

PAPERS FROM THE HISTORY SEMINAR OF
KALAMAZOO COLLEGE

NO. 8. KALAMAZOO'S INDUSTRIES AND NON-MILITARY ACTIVITIES DURING WORLD WAR I

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CHAPTER I

INDUSTRY IN KALAMAZOO, 1917-1921

On April sixth, 1917, the United States entered World War I. Every community in this vast and resourceful country was shocked. Many important problems arose and Industry had the immense task of supplying military and civilian material. Kalamazoo was by no means different from all other communities, for it had its many tasks too. The problem of labor was serious and those companies in Kalamazoo who desired to run a third shift found it very difficult to find sufficient labor. There were no employment agencies at this time, and employers had no direct method of obtaining large groups of labor. Many women were called into factories to do the work which best fitted their sex.

Not only was labor in serious demand but other factors seriously hindered the industries of Kalamazoo. On January eleventh, 1918, Charles Garfield of the National Fuel Commission ordered the Standard Paper Company and the Western Board and Paper Company to close from seven a.m. Saturday to seven a.m. Monday. By December ninth, 1919, fifty-four major companies and one hundred and six minor companies in Kalamazoo had laid off eight thousand men because of the lack of coal.¹

¹The Kalamazoo Gazette, Kalamazoo, Michigan, January 11, 1910.
(Will be referred to as Gazette in future references).

1914, 1915 and 1916 were the serious years for Kalamazoo industry. They did worse than stand still. They went backwards. This condition existed until the latter part of 1916¹. In 1917, Kalamazoo was given first place in America for producing paper tonnage. The seventeen local paper companies employed 1,765 workers in 1917. This figure showed a vast gain in employees, but outside of this field other companies were making vast gains in labor and production. This gain was noted particularly in the Clarage Fan Company, the Harrow Spring Company, the Acme Universal Joint Company, the D'Arcy Spring Company, the Goodale Company, the Gibson Mandolin Company, the Riverside Foundry, the Reed Foundry, Fuller and Son Manufacturing, and the Kalamazoo Sled Company².

In 1916-1917, Kalamazoo industries were augmented by the Barley Motor Car Company, the Kalamazoo Malleable Iron Company, the Gerline Brass Foundry, the Kalamazoo Sanitary Company, the National Corset Company, the Limousine Top Company, and the Sutherland and Rex Paper Companies³.

In December of 1919, three large industrial companies planned industrial expansion. They were the Clarage Fan Company, the Birmingham and Prosser Company and Fuller and Son Company. The Clarage Fan Company was to double its foundry department, making two additions, one 28'x170' and the other 76'x66'. This expansion would

¹Ibid, March 30, 1919

²Ibid, loc.cit.

³Ibid, loc.cit.

make its foundry space close to 25,000 square feet. Also the company planned to build a cupalo and a new foundry office 50'x86'. The company which had at that time three hundred and sixty-six employees expected to employ at least one hundred more persons¹

The Bermingham and Prosser Company, the largest wholesale paper company in Kalamazoo, planned to build a new warehouse. The site chosen and purchased was 60'x330' and located at the intersection of Frank Street and the Chicago-Kalamazoo and Saginaw Railroad Tracks. The building planned covered an area of fifty thousand square feet.²

The D'Arcy Spring Company of Kalamazoo had government contracts during the war. The contracts called for springs for army cots and twelve tiny springs used in machine guns. Outside of the government contracts, the company was manufacturing auto spring cushions (skeleton frames and upholstered frames), springs for manufacturing in prison works in Joliet, Illinois, door springs, furniture springs and machinery for manufacturing springs³

The D'Arcy Spring Company worked one shift from seven to six, a ten hour day. Skilled labor worked on piece work and averaged from fifty to eighty dollars weekly while unskilled labor averaged from fifty to sixty cents per hour. The number of employees was from five hundred to eight hundred.⁴ The company was not affected by the coal shortage.

¹Ibid, December 28, 1919.

²Ibid, loc.cit.

³Interview, Mr. Scanes of the D'Arcy Spring Co. Was former Assembly Foreman.

⁴Ibid, loc.cit.

The Upjohn Company had a leading role in Kalamazoo during the war. They had more government contracts than most industries in the city. The contracts were obtained by competitive bidding. The company at that time sold to the government quinine, ascetives, hypnotics, codines and some fluid extracts. Germany was the leading producer of chemicals. The Upjohn Company imported many chemical products from Germany. The chief ones were phenolpholin and aspirin. The phenolpholin products of the Upjohn Company thus had to be rationed. This factor lead to the realization of the need for more chemical production in the United States.¹

The Upjohn Company worked a nine hour day throughout the war. Proportionally the draft took quite a few of the company's men into service. Women and older men were hired in their places. In April of 1919, the Upjohn Company started a new factory building at a cost of approximately \$45,000.² The building was to be used for fluid extracts.

The Fuller Manufacturing Company, which makes heavy duty transmissions, had no government contracts, but indirectly by selling transmissions to the automotive industry it furnished the government war material.³ In March of 1917 a new factory was started at North Pitcher and Prouty Street at an estimated cost of \$75,000.⁴ In 1919 a connecting bridge was built,⁵ and on February seventeenth of 1920 a new factory was being planned. The factory was to be built on North

¹Interview of Mr. William Little of the Upjohn Company.

²Ibid, loc.cit.

³Interview of Mr. Monchan, Head of the Accounting Department of Fuller Manufacturing Company.

⁴Kalamazoo City Building Records, Kalamazoo, Michigan, 1917.

⁵Ibid, 1919.

Pitcher Street at an estimated cost of \$77,000¹. The company was affected by the coal shortage and was forced to run on gasoline power; nevertheless, three shifts were maintained through this period².

The Clarage Fan Company, which manufactures all types and sizes of fans and blowers underwent considerable expansion between 1917 and 1921. Although it is not definite that the company had war contracts, we can readily see the value of their product which would be used in other industries that produced war material. In 1918 the Clarage Fan Company remodeled its factory at North Pitcher Street at a cost of \$3,000³. In October of 1920 they started erection of a new factory at the corner of North and Porter Street. The building was to cost \$25,000⁴.

In the Paper Industries in Kalamazoo, progress was made in parallel with other industries. It already had been noted that by 1917, Kalamazoo was the leading producer of paper tonnage in the United States. Along with this great rise in production came expansion and remodeling to the paper industries. The Standard Paper Company, which produced paper boards for manufacturing of boxes and cartons, showed notable expansion. A nine thousand dollar storehouse was built at North Pitcher Street in 1918⁵. In 1919 a new box factory addition to the company was planned. The erection was to be at North Pitcher Street and the cost would run over \$178,000⁶. This was one of

¹Ibid, 1920.

²Mr. Monohan. (passtum)

³Kalamazoo Building Records, 1918.

⁴Ibid, 1920.

⁵Ibid, 1918.

⁶Ibid, 1919.

the largest expansions during this entire era in Kalamazoo. In 1920 the company commenced remodeling its factory and this was expected to cost \$20,000.¹

The Bryant Paper Company built a new office in 1920 at the corner of Portage and Alcott Street. The project cost approximately \$80,000.² Also new pump houses were added to the Bryant Company and the King Paper Company. In the latter part of 1920, the Bryant Paper Company started an addition to its mill at Reed Street at a cost of over \$10,000,³ and a power plant was built at Alcott Street at a cost of over \$15,000.⁴

There were many industries allied to the paper industry in Kalamazoo. During 1917-1921 these companies expanded as did the paper mills, the reason being because they furnished materials and equipment or utilized the products of the mills. At this time there were two large paper converting concerns: the Kalamazoo Stationery Company, which produced stationery and papetries and the Kalamazoo Paper Box Company, producers of high grade paper boxes which had countless uses.⁵ The Kalamazoo Stationery Company began erection in 1919 of a new factory at Frank and Harrison Street at a cost of over \$50,000.⁶ The Kalamazoo Paper Box Company also made some expansion in this period, but the exact date is unknown. These two companies hired many women

¹Ibid, 1920.

²Ibid, loc.cit.

³Ibid, loc.cit.

⁴Kalamazoo Building Records, 1919.

⁵Kalamazoo 1823-1939, Ford F. Rowe, Kalamazoo, Michigan, 1939, P.26.

(Will be referred to as Rowe in future references)

⁶Kalamazoo Building Records, 1919.

during the war era. The Kalamazoo Paper Box factory worked two shifts but little third shift. The products made by these companies for the government were chiefly wrappings and shipping boxes¹

Another field associated with the paper mills was the making of waxed paper. At this time the Saniwax Paper Company was doing a large volume of business in this field. A new warehouse was erected in 1921 at Frank and Harrison Street.

Wholesaling and jobbing of paper is really an industry by itself. This largest concern at this time was the Bermingham and Prosser Company. Its expansion has already been previously cited.

A large industry which existed in Kalamazoo because of the paper produced in this town was the Waste Paper Salvage Company. Such companies usually handled Scrap Metal. One such company was the City Iron and Metal Company. This industry was composed usually of small firms which sold their products to larger paper mills and steel mills for re-usage. Although they held no government contracts, they played an important role in furnishing steel for use in war materials and manufacturing machinery.

The foundries of Kalamazoo existing at this time were the Gerline Foundry, the Central Manufacturing Company, and the Reed Foundry. These foundries made heavy castings for machinery and other iron products. The Gerline Foundry was a brass foundry. They showed notable expansion. The Reed Foundry started a new plant at Fulford Street in December of 1919 at a cost of approximately \$11,000². The Gerline Brass

¹Rowe, Page 26.

²Gazette, 1919.

Foundry built a new storage building in 1920 on East Main Street. The Central Manufacturing Company started erection of a new foundry at Grace Street at an approximate cost of \$11,000.¹

The Harrow Spring Company made three large expansions in 1917. A storage building was erected on East Vine Street and two additions at the same location, one of which cost \$15,000,² the other \$25,000.³ In 1918 a \$5,000 oil storage tank was built,⁴ and in 1921 a new electrical shop was built.⁵

The Ihling Brothers Company produced during the war uniforms and regalia for officers and enlisted men. A store was built at Fort Custer to sell these products.⁶

The following companies, which flourished in Kalamazoo, had little if any to do with producing war material. Nevertheless they expanded in parallel with the other industries.

The Kalamazoo Stove Company made an addition to its office in 1917, and built a new garage in 1919.⁷

The Kalamazoo Tank and Silo Company, which existed many years prior to the war, made silos and windmills and tile. In 1918 the company erected a new storage building. Another silo company, the Michigan Silo Company, erected a new factory in 1917 at a cost of \$8,000.⁸

¹ Kalamazoo Building Records, 1919.

² Ibid, 1917.

³ Ibid, 1918.

⁴ Ibid, loc.cit.

⁵ Kalamazoo Building Records, 1918.

⁶ 75th Anniversary, Ihling Brothers Everard Co., 1869-1944,

Kalamazoo, Michigan, Page 8.

⁷ Kalamazoo Building Records, 1917, 1919.

⁸ Ibid, 1917, 1918.

The Kalamazoo Loose Leaf Binder Company built a new factory on Kalamazoo Avenue at a cost of over \$45,000.¹ The erection of this new factory started in January of 1921. A previous addition had been made in 1917 at a cost of \$22,000.

There was a large casket company in Kalamazoo, the Globe Casket Company. This firm underwent considerable expansion. In 1917 a dry kiln was built at the corner of Water and Pitcher Street.² In the same year an addition was made to the company at the same location. In 1919, the factory was remodeled,³ and in 1921, a new factory was erected at Edwards and Water Street at a cost of approximately \$41,000.⁴

The Humphrey Company manufactured all types of heaters. It erected a new office on North Rose Street in 1918 at a cost of approximately \$20,000.⁵

The General Gas Light Company made two large expansions in this period. In 1919, a new factory was built at Eleanore and Park Street at a cost of approximately \$50,000,⁶ and in 1920 a new factory was built at Church and Water Street at a cost of \$10,000.⁷

The Dunkley Company erected a new factory at Fulford Street at an approximate cost of \$41,000.⁸

The total amount of expansion for the leading manufacturers was approximately \$1,000,000. The poorest year was 1918, in which only \$25,000 was spent on new buildings and additions. In 1919 expansion

¹Ibid, 1921.
²Ibid, 1917.
³Ibid, 1919.
⁴Ibid, 1921.
⁵Ibid, 1918.
⁶Ibid, 1919.
⁷Ibid, 1920.
⁸Ibid, 1918.

seemed to be at tops, approximately \$400,000 having been spent this year on expansion.

In Polk's city directories, which are published every two years, a census of the assessed value showed Kalamazoo rising from \$47,500,000 in 1917 to \$51,800,000 in 1919. The number of factories in 1917 was 306 which tapered off to 200 factories in 1919. The annual wages in 1917 were approximately \$10,000,000 and in 1919 the annual wage increased to \$13,000,000. In 1917 there were 14,750 employees and 15,500 in 1919. Thus it is assumed that wages had increased considerably.¹

During the war period Kalamazoo failed to profit through those immense "cost plus" contracts that went to other cities. Kalamazoo was just getting started on war work when hostilities ceased.² It was believed that the losses of government contracts would be offset by the gain that would result from not having to reconvert.³

¹Polk's Kalamazoo City Directory, Detroit, Michigan, 1917-1919.

²Gazette, 12-29-1919.

³Ibid, loc.cit.

CHAPTER II

HOUSING

The building of new homes in Kalamazoo moved slowly through the years 1916, 1917, and 1918, but the year 1919 showed marked improvement. One of the reasons of the low building rate in 1916, 1917, and 1918 was due to the collapse of the Michigan Buggy Company in 1915, which left in Kalamazoo eight hundred empty homes¹

Below is a table of the building program of the war period.

	1917	1918	1919	1920	1921
Number of New Homes Built	76	40	121	171	187
Total Cost	\$143,980	\$90,400	\$344,075	\$514,765	\$629,160
Cost per Unit	\$ 1,908	\$ 2,035	\$ 2,843	\$ 3,023	\$ 3,370 ^{*2}

In August of 1919, Kalamazooans were trying to establish a plan of wholesale homebuilding. The program was under the direction of the Build More Homes committee of the Chamber of Commerce. The purpose of this program was to put across a two hundred and fifty new homes building project, which would aid in the critical shortage of housing. The proposed method for building was for local interests to invest in the Kalamazoo Land Company. This company, which had six hundred and twenty-seven desirable lots in Kalamazoo, hoped to inspire buyers by conveniences and modern facilities³

¹Gazette - 8, 14, 1919.

²Kalamazoo Building Records - 1917, 1918, 1919, 1920, 1921.

³Gazette - 11, 16, 1919.

In November of 1919, the Kalamazoo Loan Company had been authorized with a capital of \$400,000 of which \$300,000 had already been subscribed. As soon as this company was actually organized, building would begin. The total plan was for two hundred lots scattered through the area of the Hays Park addition, the South Park addition, and the South Side improvement flat. These plots were to have twenty-seven miles of sidewalks. Water, sewers and gas were to be available for every lot. Fifty of these houses were to be erected in Linden Park and a hundred on the East Park Heights.¹

It was desired to end the drive for the \$300,000 capital by December second of 1919. Charles B. Hays, president of the Kalamazoo Land Company, urged the people of Kalamazoo to take immediate action to this cause or he would move his company to nearby towns where the need was recognized. Mr. Hays, who had outlined the plan for homebuilding in Kalamazoo on September sixteenth, 1919, disclosed that the addition of the third shift in most Kalamazoo paper mills and large industrial plants had created their desperate shortage of housing.²

On December third of 1919, the \$300,000 necessary capital had been raised and Charles B. Hays, president of the company, stated that work would begin immediately on the first fifty homes.³

¹Ibid, loc.cit.

²Ibid, 11, 19, 1919.

³Ibid, 12, 3, 1919.

CHAPTER III

THE NON-MILITARY ORGANIZATIONS

The World War instituted in the minds of Kalamazooans a need for humanitarian service. Every man, woman and child was willing to do his part.

One of the most efficient non-military organizations was the American Red Cross. Nearly all the people of Kalamazoo contributed to this service by either working in the local chapter or by contributing in some manner.

Prior to World War I, the Red Cross Chapter of Kalamazoo county had but thirteen members, but at a meeting at the Chamber of Commerce on April 4, 1917 temporary officers of a local organization were elected and a public meeting was called for the ninth of the month at the Academy of Music. A constitution and by-laws were adopted and the following officers elected: Reverend John W. Dunning, Chairman; F. Ford Rowe, Vice Chairman; Reverend Caroline Bartlett Crane, Executive Secretary; Charles S. Campbell, Treasurer. The following were elected to the Board of Directors: W. H. Steward, Miss Lucy Gage, Mrs. Carl Blankenburg, L. H. Harvey, S. J. Wykel, Edward B. Desenberg, John W. Adams, Miss Mary McClure, Mrs. W. E. Praeger, Mrs. Herbert E. Johnston, Charles A. Blaney, and Mrs. E. P. Wilbur.

Mr. Dunning served as Chairman until April, 1919, when ill health forced him to resign. Mr. Rosenbaum relieved the Reverend Dunning, and served until November of 1919, at which time Joseph Brown,

Vice Chairman, relieved Mr. Rosenbaum.

By 1918 in Kalamazoo and the surrounding county, a roll call consisted of 20,000 members, 6,000 of which were Junior Red Cross Members. This membership figure shows the immense interest in the organization's activities.

The work done by the Red Cross Chapter in Kalamazoo was principally the making of surgical dressings, knitted garments, hospital and refugee garments. Also the local chapter carried on relief work for the families of men in the service. The Corps had an educational program, nursing service, and a motor corps. Other activities were Christmas packages, collecting of nut shells, and kindred services.

The local Red Cross Chapter and its branches in the county disbursed to the national fund \$115,986.46 and to the chapter fund \$135,086.29, leaving a balance in the treasury of \$5,421.31, a grand total of \$256,404.06.

To aid in financing the war, Kalamazoo had four Liberty Loan drives and a Victory Loan drive which took place after the Armistice. The sale of these bonds was done by local committees.

The first loan netted \$1,313,850, the second \$2,228,100, the third \$2,779,900, the fourth \$3,750,000, and the fifth \$2,227,900, a grand total of \$11,299,750. This figure includes the entire county and is exclusive of the bonds bought by men of Kalamazoo county who were in service.

In addition to the above mentioned civilian activities, there were many other boards, administrators and organizations which did splendid and necessary work for the country. There was a Fuel

Administration, an Armory Board of Control, War Camp Community Service, a local branch of the Navy League, a committee for Belgian Relief, Jewish Welfare, a Ladies' Hebrew Association, the Kalamazoo County Patriotic League which had for its objective the financing, from a general fund, of all recognized and approved relief agencies, and was consequently of great importance, and much creditable work was done by the Lucinda Hinsdale Stone chapter of the D.A.R., the Salvation Army, the War Mothers of America, the Food Administration, the Knights of Columbus, the Committee on Funds for French Wounded, the Ladies' Library Association, the Y.M.C.A., the Y.W.C.A., the Twentieth Century Club, the Comforts Forwarding Committee, the Four Minute Speakers, the War and Welfare Board, the Daughters of Veterans, the War Savings Stamps Committee, the Defense Council, the various relief and auxiliary corps of military organizations, the Benevolent and Protective Order of Elks, the public schools and colleges, the Social Service Club, the War Library Service, the Boy Scouts, the Sons of Veterans, the Michigan State Troops, the Girl Scouts, the Armenian and Syrian Relief Committee, the Rotary and Kiwanis Clubs, the Chamber of Commerce, and, in short, every organization and agency of the county. All did their part, and all are honored for their unselfish work in behalf of the national government.¹

¹The above chapter has been cited from George N. Fuller's Historic Michigan. Edited by Charles Weissert. Vol. III, National Historic Association, N.D. P.P. - 190-203.

BIBLIOGRAPHY

The Kalamazoo Building Records, Kalamazoo, Michigan, 1917, 1918, 1919, 1920 and 1921. Located in the Kalamazoo City Hall, Building Department.

The Kalamazoo Gazette, Kalamazoo, Michigan, 1917, 1918, 1919, 1920 and 1921.

Interviews:

Mr. William Little of the Upjohn Co., 1948.

Mr. Monohan, Accounting Department, Fuller Manufacturing Co., 1948.

Mr. Walter Scanes. Former Assembly Line Foreman of the D'Arcy Spring Co., 1948.

R. L. Polk & Co's. Kalamazoo City Directory, Detroit, Michigan, 1917, P.15; 1919, P.15; 1921, P. 14 & 15.

Ford F. Rowe, Kalamazoo 1823 to 1939, Kalamazoo, Michigan, Ford F. Rowe, Publisher, 1939. P.26.

George N. Fuller, Historic Michigan, Editor Charles A. Weissert, Published by the National Historical Association. N.D. Vol. III, P.P. 190-203.

75th Anniversary, Ihling Bros. Everard Co. 1869-1944, Kalamazoo, Michigan, 1944, P8.