applied year after year, the employers' attitude of hostility towards the Union disappeared. The manager of the Bridge and Beach Co., in which originated the great strike and lock-out of 1887, thirteen years after, in 1900, said that he had gradually become "converted to the fact that trade unions are all right if the leaders are conservative and fair-minded". He continued : "We wish to run a union shop just as successfully as before we ran an open shop if we succeed others will follow". In 1885 one of the largest stove manufacturers in America said that, if the trade union organisation could be dissolved entirely, "it would be beneficial to our employers' associations, the public, and the workmen themselves". Nineteen years after expressing these views the same manufacturer, addressing a meeting of the National Civic Federation in New York City, stated among other things: "I have fought the Union; I though it was to the interest of the manufacturers to destroy the Union, but I have been shown the error of my ways, and I am prepared to say now that it is the wise employer who encourages rather than discourages unionism". Reviewing the career of the Stove Manufacturers' Defence Association, he pointed out that

since 1891 we have had no strikes of any consequence. By means of these agreements troubles are reduced to the minimum. While there should be avoided the putting into agreement all matters of controversy which cannot possibly be settled by agreement, nevertheless, an agreement may be made which I assure you by my personal experience may be the greatest means of settling disputes between labour and capital and that will remove the bitter feeling that does, but should not, exist between employer and employee. In order to make agreements effective you must recognise the Union. . I want simply to impress you, from my experience, with the utmost value of agreements between employers and employees and the importance of having such agreements express certain essential things such as wages and shop conditions, without any attempt to cover every possible contingency.

These views constitute a fair expression of the opinions held by members of the Stove Founders' National Defence Association. Neither they nor the moulders claim the discovery of a way in which to solve the labour problem. They have simply solved the question, so far as they are concerned, of avoiding strikes and lock-outs and of jointly working out a solution of the minor and major problems that have arisen in connection with the development of industry so far as the relationship of employer and employee in stove foundries is concerned. Their experiences present a striking contrast to the destructive methods adopted previous to 1891 and since that time.

The method originally proposed for the working out of their problems, that is, the creation of a joint committee composed of equal numbers of each side, has worked most satisfactorily. Comparison of the progress made by groups of employers and employees who have adopted this method since that time and those who have had recourse to the principle of arbitration under which a third party is the deciding factor would seemingly indicate that the method adopted in the stove industry has proved the more efficient. Among other things, it has compelled both sides to rely upon themselves and to assume responsibility. It has compelled the joint representatives to realise that they must find the common ground upon which both can stand. It has prevented the methods and the atmosphere implied in overstatement of facts and irrelevant material for the purpose of influencing a judge or jury by befogging the issue from playing a part in the solution of the problems which could only be settled, first, by the ascertaining of facts, and secondly, by the knowledge that any agreement reached and based upon these facts must be binding upon both parties and just in its operation, if friendly relations were to continue.

The general experiment, begun in March 1891, has been in operation for over thirty years. It has eliminated strikes and lock-outs in the stove industry. It has guaranteed as large a measure of justice as men were capable of applying to themselves as foundry owners and moulders. It has successfully weathered depressions in trade and busy times; it has passed through the trying period of the war and the still more difficult times which have affected industry within the last year or so. It has successfully stood all the tests which have been applied. The annual conferences and the contact between employers and moulders during these years have served to make each acquainted with the other in a manner which would have been impossible but for the agreements (3). The foundry owners have been forced to study more carefully the conditions affecting the moulders in their employ. The moulders have likewise been forced to study questions affecting the stove industry with which they would have but slight, if any, acquaintance, were it not for the conference agreements and the annual legislative session between the representatives of the two associations.

^(*) Editorial Note. It has been pointed out in an article by Boris EMMETT in the Monthly Labour Review of the UNITED STATES BUREAU OF LABOUR STATISTICS, May 1918, pp. 168-179, that much of the success of these agreements is to be attributed to the continuity and high character of the personnel of the conferences, to which the author of the present article has contributed greatly.