

The Flint Glass Workers' Union in the Indiana Gas Belt and the Ohio Valley in the 1890's

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The American glass industry was drifting westward in the decades before 1900. Only a small amount of capital was required to establish a glass factory and the communities of the Ohio Valley, and the Indiana gas belt especially, were making strenuous efforts to attract industries of all kinds. Raw materials were plentiful and the market for glassware was growing.

In this period, according to Boris Stern, "prior to the introduction of machinery the glass industry was predominantly a small-unit industry. The amount of capital needed for a plant was comparatively negligible, and the principal item of expenditure, outside of labor, was fuel. A cheaper rate on coal or natural gas was enough of an inducement for the removal of a glass plant from one locality to another and from State to State. The history of the discoveries of natural gas in Pennsylvania, Indiana, West Virginia, and Oklahoma also tells the story of the migration of the glass industry to and from these States."¹

The westward movement of the glass industry, and its growth, are clearly revealed in the tables on the following page. The Pennsylvania data do not show the migration of glass plants which took place from the Philadelphia area to the Pittsburgh area. They do record, however, the rapid growth in the number of glass plants and the even greater increase in number of workers and capital invested in the state between 1880 and 1900.

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¹ Boris Stern, "Productivity of Labor in the Glass Industry," *Bulletin of the United States Bureau of Labor Statistics No. 441* (Washington, July, 1927), 18.

Table 1. Number of Glass Plants in Selected States and the United States in 1880, 1890, 1900, and 1910.

Year	Indiana	Ohio	Pennsylvania	West Virginia	United States
1880	4	19	77	4	169
1890	21	59	99	7	294
1900	110	28	119	16	355
1910	44	45	112	51	363

Source: *Twelfth Census of the United States, 1900, Volume IX, Manufactures, Special Reports on Selected Industries*, 952, and *Thirteenth Census of the United States, 1910, Volume X, Manufactures: Report for Selected Industries*, 883.

Table 2. Number of Glass Workers in Selected States and in the United States in 1880, 1890, 1900, and 1910.

Year	Indiana	Ohio	Pennsylvania	West Virginia	United States
1880	862	1,688	9,784	946	24,177
1890	3,010	6,435	18,510	1,371	44,892
1900	13,015	4,546	19,420	1,949	52,818
1910	9,544	10,159	23,710	6,190	68,911

Source: *Twelfth Census of the United States, 1900, Volume IX, Manufactures, Special Reports on Selected Industries*, 952, and *Thirteenth Census of the United States, 1910, Volume X, Manufactures: Report for Selected Industries*, 883.

Table 3. Capital-Invested in Glass Plants in Selected States and in the United States, 1880, 1890, 1900, and 1910.

Year	Indiana	Ohio	Pennsylvania	West Virginia	United States
1880	\$ 1,442,000	\$ 1,172,850	\$ 7,609,706	\$ 550,522	\$ 18,804,599
1890	3,556,563	4,094,677	20,459,049	825,313	40,966,850
1900	12,775,389	5,451,513	28,287,187	1,338,084	61,423,903
1910	13,149,000	16,201,000	58,632,000	7,369,000	129,288,000

Source: *Twelfth Census of the United States, 1900, Volume IX, Manufactures, Special Reports on Selected Industries*, 952, and *Thirteenth Census of the United States, 1910, Volume X, Manufactures: Report for Selected Industries*, 883.

The development of the industry in West Virginia and Ohio, although on a smaller scale, was in some respects more spectacular than in Pennsylvania, as the tables show. The West Virginia story was one of rapid and continuous growth over the period. In Ohio the industry reached a peak in 1890 from which it had declined greatly by 1900, apparently due to the failure of many of the smaller plants.

In Indiana the number of glass plants increased fivefold between 1890 and 1900. The number of workers and the amount of capital-invested increased at nearly the same pace.

Then with the failure of the Indiana gas wells, the number of firms and the number of workers in the industry contracted rapidly. Total capital-invested, however, continued to increase slowly, due probably to technological changes and a rising price level.

These early glass plants fell into three categories. There were flint glass houses which produced from high quality flint glass such things as crystal tableware, lamp globes, thermometers, prescription ware for the drug trade, and glass novelties. A second group produced bottles and jars, and a third made window and plate glass. It is with the flint (or pressed and blown) glass plants and those Indiana bottle houses which made whiskey flasks that this article is concerned.

The expansion and westward movement of the glass industry presented a challenge to the American Flint Glass Workers' Union which claimed jurisdiction over all skilled glassworkers pressing and blowing flint glass. The AFGWU had been established in 1878 in Pittsburgh. Three years later it had co-operated in the formation of the Federation of Organized Trades and Labor Unions, predecessor of the American Federation of Labor.² By 1890 it had more than 7,000 members. Under the statesmanlike leadership of William J. Smith it had abandoned what Smith termed "stand and deliver" collective bargaining. No longer did AFGWU locals submit their demands to employers with an ultimatum calling for their immediate adoption if a strike was to be avoided. Instead, the union committees met each year in national conferences with employer representatives to negotiate wages and conditions for the following year. The union's various crafts, each highly skilled, made this transition in the period from 1887 to 1892.

The major association of employers with which the AFGWU bargained originated at the Astor House in New York in 1862 as the Flint and Lime Glass Manufacturers of the East and West. After the Civil War it became the United States Flint Glass Association and in 1874 the American Association of Flint and Lime Glass Manufacturers. This association of general glassware manufacturers dealt with both commercial and labor problems until 1889, shortly after the

² Lewis Lorwin and J. A. Flexner, *The American Federation of Labor* (Washington, 1933), 12.

national conference system had been established. That year the unionized members of the association took their labor troubles into a new group called the Associated Manufacturers of Pressed Glassware. This organization in 1893 became the National Association of Manufacturers of Pressed and Blown Glassware which still bargains with the AFGWU.³ In the 1890's, the AFGWU also bargained with separate associations representing the flint bottle houses and the lamp chimney factories. In all of these firms, production still required a high degree of skill from the majority of workers.

The development of the national conference system with these three employer associations was a major step toward a mature collective bargaining relationship. It was also a major factor in enabling the AFGWU to meet the difficult problems of the 1890's successfully. The relationships and principles evolved in this decade contributed substantially to the excellent record of constructive collective bargaining which the pressed and blown glassware industry has established.

In many of the glass houses of the 1890's management was introducing labor-saving machinery, a development which threatened the jobs of AFGWU members. Annealing lehrs replaced the slower annealing ovens just before 1880. Then during the 1880's use of natural gas swept the industry. Continuous melting tanks, first used in the United States in 1879-1880, rapidly replaced glass pots until by 1898 they provided 49 per cent of the country's active melting capacity.

Not less important was a series of glass-forming machines and devices. Among the first was the Arbogast semi-automatic machine developed in 1882 and used in the 1890's on vaseline and Mason jars. The Neville reversible mould and the Ashley bottle machine entered the industry around 1894 or 1895. By 1898 Ball Brothers in Muncie, Indiana, had semi-automatic machines at work on fruit jars. That year the revolutionary Owens machine invaded the lamp chimney field. Records show only twenty semi-automatic machines in the

³ George Dougherty (former vice president of the NAMPBG) to author, September 3, 1952. For a slightly different version, see Warren C. Scoville, "Growth of the American Glass Industry to 1880," *Journal of Political Economy* (Chicago, 1892-), LII (1944), 353.

glass industry in 1897, but this number had increased to eighty by 1900.⁴

Although these machines displaced craftsmen and were a source of grave concern to AFGWU officials, their impact must be viewed in perspective. Pearce Davis reminds us: "Despite widespread and far-reaching mechanization, the craftsmen specializing in the manufacture of pressed and blown glass products fared better than those in the window-glass and glass container branches of the industry. This condition rested upon the importance in this field of special products, small-lot output, and variation in quality and design. Had it not been for these factors the magnitude of displacement of labor would have been comparable to that which took place in container manufacture."⁵

These technological improvements were significant also because they gradually erased the jurisdictional line between the AFGWU's prescription ware department and the union's rival in the bottle industry, the United Green Glass Workers Association, known after 1896 as the Glass Bottle Blowers Association. The AFGWU members traditionally had worked high quality flint glass from covered pots, and the GBBA blowers had worked lower quality green glass from uncovered pots. The new continuous tanks produced good quality glass at lower cost and gradually displaced both covered and uncovered pots. Possibly because the higher quality flint glass had been able to bear higher rates, the AFGWU prescription department's wage lists had always been higher than those of the GBBA. As a result of these wage differentials, new orders began to drift toward the GBBA plants which could quote lower prices. Or, as at Elwood, Indiana, the GBBA moved into plants which formerly recognized the AFGWU.⁶

The semi-automatic forming machines further complicated the jurisdictional picture. The AFGWU's pressed ware department claimed all pressed work, even bottles pressed and blown by these new machines. The GBBA, in turn, argued

⁴ T. W. Rowe, *Souvenir History of the American Flint Glass Workers' Union* (Toledo, 1910), 61, 80; George E. Barnett, *Chapters on Machinery and Labor* (Cambridge, 1926), 68-69; *AFGWU Convention Proceedings* (1895), 59. The material for this article has been drawn in large part from union proceedings of the period.

⁵ Pearce Davis, *The Development of the American Glass Industry* (Cambridge, 1949), 239-40.

⁶ *AFGWU Proceedings* (1893), 48.

that all bottles, however formed, should fall under its control. As a result, members of both unions operated the machines in some plants, such as the Ball Brothers' factory at Muncie. Ball Brothers apparently preferred the AFGWU despite the fact that they had dealt with the GBBA for years, because they feared that the GBBA had not really accepted the new machinery.⁷

Blurring of the jurisdictional line between the AFGWU and the GBBA spurred rivalry between the two organizations. Throughout most of the 1890's the two unions attempted to work out either an outright amalgamation, or at least a compromise solution of their jurisdictional disputes. By the end of the decade, however, rivalry had turned to open warfare.

Cutthroat competition in the glassware industry was another factor threatening the AFGWU. When the depression of 1893 greatly intensified this competition, the union was placed in a critical situation. It had gathered together the great majority of the skilled workers of the industry. Through its resulting strength, it had forced upon the organized employers a series of restrictive practices which were now placing them at a severe competitive disadvantage.

The AFGWU had based its program upon a tacit assumption that there was a given "lump of labor" to be done. The union pressed for shorter hours, higher wages, and production restrictions as if the employers' markets were assured—the consumer would buy without regard to price. Now this easy assumption was sharply challenged. The AFGWU eventually was forced to begin its retreat from restrictionism toward a philosophy of high productivity.

The union's first reaction, however, was to fight back at the forces hemming it in. The union tried the traditional organize and strike tactics and when they failed, turned to weapons employed by the aggressive capitalists of the day. Only reluctantly did the union move toward a more conscious partnership in production with the employers. The measures proposed and those put into effect by the AFGWU and the organized glass houses in order to meet the challenge of the non-union plants form a fascinating pattern of shrewdness, naivety, and resourcefulness. The forces threatening the

⁷ Barnett, *Chapters on Machinery and Labor*, 75-76.

AFGWU, the union's maneuvers against the unorganized plants, especially those in the gas belt of Indiana and in the Ohio Valley, and the results of these efforts provide the material for this article.

Competition throughout the glass industry was strong, but for the organized employers bound by numerous union restraints, it was severe.⁸ In the east, the competition of the former union plants in Rochester, Pennsylvania, and Cumberland, Maryland, was the greatest cause of alarm. The manufacturers claimed in 1892 that the Rochester plant had an advantage of 20 to 30 per cent in costs. In the same year the union admitted that three-fourths of the punch tumbler work of the country was done in nonunion houses. A union prescription ware committee, investigating nonunion firms, reported in 1895 that they were working from 40 to 50 per cent below the union wage list. Statements made by President Smith of the AFGWU and Vice-President D. A. Hayes of the GBBA in 1896 indicate that the nation's bottle blowers were then roughly divided, one-third nonunion, one-third GBBA, and one-third AFGWU. Bottle blowers constituted somewhat less than one-third of the AFGWU's membership. Nearly all of the GBBA members, however, were bottle blowers.⁹

Furthermore, the nonunion houses often operated new machines which the union accepted in its plants only very reluctantly, if it did not oppose them.¹⁰ It should be noted, however, that even the nonunion houses suffered from strikes and opposition to technological improvement. The *Commoner and Glassworker*, prominent labor weekly of the day, reported in 1896 that the Rochester Tumbler Works' employees had struck against a 20 per cent wage cut, but still refused to join the AFGWU.¹¹ And when the same house introduced advanced machinery in 1898, "the men and even the man-

⁸ *Commoner and Glassworker*, September 9, 1893. This newspaper is now very rare. Files covering the entire period of this story are available only in the Carnegie Library in Pittsburgh.

⁹ AFGWU *Proceedings* (1892), 43-45, 51; *Ibid.*, (1895), 38-42; *Ibid.* (1896), 37; Barnett, *Chapters on Machinery and Labor*, 83.

¹⁰ Barnett, *Chapters on Machinery and Labor*, 73-74; AFGWU *Proceedings* (1896), 66, 143. In fairness it should be emphasized that the union leaders, especially W. J. Smith, saw the folly of opposing new machines and urged their acceptance and control. See, for example, AFGWU *Proceedings* (1895), 59-61.

¹¹ *Commoner and Glassworker*, September 5, 1896.

ager . . . were said to be against the use of the machinery and were not making any particular effort to fully test its merits."¹²

Under the pressure of sharp price competition, the firms in the flint glass industry made several attempts in the 1890's to merge competing companies or set up cartels which would limit price cutting.¹³

The first notable effort produced the United States Glass Company in 1891.¹⁴ This organization brought together a large number of tableware factories in what the union, and at least some rival manufacturers, viewed as an attempt to monopolize the industry. By 1893 the "glass trust" was co-operating with other employers in the American Flint and Lime Glass Manufacturers Association to hold up prices. Four years later the president of the nonunion Rochester Tumbler Works met with other glassmen, union and nonunion, and expressed his willingness to stand by any price mutually agreed upon. In 1898 the tableware firms began work on a combination to be called the United Glass Manufacturers' Association. Their efforts culminated instead in the formation of the National Glass Company in 1899. This organization was capitalized at \$4,000,000.00 and included nineteen plants with approximately one-half of the industry's capacity.

In the bottle industry the Western Bottle Glass Manufacturers' Beneficial Association was in operation in 1887. At that time its representatives agreed with one glass union (possibly the GBBA, but probably the AFGWU's prescription ware department) to compel factories and workers not yet organized to join their respective organizations.¹⁵ Ten years later the National Association of Flint Bottle Manufacturers was formed to draw the entire trade together and establish

¹² *Ibid.*, May 21, 1898.

¹³ The following history of the attempts at merger is based on the *AFGWU Proceedings* of 1893, 1894, and 1895, and the *Commoner and Glassworker*, issues of August, 1893, through May, 1899.

¹⁴ *Moody's Manual of Investments: Industrial Securities* (New York, 1950), 1316.

¹⁵ George Dougherty, former vice president of the NAMPBG, believes that it was the GBBA. However, he also believes that the National Association of Flint Bottle Manufacturers was an outgrowth of the Western Association. Inasmuch as the AFGWU had jurisdiction over flint glass bottles in those years, I believe that the union involved was probably the AFGWU. Furthermore, the union refers to a "Western Flint Bottle Association" dealing with the prescription department in 1893.

uniform, and higher, prices. Apparently it was successful for at its December, 1897, meeting in Indianapolis the officers reported that practically all union and nonunion bottle concerns had joined. The association secured options on many flint bottle houses in the Ohio Valley and in 1898 filed incorporation papers in New Jersey on a unit reputed to include 90 per cent of the country's production.

The attempt to bring the lamp chimney firms together was less successful. In March, 1899, options were gathered looking forward to a combine, but by May the effort had been abandoned.

In no area was the price competition as sharp or the fight between the AFGWU and the nonunion glass houses as bitter as in the gas belt of Indiana. The glass industry in this state had mushroomed from four houses in 1880 to twenty-one in 1890 and would go to 110 by 1900, as Table 1, page 230, shows. The union recognized the importance of the struggle going on in the area by bringing its annual convention to Marion in 1893 and to Muncie in 1899.

The discovery and use of natural gas in Findlay, Ohio, had stimulated drilling in Indiana. The state's first high-pressure well was brought in near Portland in 1886. A "natural gas craze" almost immediately swept the state. Between 1886 and 1897, 5,400 live gas wells were drilled. Of these 2,800 had been abandoned by 1897, but 219 companies were still furnishing natural gas to the public.

The Indiana gas field, the largest possessed by any state, covered from 2,500 to 5,000 square miles, centering around Anderson. Seventeen counties produced gas in paying quantities.¹⁶ Of these, the major gas producing counties became known as the gas belt,¹⁷ and Marion, Indiana was named its "Queen City."

"With the discovery of gas, there was a rush to create

¹⁶ W. H. Smith, *History of Indiana* (2 vols., Indianapolis, 1897), 676-77; Indiana Writers' Project, *Indiana, A Guide to the Hoosier State* (New York, 1941), 90; Logan Esarey, *A History of Indiana* (2 ed., 2 vols., Indianapolis, 1918), II, 911-12; Julia H. Levering, *Historic Indiana* (New York, 1909), 487. See also, Margaret Wynn, "Natural Gas in Indiana," *Indiana Magazine of History* (Bloomington, 1905-), IV (1908), 31-45.

¹⁷ Grant, Howard, Tipton, Hamilton, Madison, Delaware, and Blackford counties are included in the gas belt both by Esarey, *A History of Indiana*, II, 912, and by the *First Biennial Report of the Bureau of Statistics, Indiana* (1885-1886), x-xi. Esarey would add Hancock, Henry, and Rush counties; the Bureau, Jay and Randolph counties.

new towns and to bring in new industries," according to James Morrison, prominent AFGWU leader. Offers of free gas, free land, free railroad switches, and tax remission were made. In eleven cities and towns gas was offered free to industry; in others it was offered at nominal prices.¹⁸ "Manufacturers of all sorts flocked to a territory where free fuel was offered to all comers."¹⁹ In many sections real estate values doubled within a year after the discovery of gas. By 1889-1890 the state counted 162 new factories, over nine and one-half million dollars of new capital, and more than 10,000 workers in the new plants.²⁰

Possibly the most important of the new industries was the glass industry. The boom of the 1890's made Indiana second only to Pennsylvania in the production of glass. Of the sixty-two Indiana glass plants operating in 1895-1896, the fifteen bottle houses, six fruit jar factories, and ten plants producing miscellaneous ware were of concern to the AFGWU. Prominent among these firms was the Ball Brothers Company of Muncie. Others included were the Pennsylvania Flint Glass Company, Anderson; Swayzee Glass Company, Swayzee; Depauw Glass Company, New Albany; Maring Hart Company, Dunkirk; Leader Glass Company, Yorktown, and firms, for which no names are available, at Ingalls and Red Key. All of these later firms were operating nonunion in 1895.

During this period in Indiana, Morrison recounted when writing for the Glass Container Manufacturers' Institute years later, a great amount of whiskey was being sold over the bar in take-out bottles. Saloon keepers would buy whiskey by the barrel, dilute it with water, then sell it in short capacity take-out bottles, known as jojo, picnic, or shoofly flasks. "Eight newly formed bottle companies, backed by local capital obtained from farmers and small businessmen engaged and specialized in making these short capacity flasks.

"These factories operated without regard for the union. Little blowing skill was required as most any quality would pass muster. Young men from the farms, from the pool rooms, and the corner drug store were brought in and in a

¹⁸ James Morrison, manager of the AFGWU flask factory, in an unpublished manuscript entitled, *Indiana Gas Belt, 1885-1920*, (written at the request of the Glass Container Manufacturers' Institute), 1.

¹⁹ Levering, *Historic Indiana*, 487.

²⁰ *Third Biennial Report of the Bureau of Statistics, Indiana (1889-1890)*, 6.

short while were full fledged flask blowers, for which they were paid about fifty per cent of the union wage rate."²¹

Labor for these plants was also drawn from among young workers in union glass factories in Ohio and other glass producing states. Some of these men were disgruntled because they felt that the AFGWU's strict apprenticeship laws kept them from becoming craftsmen. The gas belt houses hired these men because their experience, even though limited, was valuable. Immigrant boys from south Indiana were drawn in. Child labor was employed extensively.²² Still other workers were former members of the AFGWU, outside its ranks because they were unable to find work in organized plants, or had been suspended or expelled. All of these groups were hostile to the union and willing to accept rates far below the union scale. As a result, the nonunion firms were able to sell their flasks through jobbers at prices 15 to 20 per cent below those quoted by the unionized plants.²³

The nonunion firms had three outstanding advantages over the organized companies. First, as has been stressed, they paid lower wages, sometimes 40 per cent or more below the scale. Second, they were not burdened by union-enforced limitations on output (known in the industry as "limited turn work"), Saturday afternoons off, observance of strict craft lines in production, and the many other restrictions which made the life of the union workers easier and the costs of their employers higher. Finally, the nonunion houses worked the year around, not halting for a summer stop of six to eight weeks to spare their workers during the hot weather. And glass factories were almost unbearably hot in the summer months in those years before modern fans and ventilation.

The union's officers were aware of the advantages held by the unorganized factories and were determined to offset them. The most obvious method of bringing these firms under control was to organize their workers and this the AFGWU tried to do. One of the major efforts in the east centered

²¹ Morrison, *Indiana Gas Belt*, 2.

²² Virgil M. Simmons (ed.), *Indiana Review, The Story of the State of Indiana from its Beginning and a General Survey of Progress to the Present* (Indianapolis, 1938), 274.

²³ John M. Levis, treasurer of Illinois Glass Company, to James Morrison at Summitville, February 19, 1901, quoted in *AFGWU Proceedings* (1901), 139-41.

about the Corning Glass Works, Corning, New York, a firm that had long resisted organization. The union went on strike at this bulb producing plant late in 1890. Seizing the opportunity thus presented to enter the electric light bulb industry, the Libbey Glass Company of Toledo leased an old Findlay, Ohio, plant and hired a large number of the Corning strikers to man it. The move was successful for the company, but marked with tragedy for the men. When the strikers who had been hired were returning to Corning in the 1891 summer stop period, a freight plowed into the rear of their train as it waited in Ravenna, Ohio, killing eighteen men and injuring twelve.²⁴ The union's efforts were spurred by this disaster but the strike was eventually lost.

In the west both the AFGWU and the GBBA acted energetically to organize the rapidly expanding glass industry of Indiana. Partially as a result of their activity, the wages paid to skilled glass workers were among the highest in the state; indeed, only skilled tin plate workers exceeded them in 1895-1896.²⁵ Over the decade, as economic conditions improved, their organizing efforts met with considerable success except among the small flask plants. By May, 1899, the AFGWU had fourteen locals in ten Indiana cities (Albany, Alexandria, Anderson, Elwood, Frankton, Gas City, Greentown, Marion, Muncie, and Summitville) with 1,506 members. The GBBA had seven locals in as many cities (Albany, Fairmont, Gas City, Marion, Matthews, Muncie, and Upland) and 393 members. There were also six other glass unions, concentrated mainly in the window glass industry.²⁶

As part of its organizing drive the AFGWU held a "social session" for union and nonunion men in the Anderson, Indiana, opera house in June, 1899. Representatives of all the nonunion plants were present to hear Mayor Sam "Golden Rule" Jones of Toledo, and President W. J. Smith of the AFGWU. These efforts under the direction of AFGWU organizer Thomas W. Rowe were so successful that the *Commoner and Glassworker* reported: "The men in every non-

²⁴ Rowe, *Souvenir History of the American Flint Glass Workers' Union*, 54-57.

²⁵ *Sixth Biennial Report of the Bureau of Statistics, Indiana* (1895-1896), 225.

²⁶ *Eighth Biennial Report of the Bureau of Statistics, Indiana* (1889-1900), 157-74.

union factory in the 'gas belt' have been organized and many of the largest firms are now on the point of signing the union agreement." These plants were not to be won without a struggle, however. At Lapel the townsmen sided with the employer when the union struck for recognition and even attacked a local hotel with stones and bullets when two strikers were found there. Furthermore, the organizing campaign resulted in lockouts in Dunkirk, Hartford City, Middletown, Millgrove, and Parker.²⁷

The situation had been far less encouraging for the AFGWU earlier in the 1890's especially in the flask houses. James Morrison contends that in the earlier years, "the union attacked the situation by the traditional 'organize and strike' method, but it soon found that the 'flaskeries' could bring in new recruits from the farms and pool room as fast as the old ones could be persuaded to join the union and strike. The union also soon found that it was taking into its membership a mass of poorly trained bottle blowers faster than it could absorb them."²⁸

In all sections during the early 1890's the AFGWU production restrictions by themselves would have made the non-union employers resist them. And its attitude toward non-unionists, foreigners, and the unskilled workers made it difficult to win over the employees. For instance, Summitville, Indiana, men who had scabbed complained that when they wanted "to do the right thing" union members as a rule "forced them to the wall by refusing to work for them or with them."²⁹ Furthermore, as the depression of 1893 struck and grew worse and the union became involved in a major strike against the United States Glass Company, the AFGWU had less money to spend on organizing and in supporting strikes. Nonunion workers became more reluctant than ever to endanger their jobs by union activity. Finally, the organizers were occasionally confronted by yellow dog contracts and threats of arrest (or actual arrest) for conspiracy. As a result the organizing campaigns of the early 1890's lagged. New methods were needed.

The most effective measures, other than organization, available to meet nonunion competition were wage reductions

²⁷ *Commoner and Glassworker*, June 10, 24, July 1, 1899.

²⁸ Morrison, *Indiana Gas Belt*, 3.

²⁹ *AFGWU Circular*, August 18, 1893.

and relaxation of production restrictions in unionized firms. If production conditions were equal, or nearly so, the unionized employers could hold their own, for they readily admitted that the union members were more skilled than the workers outside the organization.³⁰ But union members were most reluctant to take such steps. The wages and rules in question represented to them the product of a long, hard struggle.

Nevertheless, the union finally recognized the necessity for making concessions to meet competition and maintain employment. The union insisted on a full investigation before accepting a change, however, as was illustrated by the joint action of the union and the employers in sending Vice President Thomas W. Rowe to Europe in 1902 to investigate the competition of foreign-made light bulbs.

Once it was decided that the employers needed help, the union had a wide choice of action. Relief might be given by establishing special low wage rates, increasing moves (i.e., standards of output), employing a sliding scale of wages, removing output limitations, working the summer stop, or in other, less important, ways.

From the point of view of the national officers a first step was to keep the bargaining committees from making demands on the employers which would make the situation even worse. President Smith had continually pleaded for moderation. In 1891, for instance, he told the convention: "Indeed, it is not impertinent to say here that the demands of nearly all our departments should be reasonably modified, or the AFGWU will be caught in the position of an animal that crept into a hole barely wide enough to admit him in search of plunder, and having found it, gorged himself so full that he could not get out again, and was caught."³¹

One of the major early concessions came in 1890 after a study of the rate structure and methods used by the Cumberland Glass Company of Maryland. In this case, in the punch tumbler branch of the paste mold department, prices were lowered, piece work was substituted for turn work and output was increased, but the better working conditions enjoyed by the Cumberland Company's nonunion workers were insisted upon.³² These changes temporarily helped the

³⁰ *AFGWU Proceedings* (1894), 56.

³¹ *Ibid.*, (1891), 24.

³² *Ibid.*, (1890), 32.

employers and enabled the union members to continue at work, and even improve their earnings.

The relief was short-lived, however, and the punch tumbler workers were forced to accept the unlimited system in 1892 with results that "far exceeded the anticipation of success," as Secretary William J. Dillon told the 1893 convention meeting in Marion. "It will be remembered that the nonunion houses controlled this trade prior to the past year."³³

In 1893, in the midst of the depression and prodded by "fierce competition," the tableware manufacturers led by the United States Glass Company demanded relief. They wanted to abolish the arbitrary summer stop rule, remove the limit on moves in the pressed ware, iron mold, and paste mold departments, and equalize moves and wages for tumblers and beer mugs in union and nonunion houses. Despite the strenuous efforts of the union's national officers, first the departmental members and then the entire union membership voted against making substantial concessions. In disgust, the United States Glass Company locked out 1,500 men in twenty-four locals including Local 97 in Gas City, Indiana. Thus began a lockout-strike which lasted nearly four years, permanently crippling the company and badly injuring the union.³⁴

The other manufacturers soon deserted the United States Glass Company and formed a new organization, the National Association of Manufacturers of Pressed and Blown Glassware, to resume relationships with the union. To these employers, as will be seen, the AFGWU gradually conceded the unlimited system, which had been the chief cause of the great strike, and other changes. In 1896 the union applied a sliding scale of wages to common jelly tumblers with conspicuous success.³⁵ The next year union officials suggested extending this system to other strongly competitive items, but the members refused and later even tried to remove it from tumblers.³⁶

The employers persistently demanded unlimited piece work. The national officers agreed whenever competition was very strong, but opposed not only unlimited piece work, but even production beyond the move (standard) on limited

³³ *Commoner and Glassworker*, July 15, 1893.

³⁴ Rowe, *Souvenir History of the American Flint Glass Workers' Union*, 62-65.

³⁵ J. W. Blum, *National Collective Bargaining in the Flint Glass Industry* (unpublished doctoral dissertation, Princeton, 1934), 42, 283.

³⁶ *AFGWU Proceedings* (1897), 54-55; *Ibid.* (1901), 45, 318.

turnwork when competition was not vigorous. Thus President Smith in 1896 argued that production beyond the move did not increase the workers' pay, under the prevailing system, but did make it difficult for older workers to meet the higher standards which inevitably resulted. Furthermore, "the greatest evil of . . . [producing more than the limited move] . . . would fall hardest upon the younger members of the trade, for by increasing the output of each shop one-fifth, it is as clear as day that the opportunities of work in that factory are reduced in the same proportion."³⁷ Smith was obviously making the questionable "lump of labor" assumption of a set amount of work to be done, not affected by wages or prices.

Under this constant pressure from the employers and the union leaders, various departments did relax output restrictions as the decade wore on. The pressed ware department accepted the unlimited basis of production in 1897 in exchange for the manufacturers' agreement to divide work among union members during slack periods and to provide their workers the better conditions prevailing in nonunion houses. (The nonunion firms had made great efforts to provide conditions which would enable their workers to increase output, and thus spread their overhead costs over more units. The organized houses, faced with limited turn work, had had less financial incentive to make production easier for their workers and had allowed both equipment and working conditions to deteriorate.) The iron mold department removed output limits in 1898 and 1901.³⁸

The manufacturers argued vigorously for relief from the union's summer stop rule. President Smith agreed that, "while union houses are closed, non-union houses are in operation and taking the trade."³⁹ The issue became so heated that in 1894 Smith declared that it was "no exaggeration to say that the peculiar arrangement of the summer stop period has done more to foster the growth of non-unionism than all other causes combined."⁴⁰

The different departments occasionally consented to work

³⁷ *Ibid.* (1896), 58.

³⁸ *Commoner and Glassworker*, March 19, 1895; *AFGWU Proceedings* (1897), 24-25; *Ibid.* (1902), 18.

³⁹ *Commoner and Glassworker*, July 15, 1893.

⁴⁰ *AFGWU Proceedings* (1894), 33.

through the summer stop in response to special pleas. More often, they rejected such requests, even when their refusal meant real hardship for their employer. The Pendleton Bottle Company of Pendleton and the Sheldon-Foster Glass Company of Gas City, for instance, had such requests denied in 1895.

The various departments at times did allow the individual manufacturers to select the six or eight-week period for the summer stop. However, this practice led to conflict between crafts making similar ware. When one department was out and the employer needed its type of ware, he would ask a related department which was still working to make it. The regular department, fearing a loss of work, quite naturally would protest vigorously.

Most interesting of the programs proposed or employed by the union are those modeled on the business practices of the period—measures used with success by corporations.

Beginning in 1894 and continuing for several years, the union placed a full-time man in the field to persuade dealers to favor union-made ware over nonunion. William Beck of Anderson, Indiana, held the post for several years. This union “salesman” developed the effective technique of taking a representative of the local AFL central labor union with him as he called on the dealers of each locality. In 1897 the bottle manufacturers and the prescription department set up a committee to study use of a union label.⁴¹ As a result, in 1898 the union inaugurated the practice of placing a union stamp on bottles to assist the agent in his efforts.

Failing to organize many of the nonunion houses and yet suffering from their competition, the union sought a way to drive them out of business. This method of aggressive capitalists could be employed by unions as well as corporations. In 1887 the union had taken stock in a Sharpsburg, Pennsylvania, plant “to hold factory from scabs.” In 1895 the prescription department resurrected this idea and urged the union to buy up the “paper” (promissory notes) of small Indiana gas belt concerns and refuse to extend the loans when they fell due, unless the firm accepted the union. The scheme was dropped, however, when the officers found that the amount of paper outstanding was boundless.⁴²

⁴¹ *Commoner and Glassworker*, August 14, 1897.

⁴² *AFGWU Proceedings* (1887), 37; *Ibid.* (1895), 211; *Ibid.* (1896), 23.

Many members urged the union to establish a producers' co-operative to combat the unorganized plants. At the 1896 convention there was a strong movement for one. When the rumor spread that the AFGWU was planning to build a factory, representatives of Swayzee, Indiana, asked that Swayzee be considered as the site. They claimed, "we are situated in the best part of the natural gas belt, and can give your people splendid inducements to locate at our place." The plan was rejected, however. Two years later, with support of the president, a resolution for a co-operative passed, but a specific plan to establish "The Co-operative Flint Glass Workers' Manufacturing and Distributing Association of America" was defeated. A profit-sharing scheme to assist union firms (and their workers) which did not have the machines, was also rejected. The same year the president suggested that the union, alone or with organized employers, buy up the Owens machine.⁴³ But, again, nothing was done.

The bounty system of fighting nonunion competition in the Indiana gas belt and elsewhere got beyond the discussion stage. This unorthodox idea was first presented by President Smith in 1889. Under his plan, as described by Morrison, "the union would pay to any manufacturer employing its members an amount that would equal the difference between the union rate of pay and that paid by the 'flaskeries' on any order taken at competitive prices for jojo, picnic, and shoofly flasks."⁴⁴ The bounty would enable workers to receive the union scale, part from the employer, and the remainder from the union. The employer in turn would have lower costs, and therefore could cut his prices and possibly drive his nonunion competitors out of business. This method would be as effective as a strike, and cheaper, Smith argued.⁴⁵

After much hesitation the program was tried in 1893 in the midst of the depression. From November, 1893, to March, 1895, the union paid out \$7,233.00 in bounty to eighteen bottle companies and five men, who may have been representatives of these or of additional companies. Of the firms listed as receiving the bounty, only one, the Anderson

⁴³ *Ibid.* (1896), 170-71, 186-87; *Ibid.* (1895), 25, 26, 50, 191, 225, 241; *Ibid.* (1898), 54.

⁴⁴ Morrison states that the plan grew out of a discussion between him and Smith. See Morrison, *Indiana Gas Belt*, 3.

⁴⁵ *AFGWU Proceedings* (1889), 31-32.

Flint Bottle Company, was located in Indiana.⁴⁶ The measure apparently strengthened the unionized firms against their unorganized rivals. Furthermore, it aided the union's tableware department in its strike against the United States Glass Company, which was then in progress. At the end of a summer stop in the midst of this strike, a move was made by the employers to get the bottle houses to support the United States Glass Company. However, some of the bottle producers had already started under the bounty system and the others, fearing their competition, rejected the alliance.

President Smith believed that the bounty was effective. James Morrison, superintendent of the union's flask plant, insisted in 1901 that in all but one instance the money went into the private pockets of the recipients and was used to lower prices.⁴⁷ Thomas W. Rowe, later president of the AFGWU, and still later a high company official, contended that the gap between the union and nonunion wages was too great to be closed by the bounty. When writing about the project in later years, James Morrison revised his earlier estimate. He stated then: "This plan, for a time, looked as if it might work, but the rank and file of the AFGWU membership loudly protested that they would not allow any of their hard-earned money which was paid into the union as dues to be paid to any employer. Even though it was easy to demonstrate that the bonus plan would cost the union less than the traditional 'organize and strike' plan, the bonus plan had to be abandoned."⁴⁸ Morrison's later appraisal seems sound for a period of depression in which most strikes were doomed to fail.

Most unusual of all the union's programs was the establishment of a flask plant in the gas belt. This project was sanctioned by the 1899 national convention held in Muncie, to help the prescription department against the fierce competition of the unorganized flaskeries. At the time, the AFGWU was working desperately to keep its prescription workers from going over to the GBBA, which was gradually taking over the bottle business. The agitation in the prescription department was undoubtedly a major factor in leading the AFGWU into this venture.

⁴⁶ *Ibid.* (1894), 123-39; *Ibid.* (1895), 110-16.

⁴⁷ *Ibid.* (1901), 146.

⁴⁸ Morrison, *Indiana Gas Belt*, 3.

By October, 1900, the union had a twelve-ring furnace in operation in Summitville, Indiana. The factory had cost \$12,000.00 and had been located in Summitville to take advantage of a free gas well, factory site, and railroad switch offered by the community.

The union flask plant paid the full union scale and sold much of its ware through the Illinois Glass Company. This firm operated the nation's largest union flask factory in Alton, Illinois, and was also the most important jobber-customer of the nonunion houses. The Illinois Glass Company in 1901 undertook to resell the Summitville flasks in such a way as to help the AFGWU force the nonunion factories into some kind of agreement to pay union wages and maintain prices which would permit union houses to make a profit.⁴⁹

The "scab houses," Morrison declared, made ". . . very small or no profits due to the intense competition between the flaskeries for the business and jobbers dealing in saloon supplies." The idea behind the union plant "was to keep the prices of flasks so low that there would be no profit and discourage new capital from venturing into [the industry]. It was understood that the plant would lose money but that the loss would be less than that required to pay strike benefits which would have to be done under the 'organize and strike' plan." Furthermore: "The flask blowers employed at Summitville were strikers from the 'flaskeries' and their employment at Summitville made of them dues payers instead of receivers of strike benefits."⁵⁰

Superintendent Morrison appears to have managed the union plant efficiently; however, it lost money because it paid union wages, but sold its ware below nonunion prices. The union claims that operation of the factory discouraged the building of at least five new nonunion plants, and was a factor in forcing seven of eleven flask-producing firms in the area to close, one firm to reduce operations greatly, and the remaining three to limit their production. The *Commoner and Glassworker* agreed that, "the purpose of the factory was successful, at least to a certain extent. . . ."⁵¹

The *National Glass Budget*, a management journal of the

⁴⁹ AFGWU *Special Convention Proceedings* (1899), 15-20; AFGWU *Proceedings* (1901), 79-80, 136-141.

⁵⁰ Morrison, *Indiana Gas Belt*, 4.

⁵¹ AFGWU *Proceedings* (1901), 143-45; *Commoner and Glassworker*, October 18, 1902.

period, was very critical of James Morrison and the flask factory. His salary, his expense account and traveling, as well as the project, came in for censure. The following quotation from the *Budget* reflecting the attitude of many nonunion employers, suggests that the plant had hurt its opponents. "Not only has [James Morrison] served a term in the Indiana legislature, but he has managed a strictly union whiskey flask factory for nearly a year, and sold its product at any sort of a scab price he could get in order to take business away from regularly established glass firms who preferred to run their business independent of union control."⁵²

Despite this success, as the 1901 summer stop approached, Morrison became fearful that some of the nonunion houses would take advantage of the lull in the union factory to reopen. Furthermore, the union leaders and employers noted that the nonunion firms which had reduced production of bottles had turned to other lines where their competition was now being felt. Disregarding these troubles, the pressed ware department that year asked for a union factory to make tumblers, if a satisfactory agreement with its employers could not be reached.⁵³

The union's flask plant was doomed, however. In 1901 the great bulk of the prescription department finally left the AFGWU and went over to the GBBA. By 1902 the AFGWU had a prescription department in name only and discontinued the production of flasks. The fight against the "flaskeries" was no longer its fight. These firms did not last long, as Table 1, page 230, suggests, for "the gas field was a shallow one, and the supply diminished rapidly and the boom atmosphere died out."⁵⁴ A supply of gas which might have lasted a century if carefully used had been "squandered in less than 15 years."⁵⁵

Against the advice of the union's new president, Charles Voitle, the flask plant was reopened in 1902 as a training school for bottle blowers to be used by the AFGWU in its growing jurisdictional battle with the GBBA. In June, 1903,

⁵² *National Glass Budget*, June 1, 1901.

⁵³ *AFGWU Proceedings* (1901), 319.

⁵⁴ Morrison, *Indiana Gas Belt*, 3-4.

⁵⁵ Indiana Writers' Project, *Indiana, A Guide to the Hoosier State*, 90.

however, fire destroyed the plant and saved the union from further embarrassment.

The economic pressures brought to bear on the AFGWU during the 1890's forced the union to supplement its traditional tactics with unorthodox methods. The AFGWU found itself waging a bitter fight against the formerly unionized United States Glass Company, but co-operating closely with other organized employers by the use of subsidies, union glass "salesmen" and the union label. The fight against the nonunion houses, especially those in the Indiana gas belt, which endangered both the organized firms and the jobs of union members, even led the union to set up its own flask plant.

The AFGWU was forced to start relaxing the numerous production restrictions it had built up in its militant first years. The movement thus begun eventually would eliminate almost entirely limited turn work and the long arbitrary summer stop. And in the 1890's, in a few cases, even wages were reduced.

When prosperity returned, the AFGWU again launched organizing drives which added thousands to its membership. The more unusual methods of fighting nonunion firms were laid aside. But this successful transition was due, at least in part, to the greater freedom which the union now offered its potential members and their employers.

The AFGWU had survived a bitter struggle against numerous nonunion plants, the United States Glass Company, the depression, technological change, and even the GBBA. It had maintained relations with the employer associations in its field and continued to build a mature collective bargaining system. The leaders and members had seen something of the fallacy of the "lump of labor" theory and the value of making the necessary concessions to enable their employers to continue in business and supply jobs. In the future they would make many more concessions in return for additional wage and hour benefits. The employers, in turn, had developed a high regard for the AFGWU's responsibility and resourcefulness. Out of such mutual understanding and respect a healthy bargaining relationship could, and did, continue to grow.