A Draft Documentary History of Industries along the E.T. & W.N.C. and Clinchfield Railroads through Johnson City

Part 1:

West of Sevier Street, between West Walnut Street and the Barrett Railroad Yard, 1901-1946

By William C. Schneck, Jr. (As of 3 March 2024)

1.0 Introduction

This is a draft documentary history of the industrial operations serviced by the E.T. & W.N.C. and Clinchfield railroads and located west of Sevier Street. At present, I am planning to produce five more documentary histories on trackside industries in and around Johnson City. For the present document, I have attempted to collect relevant documents and place them in roughly chronological order for each geographic location. Maps and figures of the exterior of the buildings for each location are grouped together and presented first, while figures of the interior and advertisements are integrated with the text and are presented second. In the interest of convenience and completeness, this document reproduces a significant amount of material from "A Draft Documentary History of William E. Uptegrove & Brother and Their Operations in East Tennessee, 1897 - 1933."

Regrettably, I have failed to find much information on some of these industries. Perhaps more can be accomplished on this portion of the subject. I invite other members of the Historical Society to add any missing material to this document and discuss/correct any deficient interpretations of the information at hand (particularly the dating and interpretation of the photographs). For those who wish to research the documents and photographs further, I have provided links, when available, to expedite such attempts. In general, I have left the original spelling (sometimes autocorrect strikes, so I am unsure that all of it is original). I wish to thank Chris Ford for his assistance and encouragement to bring this document into a presentable state.

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2.0. Properties West of Tennessee Street and Between the Clinchfield Barrett Yard and West Walnut Street (North to South):

Clinchfield Products Corporation, Rollin Chemical Corporation, and Miller Brothers Company; Johnson City Foundry and Machine Company; Johnson City Boiler and Tank Shop; and Washington County Gas Company



Map 1. Track side industries west of downtown Johnson City around 1915.¹

The Clinchfield Products Corporation (1915 – 1919), The Rollin Chemical Corporation (1919 – 1923?), The Miller Brothers Company (1924 – 1954) Served by Both the Clinchfield and the Southern Railroads

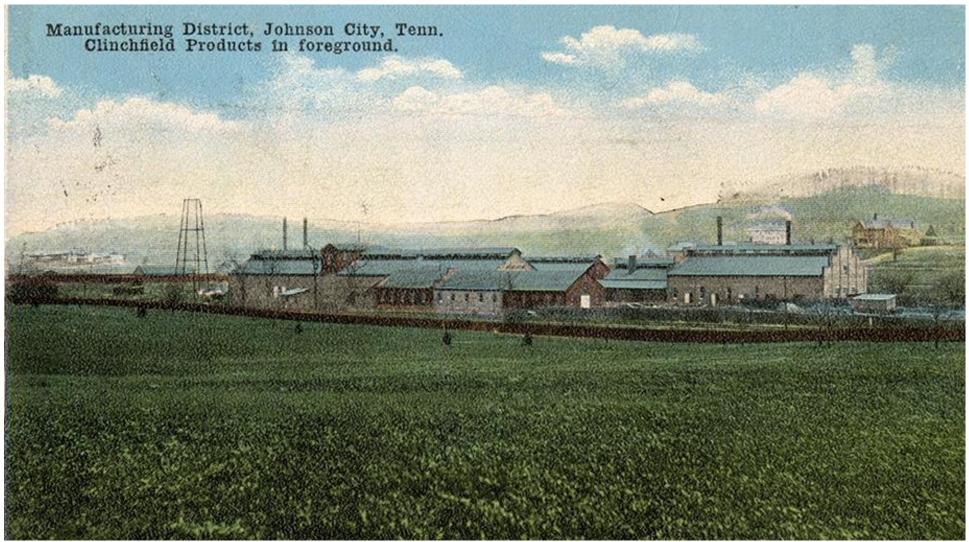
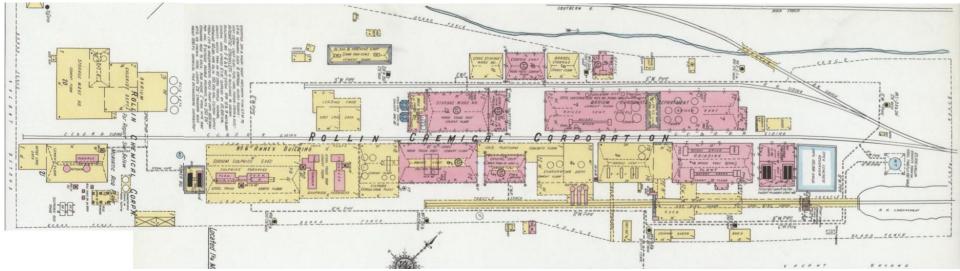
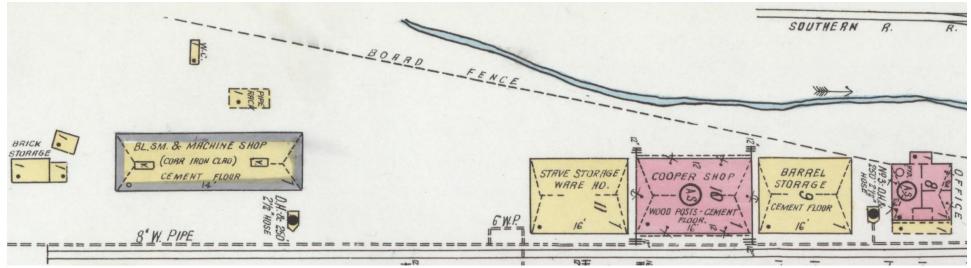


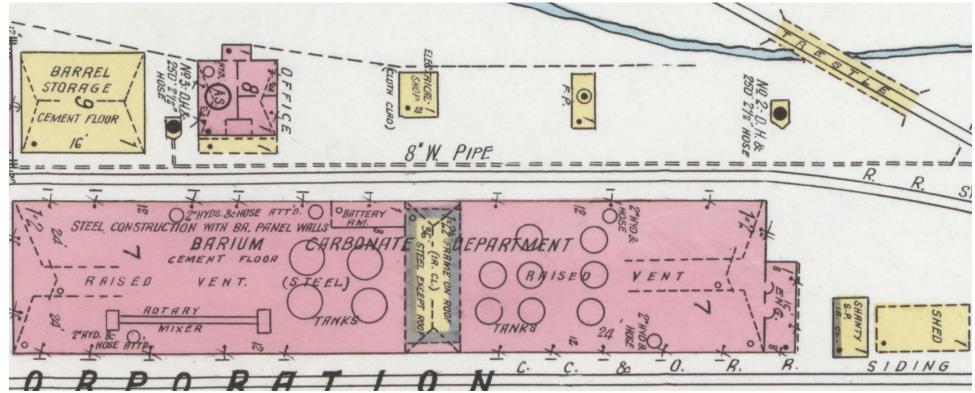
Figure 1. "Manufacturing District, Johnson City, Tenn. Clinchfield Products in foreground". This image likely dates to 1916 and is certainly not later than 1919.² This view looks southeast. The long building, to the right of the incomplete water tower, appears to be the "Barium Carbonate Department." The three small buildings (brown, gray, brown), in front and to the right of the "Barium Carbonate Department," from left to right appear to be the "Barrel Storage" building, "Cooper Shop," and "Stave Storage Ware Ho." The large, light-colored building on the right appears to be the "No. 6 Annex Building," see Map 2. The indistinct buildings in the right background appear to be some of the new homes that were being built along the trolley line to the East Tennessee Normal School and those in the left background may have belonged to either the Johnson City Foundry & Machine Company and/or the Washington County Gas Company.



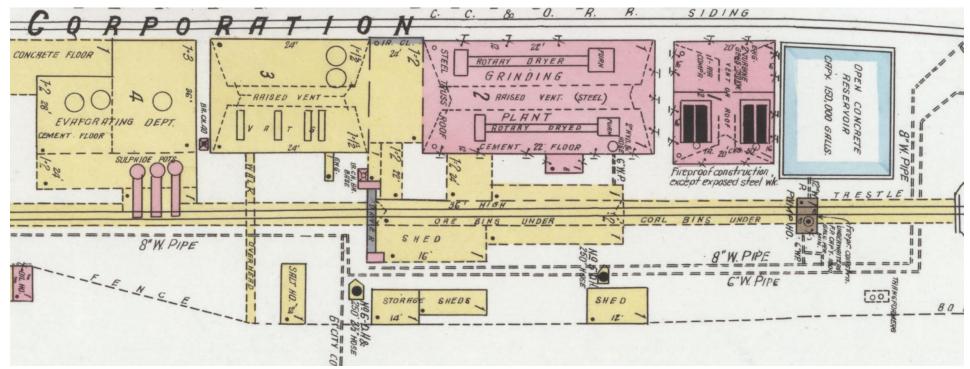
Map 2. Rollin Chemical Corporation in February 1920. The Rollin Chemical Corporation assumed control of this property from the Clinchfield Products Corporation in July 1919.³ Note that north is roughly at the top of the map. See "Clinchfield Products Corporation" on Map 1.



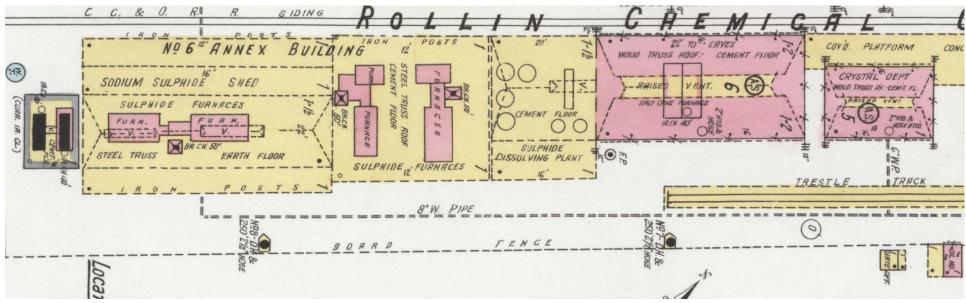
Map 2A. A detail from Map 2 of the Rollin Chemical Corporation plant showing the "Brick Storage" building, "Machine Shop", "Stave Storage Ware Ho.", "Cooper Shop," "Barrel Storage" building, and the Office (from left to right). February 1920. See Figure 1.



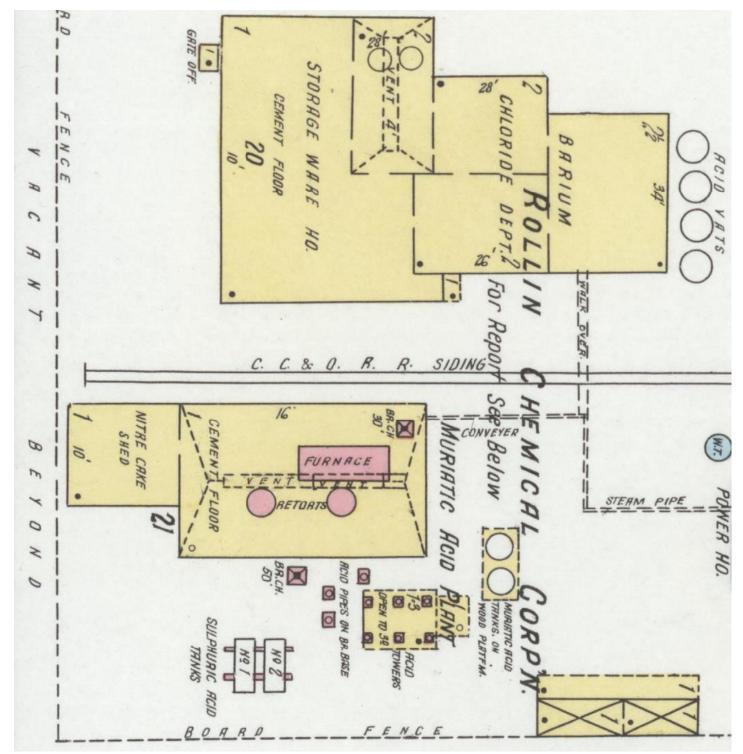
Map 2B. A detail from Map 2 of the Rollin Chemical Corporation plant showing the of the Barium Carbonate Department, as well as the "Barrel Storage" building, the "Office", the "Electrical Shop", a "Shanty" and a "shed" in February 1920. See Figure 1.



Map 2C. A detail from Map 2 of the Rollin Chemical Corporation plant showing the "Evaporating Dept." building, "Grinding Plant" building, the power house, and the "Open Concrete Reservoir, from left to right. This detail also includes the "Oil Ho.", coaling trestle, the "Salt Ho.", and three sheds. February 1920.



Map 2D. A detail from Map 2 of the Rollin Chemical Corporation plant showing another "Power Ho.", the "No. 6 Annex Building" (involved in sulphide processing), the "Crystal Dept." a portion of the coaling trestle, the "Oil Ho." and the "Gate Off." February 1920. See Figure 1.



Map 2E. A detail from Map 2 of the Rollin Chemical Corporation plant showing the "Barium Chloride Dept.", and the "Muriatic Acid Plant". February 1920. See Figure 2.

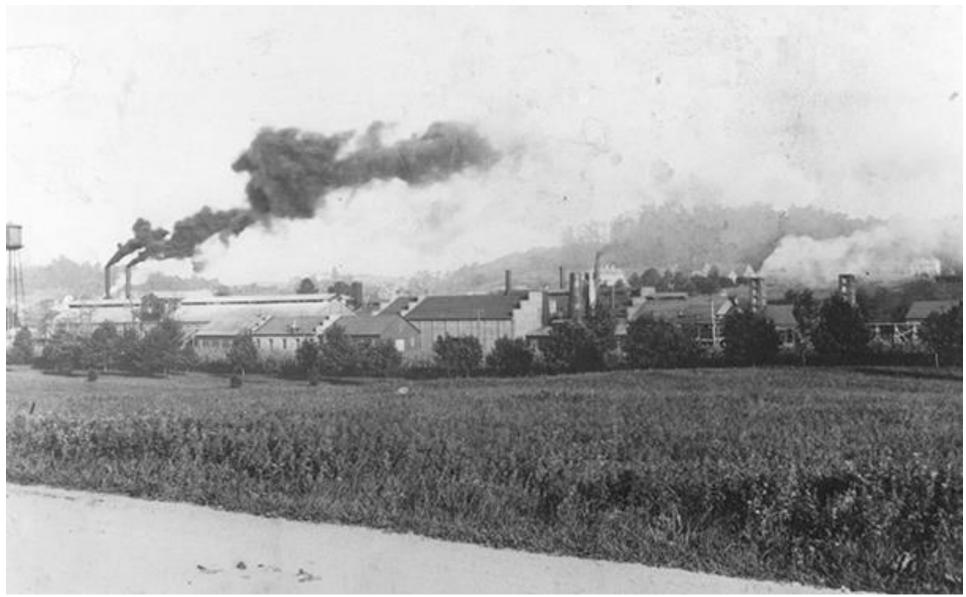


Figure 2. The Clinchfield Products Corporation or Rollin Chemical Corporation. Based on the completed water tower (on the left), the change in vegetation, and the additional buildings to the right (west), this photograph was taken some time after that in Figure 1, see Map 2.⁴



Figure 3. "Miller Brothers Company... Manufacturers of Hardwood Flooring, Johnson City, Tennessee." It appears that this photograph is looking southwest. It also seems that the Miller Brothers had acquired the plant formerly operated by the Clinchfield Products Company/Corporation and the Rollin Chemical Corporation. The large building, on the right, appears to have previously been the "Barium Carbonate Department", the building to its left is the power house with the coal trestle to its left, and the water tower on the left, see Map 2. Historian Ray Stahl captioned this photograph: "This is Miller Brothers Lumber Company on Tennessee Street, Johnson City. The plant started in 1924 and was sold in 1954 to Harris Manufacturing Company. Miller Brothers also owned and operated plants at Knoxville, Tennessee, and Summerville, South Carolina. At its peak operation the Johnson City plant employed 300 to 400 persons. Photo courtesy of Watt Miller, Jr."⁵ Prior to acquiring this property, the Miller Brothers owned and operated a lumber facility at the corner of West Cherry and South Roan streets. The property on West Cherry and South Roan streets will be address in a subsequent documentary history. The standard gauge trackage in front of the plant would have been owned by the Southern Railway.



Figure 3A. The former "Barium Carbonate Department" building.

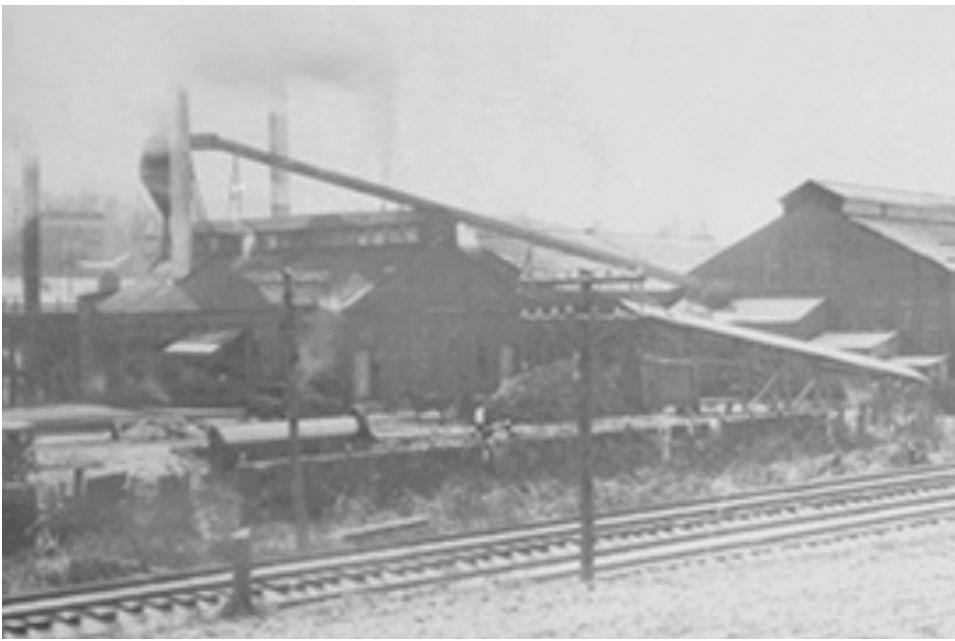


Figure 3B. The power house of the Miller Brothers Company.



Figure 4. "Miller Brothers Company... Manufacturers of Hardwood Flooring, Johnson City, Tennessee."⁶ The large building, on the right, appears to have previously been the "Barium Carbonate Department", and the building to its left, with the cyclone, is the power house. See Map 2.



Figure 5. "Miller Brothers Company... Manufacturers of Hardwood Flooring, Johnson City, Tennessee."⁷ This portion of the plant appears to be west of the old "Carbonate Depart."

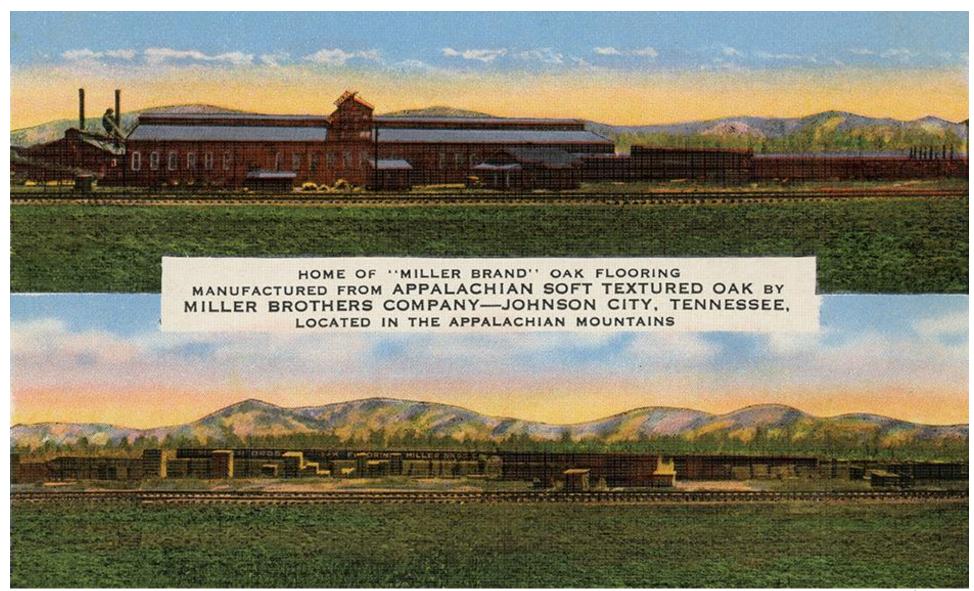


Figure 6. "Home of 'Miller Brand' Oak Flooring Manufactured from Appalachian Soft Textured Oak by Miller Brothers Company".⁸



Figure 7. "An aerial view of the Miller Brothers Lumber Company, Johnson City, Tennessee," looking southwest, 1 March 1947.⁹



Figure 7A. A detail of the Miller Brothers Lumber Company. In the left foreground appears to be the "Open Concrete Reservoir" (note the reflection of the exhaust plumes), with the power house behind it. The building in the center appears to have previously been the "Barium Carbonate Department" of the Rollin Chemical Corporation, see Map 2.

2.1.1. The Clinchfield Products Corporation (1915 – 1919)

18 August 1915. Weekly Drug Markets.

"The Clinchfield Products Co., with a capitalization of \$500,000, is to build a large plant at Johnson City, Tenn., and work will be commenced immediately. Three large buildings will be erected and the most modern machinery installed. The products to be manufactured by the new company are barium chloride, barium dioxide, blank fix, lithophone and others which are used for colors, dyes and enameling. The feldspar from which the products are obtained is found in great abundance along the Carolina, Clinchfield & Ohio railroad."¹⁰

21 August 1915. The American Fertilizer.

"Tennessee Feldspar Plant – Work on the new plant of the Clinchfield products plant, Johnson City, Tenn., which is estimated to cost \$500,000, has commenced. This is a chemical concern and its products are to be manufactured from feldspar, which is found in western North Carolina in vast deposits. This plant will be erected in the western part of Johnson City."¹¹

23 December 1915. Johnson City Comet.

"Clinchfield Products Co. Increases Capital Stock to Provide Funds for Completion and Operation of Plant – Will Employ Hundreds of Workmen and 250 Skilled Chemists. Welcome news was received in Johnson City Friday to the effect that the Virginia Corporation commission had amended the charter of the Clinchfield Products Company, a local concern, thereby increasing the capital stock from \$750,000 to \$1,500,000.

The president, Mr. Chas. Ingram, of New York, is authority for the statement that the increase in the capital stock is made to provide the necessary funds for the completion and operation of the plant now under construction and also to provide for the extensive additions that the company intends making for the production of various chemicals to be manufactured.

The corporation, it is stated, will, in addition to the several hundred men now employed, add about 250 skilled chemists as well as a number of other high salaried men.

As a beginning the company is erecting three larbe [lab?] buildings and as the industries grows additional buildings will be erected. Work is going on rapidly on the buildings now under construction."¹²

30 June 1916. Sixth Annual Report - Carolina, Clinchfield and Ohio Railway...

"List of New Industries Established during Year Ended June 30, 1916... Johnson City... Clinchfield Products Corporation... Barium, salts, chemicals, acids, etc."¹³

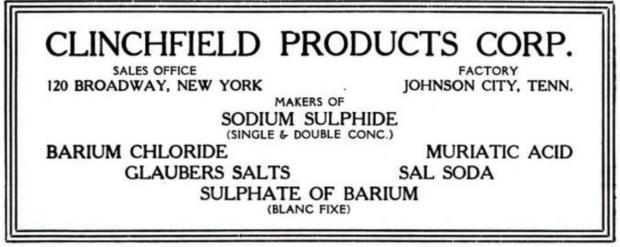


Figure 8. Shoe and Leather Reporter, Annual, 1917.¹⁴

2.1.2. The Rollin Chemical Corporation (1919 – 1923?)

16 September 1919. Moody's Analyses of Investments, Part II, Public Utilities and Industrials.

"Rollin Chemical Corp.: Incorporated on September 16, 1919, to acquire the chemical manufacturing properties of Rollin Chemical Company, Inc., at Charleston W. Va., and Clinchfield Products Corp. at Johnson City, Tenn., and Evington, Va. The plant production includes a line of barium, chlorine and sodium compounds..."¹⁵ This same information also appeared in the 1922 edition of Moody's Manual of Investments: American and Foreign.

9 October 1919. Manufacturers Record.

"Rollin Chemical Corporation Organized. Announcement has recently been made of the organization of the Rollin Chemical Corporation, with a capital of \$2,500,000, which takes over the chemical plants of the Rollin Chemical Co., Charleston, W. Va., and the chemical works and mines of the Clinchfield Products Corporation, located at Johnson City, Tenn., and Evington, Va. New capital has been brought into the company and extensions are being planned. Changes will also be made in order to improve and centralize the manufacture of certain products, so that these can be turned out with the greatest facility.

The plant at Charleston, W. Va., is located on the lines of the Chesapeake & Ohio Railroad, and has available local connections to the New York Central Lines; and the works at Johnson City are directly connected with the Southern Railway Lines and the Carolina, Clinchfield & Ohio Railway.

The location of these two plants places the corporation in a position to make a wide distribution of its various products. The main products of the company include barium binoxide, barium carbonate, barium chloride, barium sulphate, barium nitrate, barium sulphide, sodium sulphide, glauber salts, salt cake, caustic soda, carbon tetrachloride, monochlor benzol, dichlor benzol, sulphur chloride, special solvent mixture, chlor hydrin, muriatic acid and carbon bisulphide.

The officers of the new corporation are: Hugh Rollin, president; Chas. Ingram, vicepresident; Col. J.J. Riley, chairman of the board; Herbert Maynard, treasurer; John G. Harrison, secretary and sales manager. The executive and sales offices will be located at the Equitable Building, 120 Broadway, New York City.

The Clinchfield Products Corporation will continue its own original business of mining and grinding feldspar for the ceramic trade. It has plants at Erwin, Tenn., and Bedford, N.Y.¹⁶

1919. Mineral Resources of the United States, 1919, Part II - Nonmetals.

"Considerable [barytes] ore was taken from the mine at Evington, Campbell County, Va., in 1919, which was operated in the first half of the year by the Clinchfield Products Corporation, of New York, and in the last half by the Rollin Chemical Co., of Charleston, W. Va., which purchased the property. The quantity produced, however, was not as great as in 1918. It was all used in the plants of the two companies at Charleston, W. Va., and Johnson City, Tenn.... Of the 10 plants in the United States in which barium chemicals. were made either directly or indirectly from crude barytes in 1919, 5 are on the Atlantic seaboard in New Jersey, New York, and Pennsylvania, 2 in Illinois, 2 in Tennessee, and 1 in West Virginia. The Rollin Chemical Corporation, at its plant at Charleston, W. Va., produced the largest quantity of barium chemicals. None were produced at Johnson City, Tenn., after the Rollin Corporation took it over in July..."¹⁷



Figure 9. Oil, Pain and Drug Reporter, 3 January 1921.18

10 July 1923. Brick and Clay Record.

"Chemical Plant Changes Hands – The Barium Reduction Corp., a newly organized company, has purchased the chemical plants, mines and business of the Rollin Chemical Corp. All business including the sale of the company's products will be conducted from its offices in the Borden Bldg., 350 Madison Avenue, New York. The selling agreement between the Clinchfield Products Corp. and the Rollin Chemical Corp., which has been in effect for some time, is now cancelled. The Barium Reduction Corp. maintains its works in South Charlestown, W. Va."¹⁹

2.1.3. The Miller Brothers Company (1924 – 1954)

1924 – 1954. "Miller Brothers Lumber Company... Johnson City. The plant started in 1924 and was sold in 1954 to Harris Manufacturing Company. Miller Brothers also owned and operated plants at Knoxville, Tennessee, and Summerville, South Carolina. At its peak operation the Johnson City plant employed 300 to 400 persons..."²⁰

8 July 1932. Manufacturers Record.

"Flooring Plant – Johnson City, Tenn., Factory Resumes with 125 on Payroll – Johnson City, Tenn. – The Miller Brothers Company flooring plant which has been closed for several weeks, reopened this week, providing employment for from 125 to 140 former workers. The plant is being repond for an indefinite period, officials said, and only former employees will be given work."²¹

1934. American Federationist.

"Johnson City – The Miller Bros. Lumber Company, Sells Mfg. Company, all hardwood floorings and manufacturing concerns are closed at present."²²

Table 1. Extract: "Manufacturing Industries and Firms Inspected and Reported... Johnson City, Washington County", for the Year Ending 1 December 1916.²³

	Character of Business	No. Employes at time of inspection			No. Hours		No. I	Hours		
Eirm Nomo					l	Labor Males		Female and		General
Firm Name		Over 16		Under 16		Over 16		Min. Under 16		Condition
		M.	F.	M.	F.	Da.	Wk.	Da.	Wk.	
Clinchfield Product Co.	Chemical Mfrs.	150				12	72			Good

Table 2. Extract: "Directory of Industries Inspected, with No. Employes, December 1, 1916, to December 31st, 1917... Washington County – Johnson City".²⁴

		No. Employes				
Style of Firm	Business	Over 16		Under 16		
		Male	Female	Male	Female	
Clinchfield Product Corp.	Chemical Mfrs.	230				

Table 3. Extract: "Directory of Industries Inspected, with No. Employes... Washington Co. – Johnson City", for the Year Ending 31 December 1918.²⁵

		No. Employes				
Style of Firm	Business	Over 16		Under 16		
		Male	Female	Male	Female	
Clinchfield Product Co.	Chemical Mfrs.	229				

Table 4. Extract: "Directory of Industries Inspected, with No. Employes... Washington County – Johnson City", for the Year Ending 31 December 1919.²⁶ The author did not find any labor reports pertaining to this property for the period 1920 to 1926.

		No. Employes				
Style of Firm	Business	Over 16		Under 16		
		Male	Female	Male	Female	
Rollin Chemical Co.	Mfrs. Chemicals	172				

Table 5. Extract: Directory of Industries Inspected with Number of Employes... Washington County – Johnson City", for the Year Ending 31 December 1926.²⁷

		No. Employes				
Style of Firm	Business	Over 16		Under 16		
		Male	Female	Male	Female	
Miller Bros. Inc.	Planing Mill	24	1			

Table 6. Extract: "Directory of Industries Inspected with Number of Employes... Washington County – Johnson City", for the Year Ending 31 December 1928.²⁸

		No. Employes				
Style of Firm	Business	Over 16		Under 16		
		Male	Female	Male	Female	
Miller Bros.	Planing Mill	54	3			

Table 7. Extract: "Directory of Industries Inspected with Number of Employes... Washington County – Johnson City", for the Year Ending 31 December 1929.²⁹ The Miller Brothers Company was not listed in the 1930 report.

		No. Employes				
Style of Firm	Business	Over 16		Under 16		
		Male	Female	Male	Female	
Miller Lumber & Mfg. Co.	Lumber	72	2			

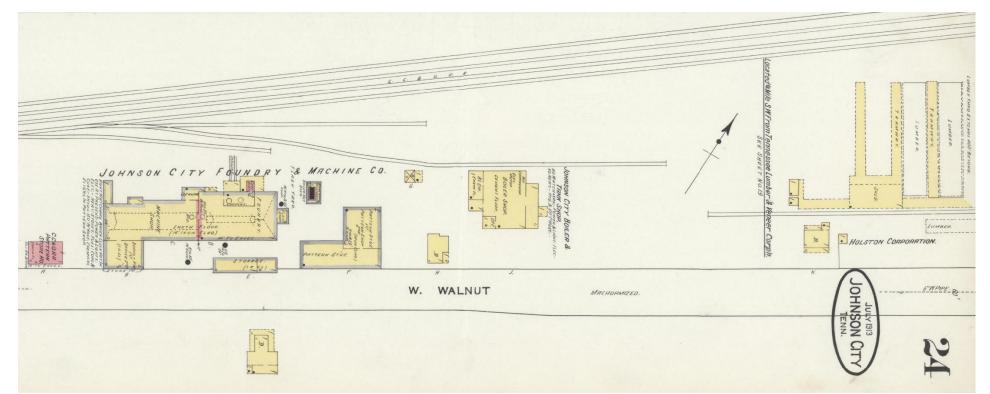
Table 8. Extract: "Location and List of Industries Inspected 1933... Washington County – Johnson City", for the Year Ending 31 December 1933.³⁰

		No. Employes				
Style of Firm	Business	Over 16		Under 16		
		Male	Female	Male	Female	
Miller Brothers Co.	Mfg. Hdwd. Flooring	145	2			

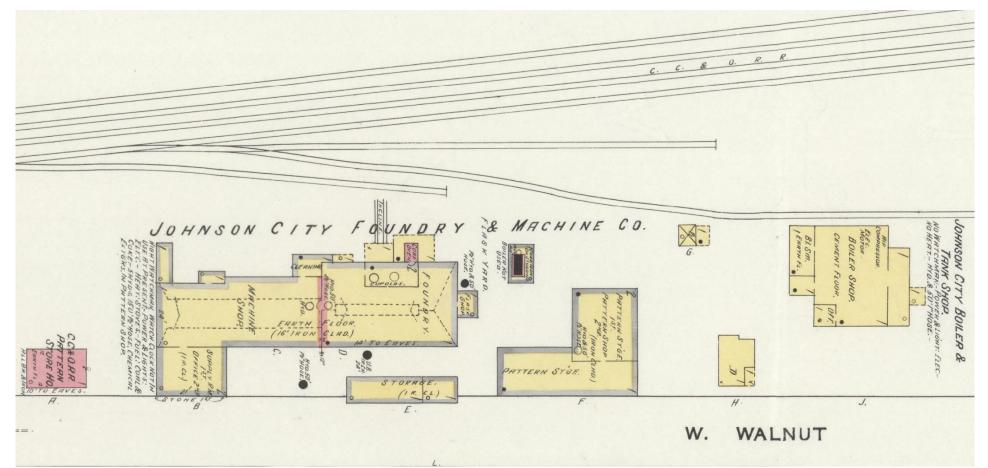
Table 9. Extract: "Location and List of Industries Inspected 1935... Washington County – Johnson City", for the Year Ending 31 December 1935.³¹

		No. Employes				
Style of Firm	Business	Over 16		Under 16		
		Male	Female	Male	Female	
Miller Brothers Co., Inc.	Mfg. Hardwood Flooring	183	3			

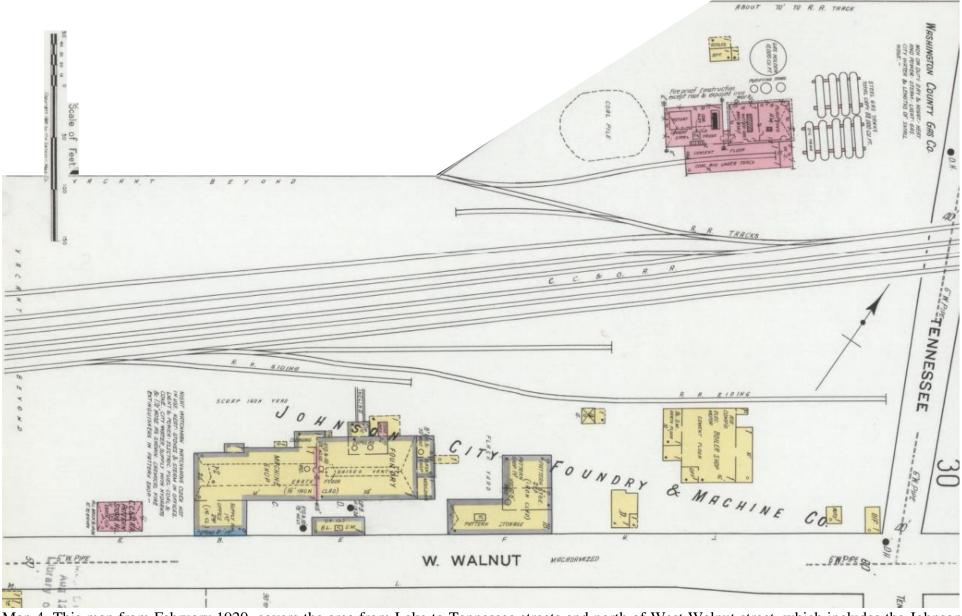
Johnson City Foundry and Machine Company (at this location 1909 – 1984), Johnson City Boiler and Tank Shop (1913 – 1917), Washington County Gas Company (1915 to at least 1986), Served by the Clinchfield Railroad



Map 3. This map shows the locations of the Johnson City Foundry & Machine Company (on the left), the Johnson City Boiler & Tank Shop (in the center), and the Holston Corporation lumber yard (on the right) along West Walnut Street in July 1913. The Holston Corporation lumber yard will be east of Tennessee Street, after it is put in, and will be addressed in the section below dealing with properties between Tennessee and Summer streets.³² See Map 1.

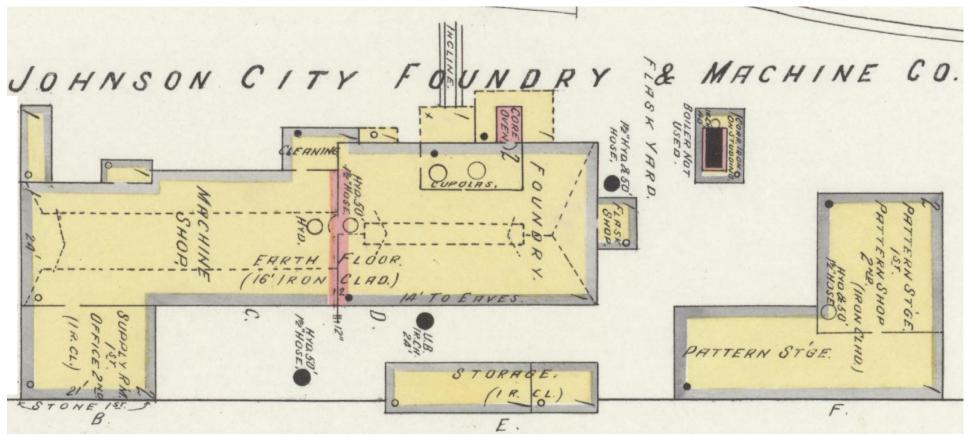


Map 3A. A detail of the Sanborn Fire Insurance map of July 1913 showing the "Johnson City Foundry & Machine Co.", note the "Johnson City Boiler & Tank Shop" on the right.

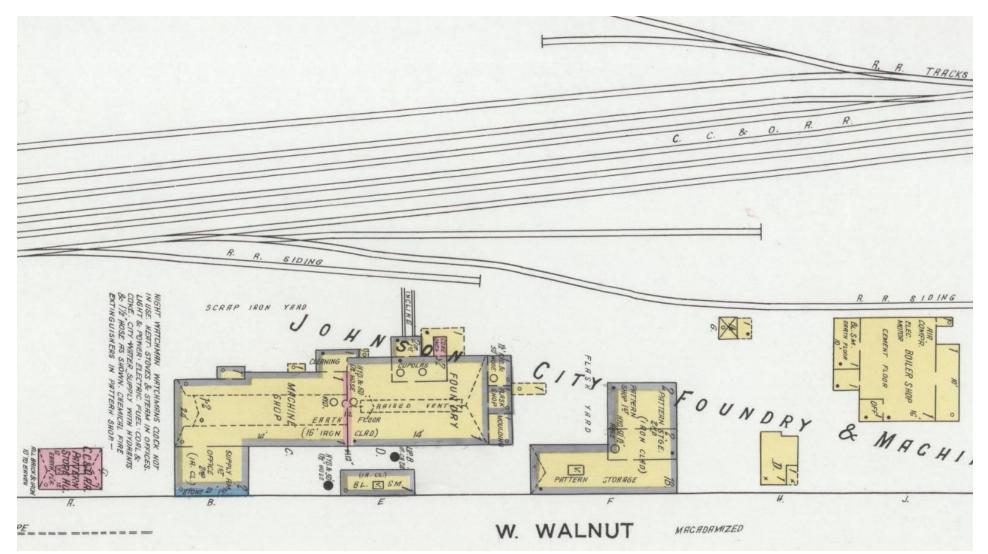


Map 4. This map from February 1920, covers the area from Lake to Tennessee streets and north of West Walnut street, which includes the Johnson City Foundry & Machine Company, as well as the Washington County Gas Company, at the top right.³³ Regrettably, the author has not located any images of the Washington County Gas Company facility. The gas company facility was not included in the 1913 Sanborn maps of this area.

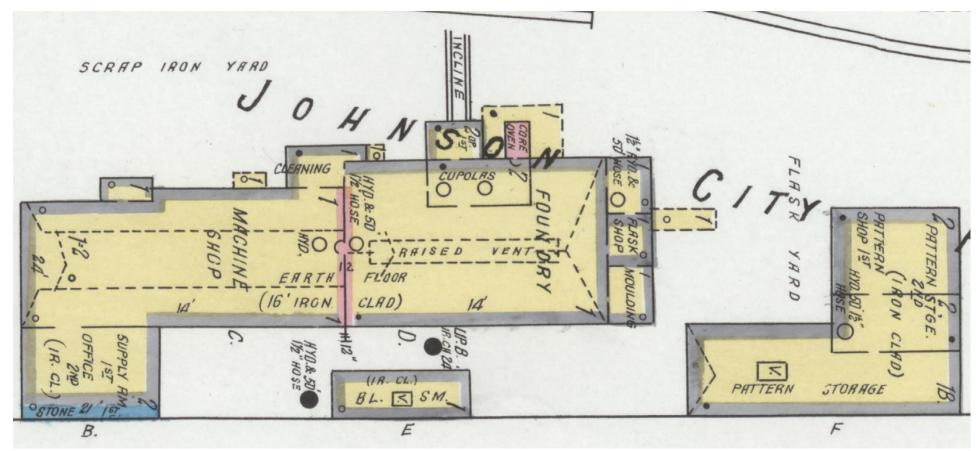
2.2. Johnson City Foundry and Machine Company (at this location 1909 – 1984) Served by the Clinchfield Railroad



Map 3B. A detail of the "Johnson City Foundry & Machine Co." in July 1913. See Map 1.



Map 4A. A detail of the Johnson City Foundry & Machine Company, February 1920. Note that the Johnson City Boiler and Tank Shop property (minus the machinery/equipment) had been acquired by the Johnson City & Machine Company between 1917 and 1920. See Map 1.



Map 4B. A detail of the Johnson City Foundry & Machine Company showing the "Machine Shop", "Foundry", and "Pattern Storage" building, from left to right. February 1920.

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Map 4C. A detail of the "Boiler Shop" of the Johnson City Foundry & Machine Company in February 1920.



Figure 10. "West Walnut Street Johnson City Foundry".³⁴ The first building on the left is the one that contained the office, on the 2nd floor (which is actually at street level), and a supply room on the first floor. The building behind the back two cars was used for storage in July 1913. The next building to the right appears to be one that was used for pattern storage, and the building with the light-colored roof belonged to the Fabrication Division (which was reportedly built by 1926, see Figure 14). The building behind the office, of which only the roof can be seen, appears to be the machine shop and foundry. Note the Model Mill in the distance, in the right background. See Figure 11.

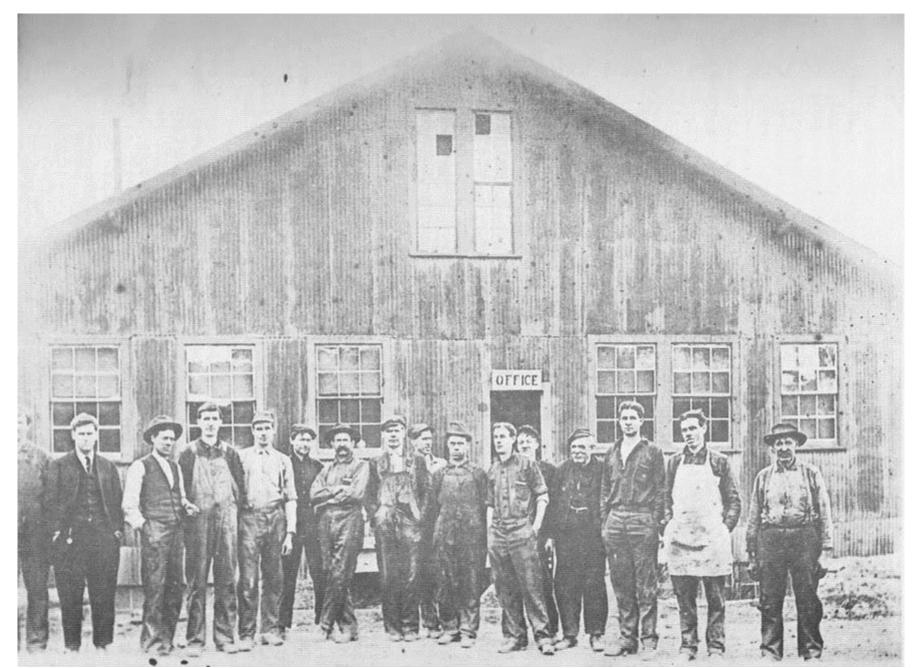


Figure 11. This photograph shows the new office building of the Johnson City Foundry and Machine Company on West Walnut Street, c. 1910.³⁵



Figure 12. A view of the back side of the Johnson City Foundry and Machine Company published in 1909, also known as the "Dominion Iron Works" at this time. This photograph was taken from the north (back) side of the plant, looking south toward West Walnut Street. This photograph shows the pattern storage building, on the left, with the foundry and machine shop building on the right. The shed in the center of the photograph housed the boiler, but was reportedly not in use by July 1913.³⁶ See Figure 13 and Map 3A.



Figure 13. "Johnson City Foundry and Machine Shop, 920 West Walnut Street".³⁷ This photograph shows the incline up to the foundry, as well as the standard gauge Clinchfield Railroad spur. The structure behind the incline appears to be the pattern storage building. The building to left of the pattern storage buildings should be the Boiler Shop, and the light-colored building in the background belonged to the Fabrication Division. The Fabrication Division Building was reportedly built by 1926, see Figure 14. See also Figure 12 and Map 3.

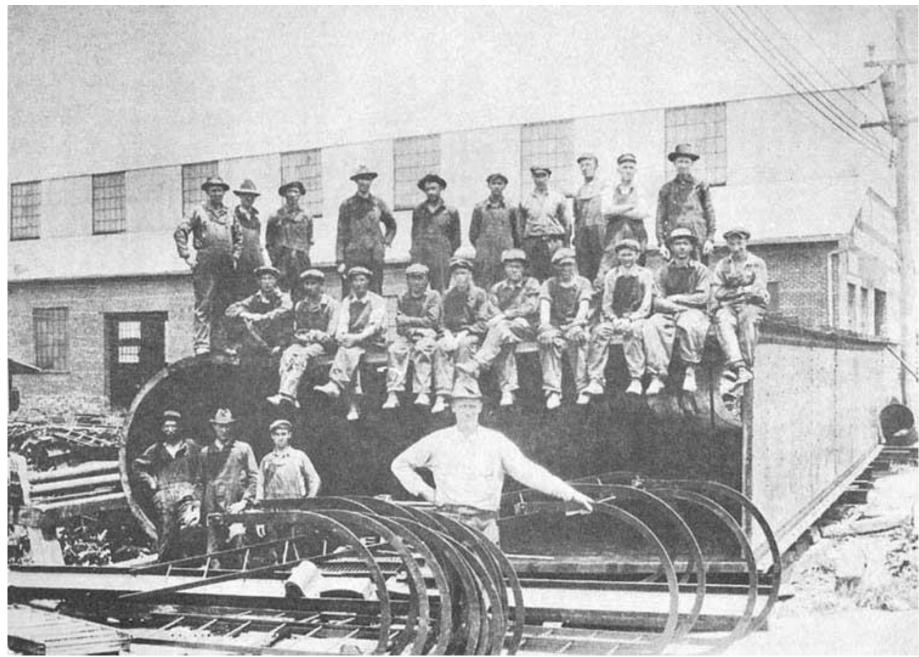


Figure 14. A photograph looking east at the Fabrication Division building of the Johnson City Foundry and Machine Company in 1926.³⁸



Figure 15. "Johnson City Foundry and Machine Company, 920 West Walnut Street"³⁹ Note the C.B. Voncanon office on the right, on the northeast corner of Tennessee and West Walnut streets. The water tower in the background probably belongs to the Rollin Chemical Corporation/Miller Brothers Company. The Fabrication Division Building was reportedly built by 1926, see Figure 14.



Figure 15A. A detail of the Johnson City Foundry and Machine Company. The first building on the left appears to be the one that contained the office, on the 2nd floor (at street level), and a supply room on the first floor. The building to the right was used for pattern storage in July 1913. However, the function of this building was not specified on the Sanborn Fire Insurance map of February 1920. The next building to the right appears to be one that was used for pattern storage. The building behind these three buildings appears to be the machine shop and foundry. The building behind the car is marked as a dwelling on the Sanborn map of February 1920. The building on the right appears to be the Boiler Shop.

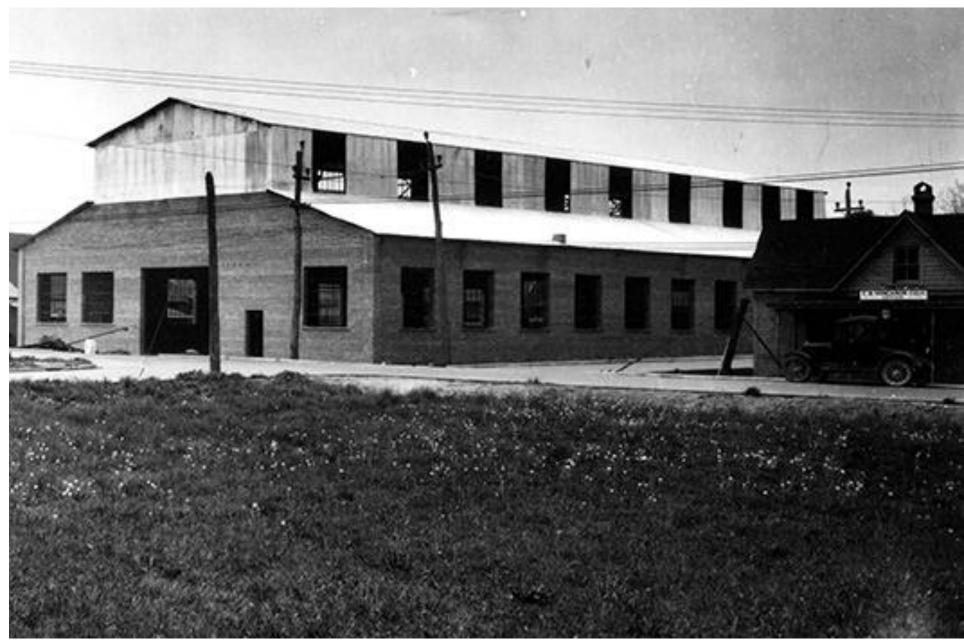


Figure 15B. A detail of the Fabrication Division Building of the Johnson City Foundry and Machine Company, which was reportedly built by 1926, see Figure 14. Note the office building of the C.B. Voncanon Company on the right side of this photograph.



Figure 16. "The Johnson City Foundry & Machine Works, inc. built bridges, tanks, iron work, and steel plate work, among other things. Shown here is an end of the foundry building with their sign advertising, 'iron or steel, draw a picture of it, we'll build it.' (Courtesy of Doug Thompson.)"⁴⁰ Note, the Sanborn map of February 1920 indicates that the foundry was in a different building; additionally, the sign on this building indicates that it was occupied by the Fabrication Division. The building on the right would be used by the C.B. Voncanon Company as their office, when they occupied this property from 1920 - 1928. This photograph looks north across West Walnut Street, along Tennessee Street, and appears to have been taken after Figure 15 and probably dates to after 1928.



Figure 17. "A moulder fashions the intricately detailed pattern into which molten metal will be poured to solidify in the shape of the mold." This photograph was published in 1959.⁴¹



Figure 18. "Foundry workers pour melted aluminum into a mold under the direction of V.M. Eads (left), foundry foreman." This photograph was published in 1959.⁴²

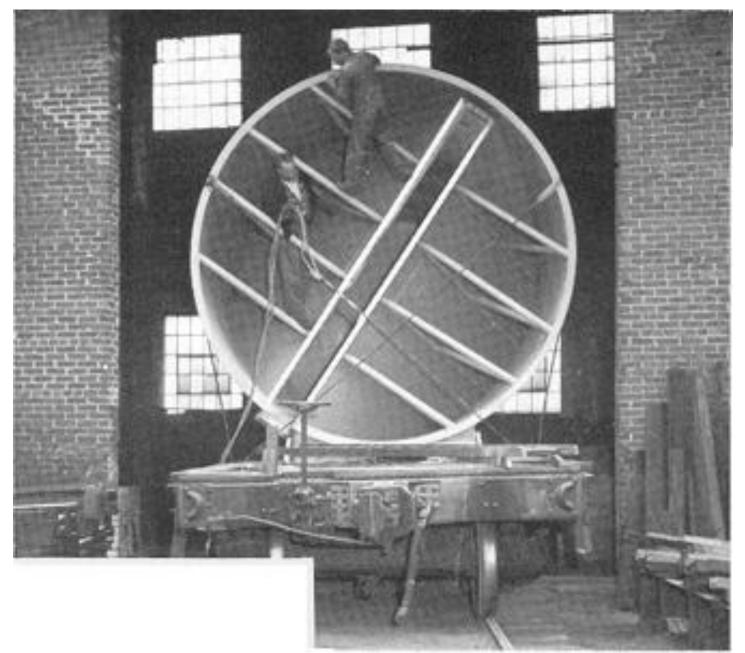


Figure 19. "A huge tank manufactured at the plant on special order rests on a flat car at the door of the structural shop while workmen add finishing touches – spraying the tank with rust-resistant paint." This photograph was published in 1959.⁴³ The author has not been able to determine which building this photograph was taken in.



Figure 20. "A machinist prepares a casting for finishing operations on a planing mill." This photograph was published in 1959.⁴⁴



Figure 21. Reportedly, "Johnson City Foundry and Machine Works, Workers Posing".⁴⁵ However, the brick building in the background does not appear to match any of the buildings of the Johnson City Foundry and Machine Works at their West Walnut Street site and the Sanborne Insurance maps do not depict any brick buildings at their previous site on Cherry Street. Perhaps this building was constructed after 1920 on the West Walnut Street site, see Figure 19, which depicts the interior of a building with brick construction.



Figure 22. Reportedly "Workers from the Johnson City Foundry and Machine Works, established in 1883, stop working to pose for this picture. The foundry was the first industry to receive the Army – Navy 'E' award for excellence in November 1943 when they operated at 95 percent during World War II, producing products for defense usage. (Courtesy of John G. and Etta Love.)"⁴⁶ This caption implies that this photograph was taken during WWII, but the clothing of the workers does not appear to support that implication. Additionally, the author could not determine if or where this photograph was taken with respect to the Cherry Street or West Walnut Street sites of the Johnson City Foundry and Machine Works. Perhaps it was taken at "Lynchburg – Roanoke" or was taken at a different factory in Johnson City. Of note, the author has not found any sources that affiliated the Johnson City Foundry and Machine Works with any factories in "Lynchburg – Roanoke."

2.2. Johnson City Foundry and Machine Company (at this location 1909 – 1984) Served by the Clinchfield Railroad

31 December 1908. Johnson City Comet.

"The Johnson City Foundry and Machine shops are moving from the shops on Cherry street which they have occupied for years to their new home below the Standard Oak Co., giving way for Carter addition improvements."

6 May 1909. Johnson City Comet.

"Big Plants Consolidate – Johnson City Foundry and Machine Works and Bristol Stove and Foundry Co. Merge. On May 1 the Bristol Stove and Foundry Co. and the Johnson City Foundry and Machine Works were consolidated and re-incorporated as the Dominion Iron Works. The general offices of the company will be in Johnson City, and the greater part of the work will be done here in the new plant now under construction on the line of the C., C. & O. west of the city. Ultimately the Bristol plant will be abandoned and moved to this city. Considerable new capital has been interested and \$40,000 has been paid in on a capital stock of \$50,000."

3 February 1910. Johnson City Comet.

"Prosperous Industry. One of the busiest industries of the city just now is the Johnson City Foundry and Machine Works. It is working the largest force in both its foundry and machine shop that it has ever worked and has orders piled up for months to come. It has thirty-five men in the foundry department alone."

18 July 1912. The Iron Trade Review.

"The property of the Johnson City Foundry & Machine Co., Johnson City, Tenn., has been sold to S.C. Williams, the price being \$16,500."⁴⁷

c. 1917. Shay (Shop Number 684, built for Morton, Lewis & Willey Lumber Company in 1901) owned by the Johnson City Foundry & Machine Company, perhaps until 22 July 1921.

Table 1	10. 5	Shay,	Shop	Number	684. ⁴⁸
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Table 10. Snay, Snop Number 684.									
Built:	Class:	Trucks:	Cylinders (#-Dia. x Stroke)						
12-13-1901	B 25-2	2	3 - 8 x 12						
Gear Ratio:	Gear Ratio: Wheel Dia.: Gauge: Bo								
3.071	26"	36"	Boot – 48"						
Boiler Pressure (PSI):	Tractive Effort:	Factor of Adhesion:	Maximum Safe Speed:						
150	15,308 Lbs.	4.25	10.1						
Fuel Type:	Fuel Capacity:	Water Capacity:	Empty Weight (as built)						
Coal	1.75 Tons	1,040 Gallons	55,000						
		Owners:							
Morton, Lewis & Wille	ey Lumber Company	, Holston Valley Railw	ay #5, Bristol, Tennessee						
(1909) C.W. Retz Com	pany #5, Patterson's	Mill, Tennessee							
(1-1913) Patterson Lun	nber Company (O.H.	Viall), Patterson's Mi	ll, Tennessee						
(c. 1917) Johnson City	Foundry & Machine	Co. (D), Johnson City	, Tennessee*						
(7-22-1921) Virginia H	ardwood Lumber Co	ompany #1, Clinchfield	l, Virginia						
(10-31-1928) Virginia	Hardwood Lumber C	Company #1 (1 st), Basti	an, Virginia						
Disposition: Scrapped									
Additional Notes: * Ow	vned by Dealer								
	-								

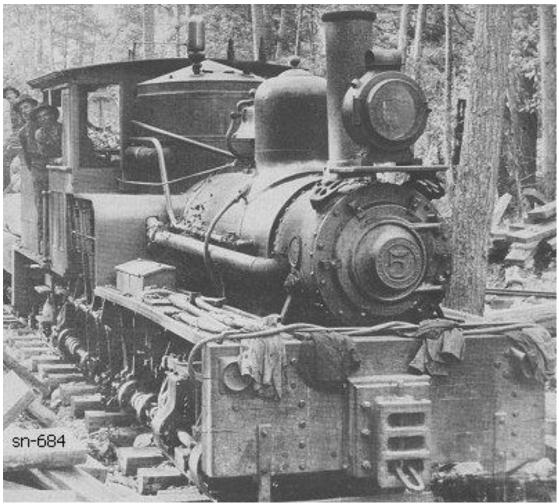


Figure 23. Shay, Shop Number 684, "C.W. Witbeck collection",⁴⁹ owned by the Johnson City Foundry and Machine Works, c. 1917 – 1921? Of note, there is no information, one way or the other, that this locomotive was ever used around the Johnson City Foundry and Machine Works.

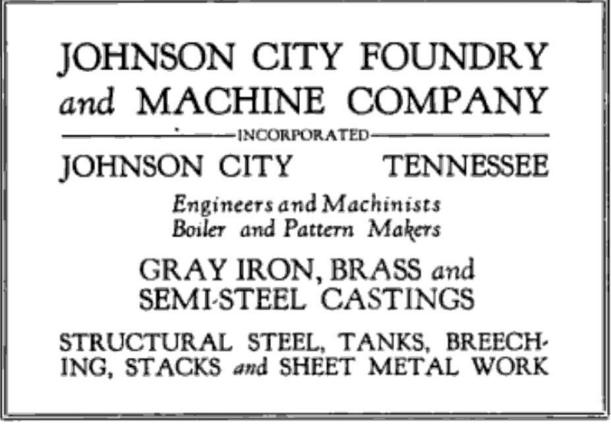


Figure 24. <u>The South's Development: A Glimpse of the Past, The Facts of the Present, A Forecast</u> of the Future, 11 December 1924.⁵⁰

11 February 1926. Manufacturers Record.

"Tenn., Johnson City – Following are additional subcontractors on American Bemberg Corporation's plant between here and Elizabethton: Virginia Bridge & Iron Co., Roanoke, Va., on structural steel; C.O. Biddle, Johnson City, on plumbing; B.G. Young, Johnson City, for sewers; Johnson City Foundry & Machine Co., miscellaneous iron and steel; Johnson City Shale Brick Co., for brick; Summers Hardware Co., Johnson City, for hardware. Hughes – Foulkrod Co., 421 Seventh Ave., Pittsburgh, Pa., Genl. Contrs.; Lockwood, Green, & Co., Engrs.; 1 Pershing Sq., New York."⁵¹

1929. Machinist" Monthly Journal, page 312.

"Johnson City – Johnson City Foundry and Machine Works has acquired plant and business of Watauga Extract Co., Elizabethtown, and will remove to Johnson City works, which will be developed to accommodate increase."⁵²

22 January 1930. The Iron Trade Review.

"The Johnson City Foundry & Machine Co., Johnson City, Tenn., wants a used 36 to 48inch planer with 16 to 20-foot bed."⁵³

JOHNSON CITY FOUNDRY & MACHINE CO.

INCORPORATED

Manufacturers of Fire Hydrants, Iron Body Gate Valves and Fittings Johnson City, Tenn.

JOHNSON CITY FIRE HYDRANT

A new and improved hydrant, designed to overcome the difficulties t h a t have been troublesome to water works superintendents and fire chiefs.

Some of its important features are:

When subjected to sudden, heavy external impact, the resulting damage is limited to the replacement of inexpensive parts, that are quickly replaceable without flooding or inevitable confusion, and yet will withstand (w i t h o u t breaking) any shock that hydrants heretofore in use will endure without breaking.

Repairs can be made very quickly, and without the necessity of shutting off the main.

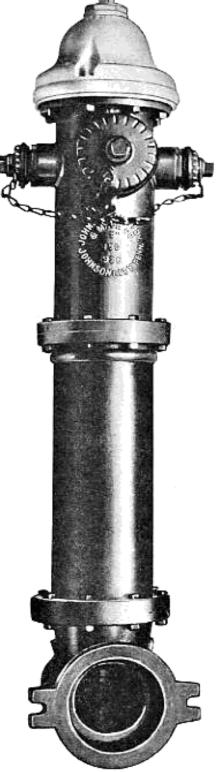
No digging is necessary to replace broken parts.

There is positively no danger of flooding with consequent loss of water.

The design is rugged and substantial with extra factor of safety for severe service.

Rapid and positive drain is accomplished by doublebushed outlets, drip valves are positive and automatic, non-corrodible and easily removed without digging up hydrant.

Simple in construction with dependable operating mechanism, operating stem in one piece, bronzed lined where it goes through the stuffing box and packing,



bronzed b u s h e d stuffing box, bronze glands a n d bolts. Threads on the stem are above the stuffing box and packing and are never in contact with water, consequently lubricant is at all time retained on the operating threads.

Valve proper is kept tightly closed by water pressure alone, even should the barrel become broken off.

Hydrant barrel is extra large in size with nozzle curves of generous radius, thus limiting friction to a minimum.

Hydrant barrel is made in two sections, the upper section being designed breakable, easily removed and interchangeable.

Nozzles can be quickly rotated to any required position by unbolting top section of barrel and rotating as desired.

All internal parts that are subjected to wear may be easily removed through the hydrant top without digging.

All like parts are absolutely interchangeable, being made to jigs and gauges.

Hydrant bottoms are fitted with two lugs so that the leaded joint underground can be strapped to the main.

The Johnson City Hydrant is so designed as to be outstanding in the field and of most modern design in every detail.

GATE VALVES

We manufacture gate valves particularly designed for use in the water works and sewage treatment plants. The Johnson City A.W.W.A. valve follows the standard specifications of the American Water Works Association.

Figure 25. "Foundry Ad from 1930"⁵⁴

1943. "Johnson City Foundry and Machine Works began giving voluntary priority to the production of war materials in the fall of 1940 and won an 'E' Award for services to the war effort in 1943."⁵⁵

1984 – 1989. "Newsletter – Tennessee Anthropological Association".

"The Johnson City Foundry and Machine Works (JCFMW), one Johnson City's oldest industries, donated many of its records to the archives. The archives received the foundry materials through the intercession of Diana Reilly Graves, treasurer of Tenetek Holding Company, the firm which bought JCFMW in 1984 from George and May Ross McDowell of Johnson City. Tenetek, which had more than \$1.6 million in mortgages on the foundry property, went into bankruptcy in March 1989. A Knoxville-based lending company, First Mortgage Corporation (FMC), in April purchased the company out of foreclosure..."⁵⁶

Table 11. Extract: "Manufacturing Industries and Firms Inspected and Reported... Johnson City, Washington County", for the Year 1913.⁵⁷

Firm Name	Nature of Business	1 2	es at Time of ection	Hours La	bor Week	Gen'l. Cond.	No.
		Male	Female	Male	Female		Insp.
Johnson City Fdry & Mach. Co.	Foundry and Machine Shop	30		551/2		Good	1

Table 12. Extract: "Manufacturing Industries and Firms Inspected and Reported... Johnson City, Washington County", for the Year Ending 1 December 1915.⁵⁸

Firm Name.	Character of Business.	No. Employes at time				No. Hours		No. Hours		
		of inspection.				Labor Males		Female & Min.		General
		Over 16.		Under 16.		Over 16		Under 16		Condition.
		M.	F.	M.	F.	Da.	Wk.	Da.	Wk.	
Johnson City Foundry & Mach. Co.	Fndry. & Mach. Shop	26				9	54			Good

Table 13. Extract: "Manufacturing Industries and Firms Inspected and Reported... Johnson City, Washington County", for the Year Ending 1 December 1916.⁵⁹

Firm Name	Character of Business	No. Employes at time				No. Hours		No. Hours		
		of inspection				Labor Males		Female and		General
		Over 16		Under 16		Over 16		Min. Under 16		Condition
		М.	F.	М.	F.	Da.	Wk.	Da.	Wk.	
Johnson City Fndry & Mach. Wks.	Fndry. & Mach. Shop	47				10	571⁄2	10	55	Good

Table 14. Extract: "Directory of Industries Inspected, with No. Employes, December 1, 1916, to December 31st, 1917... Washington County – Johnson City".⁶⁰

Style of Firm		No. Employes					
	Business	Over 16		Under 16			
		Male	Female	Male	Female		
Johnson City Foundry Co.	Foundry & Machine Shop	45					

Table 15. Extract: "Directory of Industries Inspected, with No. Employes... Washington Co. – Johnson City", for the Year Ending 31 December 1918.⁶¹

Style of Firm		No. Employes				
	Business	Over 16		Under 16		
		usiness Over 16 Under Male Female Male I	Female			
Johnson City Foundry Machine Co.	Foundry and Machine Shop	44				

Table 16. Extract: "Directory of Industries Inspected, with No. Employes... Washington County – Johnson City", for the Year Ending 31 December 1919.⁶²

Style of Firm		No. Employes				
	Business	Over 16		Under 16		
		Over 16 Under 16	Female			
Johnson City Foundry & Machine Co.	Foundry and Machine Shop	50	1			

Table 17. Extract: "Directory of Industries Inspected, with No. Employes... Washington County – Johnson City", for the Year Ending 31 December 1920.⁶³

Style of Firm		No. Employes				
	Business	Over 16		Under 16		
		Male	Female	Male	Female	
Johnson City Foundry & Machine Co.	Foundry and Machine Shop	51	1			

Table 18. Extract: "Directory of Industries Inspected, with No. Employes... Washington County – Johnson City", for the Year Ending 31 December 1921.⁶⁴

			No. Employes				
Style of Firm	Business	Ove	Over 16		Under 16		
		Male	Female	Under 16	Female		
Johnson City Foundry & Machine	Co. Foundry & Machine Shop	32	1				

Table 19. Extract: "Directory of Industries Inspected, with No. Employes... Washington County – Johnson City", for the Year Ending 31 December 1922.⁶⁵

Style of Firm		No. Employes				
	Business	Over 16		Under 16		
		Male	Female	Male	Female	
Johnson City Foundry & Machine Co.	Foundry and Machine	33	1			

Table 20. Extract: "Directory of Industries Inspected with Number of Employes... Washington County – Johnson City", for the Year Ending 31 December 1925.⁶⁶

		No. Employes				
Style of Firm	Business	Over	16	Under 16		
		Male	Over 16 Under 16	Female		
Johnson City Foundry & Machine Co.	Foundry and Machine Shop	52	1			

Table 21. Extract: "Directory of Industries Inspected with Number of Employes... Washington County – Johnson City", for the Year Ending 31 December 1928.⁶⁷

Style of Firm		No. Employes				
	Business	Over 16		Under 16		
		Male	Female	Male	Female	
Johnson City Foundry Machine Co.	Foundry	62				

Table 22. Extract: "Directory of Industries Inspected with Number of Employes... Washington County – Johnson City", for the Year Ending 31 December 1929.⁶⁸

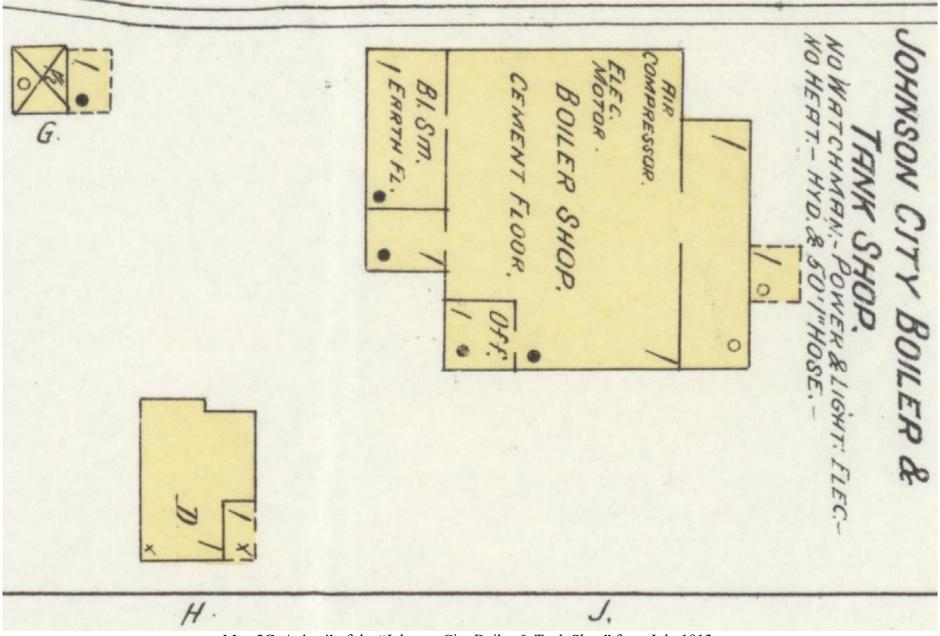
Style of Firm		No. Employes					
	Business	Over 16		Under 16			
			Male	Female	Male	Female	
	Johnson City Foundry & Machine Co.	Foundry & Machine	89	2			

Table 23. Extract: "Location and List of Industries Inspected 1933... Washington County – Johnson City", for the Year Ending 31 December 1933.⁶⁹

Style of Firm		No. Employes					
	Business	Over 16		Under 16			
		Male	Female	Male	Female		
Johnson City Foundry & Machine Co.	Fdry. & Mach. Shop	77	1				

Table 24. Extract: "Location and List of Industries Inspected 1935... Washington County – Johnson City", for the Year Ending 31 December 1935.⁷⁰

		No. Employes					
Style of Firm	Business	Over 16		Under 16			
		Male	Female	Male	Female		
Johnson City Foundry & Machine Shop	Foundry & Machine Shop	93	1				



Map 3C. A detail of the "Johnson City Boiler & Tank Shop" from July 1913. This property was acquired by the Johnson City Foundry and Machine Company between 1917 and 1920.

2.3. Johnson City Boiler and Tank Shop (1913 – 1917)

18 September 1913. Manufacturers Record.

"The Johnson City Foundry and Machine Works and the Johnson City Boiler & Tank Co. are two ironworking concerns that employ a number of people and do a very considerable business."⁷¹

13 September 1917. Johnson City Comet.

"Mr. Henry Ehret, owner of the Johnson City Boiler and Tank factory has made announcement that he has sold outright to the United States government his plant located in the southern part of the city. The government recently sent an agent here to confer with Mr. Ehret regarding the sale of the plant, the sale was confirmed and the plant turned over to the government, Mr. Ehret realizing a handsome profit as a result of the sale. Mr. Harry Girch, a government inspector, is here now on the job and the machinery is being boxed and shipped as rapidly as possible to the government shipyards."

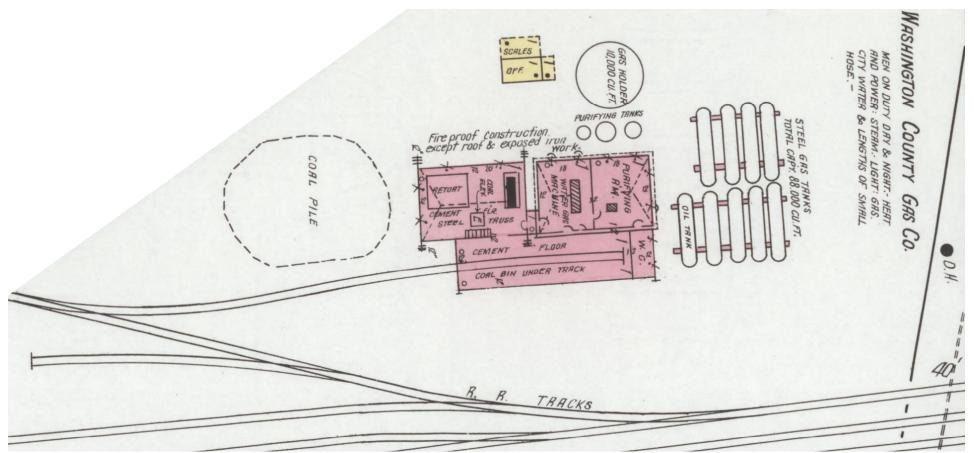
24 September 1917. The Iron Age.

"The Central South – Louisville, Ky., Sept. 24... The plant of the Johnson City Boiler & Tank Co., Johnson City, Tenn., has been purchased by the Government, according to an announcement by Henry Ehret, president. It will be dismantled at once and the equipment shipped to the Slidell Shipbuilding Co., Slidell, La., and to the Marrell – Stevens Shipbuilding Co., Jacksonville, Fla." Apparently, the Johnson City Boiler & Tank Company was re-established at a different location in 1921.⁷²

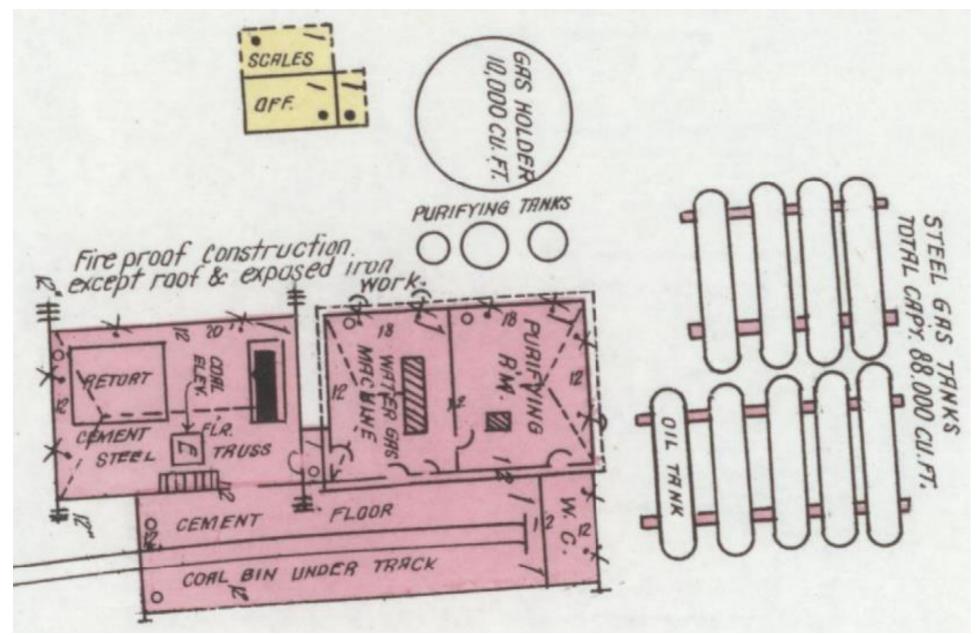
Firm Name	Character of Business	No. Employes at time			No. Hours		No. Hours			
		of inspection				Labor Males		Female and		General
		Over 16 Under 16		er 16	Over 16		Min. Under 16		Condition	
		М.	F.	М.	F.	Da.	Wk.	Da.	Wk.	
Johnson City Boiler & Tank Co.	Tanks & Boilermakers, Mfrs.	10				10	60			Good

 Table 25. Extract: "Manufacturing Industries and Firms Inspected and Reported... Johnson City, Washington County", for the Year Ending 1 December 1916.73

Washington County Gas Company (1915 to at least 1986) Apparently Served by the Clinchfield Railroad



Map 4D. A Detail of the Washington County Gas Company from February 1920. The road on the right is Tennessee Street. See Map 1.



Map 4E. A detail of the Washington County Gas Company from February 1920.

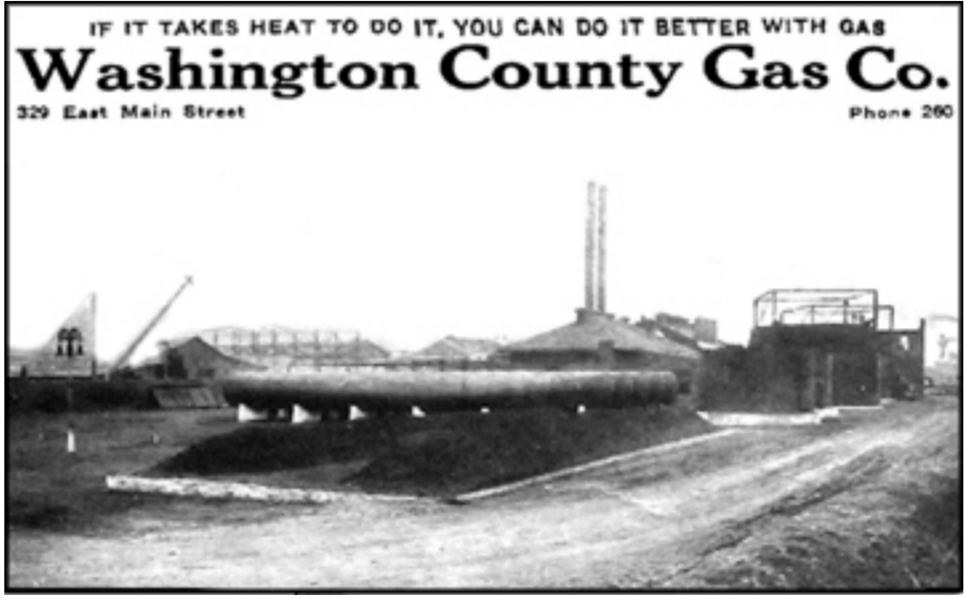


Figure 26. A photograph of the Washington County Gas Company facility, apparently from 1930, which appears to be looking west at the "Steel Gas Tanks" and the 10,000 cubic foot "Gas Holder".⁷⁴ However, this facility appears to have changed significantly since the Sanborn Insurance Company map (Map 4E) was produced in February 1920.

2.4. Washington County Gas Company (1914 to at least 1986) Apparently Served by the Clinchfield Railroad

13 January 1915. Engineering and Contracting.

"Johnson City, Tenn. – The American Gas Construction Co. of Newton, Ia., will construct a gas plant here."⁷⁵

10 February 1915. The Gas Record.

"Will Build Plant in Tennessee. The Wagner Engineering Co., of Grand Rapids, Mich., will build a new gas plant at Johnson City, Tenn., as soon as the company has been permanently organized. The Franchise has been obtained."⁷⁶

15 April 1915. Johnson City Comet.

"Gas Company will Construct Plant – Mr. R.B. Wagner, of Grand Rapids, Mich., has been in the city this week to complete arrangements to begin the work of constructing the gas plant he recently obtained a 30-year franchise for. The Washington County Gas Company is the name of the corporation and it is a 200,000 concern. The contract for construction has been let to the American Gas Construction Company, of Newton, Ohio [apparently this should read "Iowa"], and it is hoped to have the work started early in May and completed in August. A site for the erection of the plant has not yet been purchased."

16 April 1915. Moody's Manual of Investments.

"Washington County Gas Co.: Incorporated in Tennessee, April 16, 1915. [In 1939] Serves Johnson City and Elizabethton, Tenn., with manufactured gas. Franchise at Johnson City expires Nov. 6, 1944. Population served, 39,887..."⁷⁷

12 May 1915. The Gas Record.

"At Johnson City, Tenn., the Washington County Gas Co. has been organized with \$200,000 capital to build a plant in that city and 22 miles of high pressure mains reaching to Jonesboro, Elizabethton and other points. Wagner Bros. of Grand Rapids, Mich., are prime movers in the enterprise...

Contracts for Tenney plant. The American Gas Construction Co., Newton, Ia., contractors and builders of the 'Tenney Process' recently closed a contract for building a complete gas works including street mains, buildings, generating apparatus, storage, etc., in Johnson City, Tenn. The company is doing this work for Appleby & Wagner of Saginaw, Michigan. All the material for this job has been ordered and construction work will start immediately....⁷⁸

20 May 1915. The Iron Trade Review.

"Johnson City, Tenn. – Washington County Gas Co. has been incorporated at \$200,000 to build a plant in Johnson City, lay 22 miles of mains and install a high pressure gas system. Plans also are made to extend lines to Jonesboro and Elizabethton."⁷⁹

24 May 1915. The American Gas Light Journal.

"R.B. Wagner, representing the Washington County Gas Company, recently organized in Johnson City, Tenn., has purchased a lot on which to locate the plant, and has leased the building now occupied by the Johnson City Restaurant for a period of 8 years."⁸⁰

27 May 1915. Johnson City Comet.

"Expect Gas Plant to be in operation by August 1 – The work on the new gas plant for Johnson City is going rapidly ahead and the American Gas Construction Company, who have the contract and are building the plant, say that they will be ready to deliver gas to consumers on or about August 1st. Mr. S.S. McConkey, in charge of construction of the plant, has the foundation for the plant now ready, brick are arriving daily and the building will be rushed to completion.

Twenty men have arrived and pipe laying has begun by their forces of experts. Several cars of pipe have been unloaded and the laying of the mains will soon be under way. The trestle under McCorkle and Allen will soon be finished and the spur track will be completed within the next two weeks. The plant when completed will be sufficiently large to supply a city of 75,000 or more population and will be one of the most modern in the United States.

All mains will be pushed underneath the paved streets and in no instance will the streets be disturbed where it is at all possible to avoid it.

The offices will be located in the Burow building next to the Tennessee Eastern Electric Company's offices, and fitted up and ready for occupancy by June 10th. Gas fixtures and ranges of all kinds will be displayed and expert demonstrators will be employed."

23 June 1915. The Gas Record.

"B.G. Appleby, of Bay City, Mich., is president of the new gas company at Johnson City, Tenn., which Gifford Manning, chief constructor, and R.B. Wagner, manager, are just completing."⁸¹

DO IT! DO IT RIGHT! DO IT RIGHT NOW!

There are advantages in getting ready for gas early, and the people are finding it out. Come in and let us explain. Come in anyway. It will be worth your while to see the beautiful appliances on display.

10000 00000 000000

Washington County Gas Co.

Both Phones 260. 240 E. Main St. "Come in and sit down 'til the car comes."

Figure 27. Johnson City Comet, 15 July 1915.

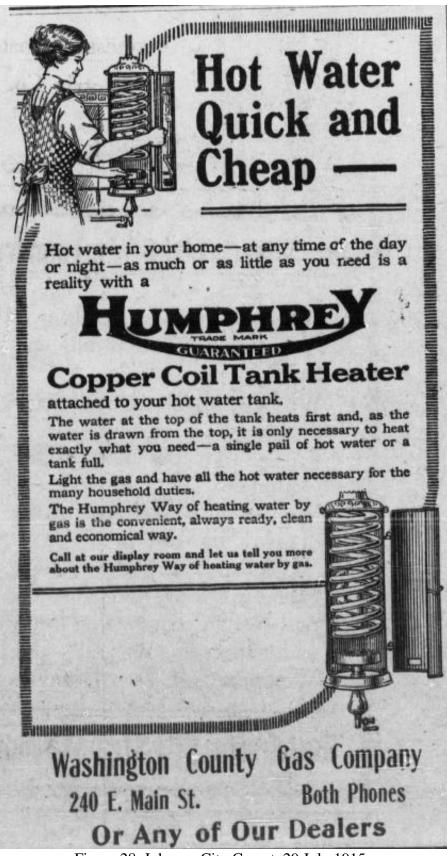


Figure 28. Johnson City Comet, 29 July 1915.

2 August 1915. The Gas Age.

"Johnson City, Tenn. – The Appleby – Wagner Co., which controls the Washington County Gas Co. of this place, announces that it has laid 18 miles of mains. The plant is near enough to completion to warrant the company to turn on gas August 15."⁸²

5 August 1915. Johnson City Comet.

"Watch Us Grow. That's Johnson City. With the new acid and dye plant [of the Clinchfield Products Company] coming here, a new home for the Elks – with other enterprises under construction, and the Washington County Gas company nearing completion of its plant, we will have the biggest manufacturing town in the South to the population..."

15 September 1915. The Gas Age.

"Johnson City, Tenn. – The Washington County Gas Co. has turned on gas here. Many visitors attended the demonstrations given by experts at the office of the company. Within the past four months this plant has been installed at a cost of about \$100,000. The system has 18 miles of mains."⁸³

22 September 1915. The Gas Record.

"Three thousand guests attended the opening of the new Washington County Gas Co. at Johnson City, Tenn., the first week in September."⁸⁴

10 November 1915. The Gas Record.

"New Tennessee Plant Opened – The Washington County Gas Co., of Johnson City, Tenn., recently kept open house to celebrate the launching of its new plant – a property of the Appleby – Wagner Co., of Saginaw, Mich. The company's office in Johnson City is located on the most prominent corner in the business district and Manager H.D. Wilson is careful to keep the windows up to the minute, with something new in them at all times, to get people used to looking into them. The office was opened six weeks before the gas was turned on, and the company advertised in a way which made everyone in town anxious to be the first to use gas when the opening took place. The result was that over a hundred services had been run before there was a foot of gas in the holder. Mr. Wilson personally directed the advertising for the opening, and, as usual, tried original 'stunts.' He started with the newspaper advertisements with talks along educational lines, and with write-ups of the different manufacturers' representatives as they reached town, telling of the many things that can be done with gas. He exploited the features of ranges, lights, water heaters, room heaters, etc., and urged all to get in early. Ny this means the whole town was brought to a fever heat of expectancy.

At 2 p.m. the doors were opened for the reception, and the floor was crowded from that on until closed at 10 p.m. Even the street in front of the office was crowded both afternoon and evening."⁸⁵

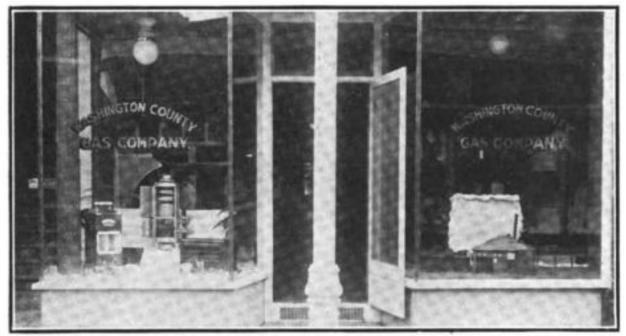


Figure 29. 'Exterior of Washington County Gas Co.'s Office, Johnson City, Tenn.", apparently at 240 East Main Street.⁸⁶



"One of Washington County Gas Co.'s Publicity Methods." "Float Which Announced Gas Company opening."

Figure 30. Advertising of the Washington County Gas Company.⁸⁷



Figure 31. Johnson City Comet, 23 September 1915.

May 1916. The Gas Industry.

"Johnson City – The plant of the Washington County Gas Company at this city is to receive new machinery and equipment which will practically double its manufacturing capacity."⁸⁸

They Say There is a GasShortage. They Say There is a Coal Shortage. But we have all the Gas you can use and a limited supply of Coke at \$7.50. TELEPHONE 260 TODAY Washington County Gas Company Service First-Profit a By-Product

Figure 32. Johnson City Comet, 31 January 1918.

2 February 1918. Michigan Manufacturer and Financial Record.

"The following Saginaw men were elected at the recent annual meeting of the Washington County Gas Company, of Johnson City, Tenn.; president, B.G. Appleby; secretary-treasurer, C.W. Orton; directors, B.G. Appleby, Guy S. Garber, O.L. Dittmar, C.E. Lown, Henry Witters, L.R. Cooper, Loyd T. Crane, Herbert C. Remer, C.W. Orton, H.E. Oppenheimer and William C. Weichmann."⁸⁹

6 October 1923. Gas Age - Record.

"Johnson City, Tenn. – One of the most important public utilities and largest establishments of Johnson City is that of the Washington County Gas Co., whose offices are located at 240 East Main Street, and the plant is on Tennessee Street.

An outstanding feature of the Washington County Gas Co., is the manufacture of high grade gas for fuel purposes. The Washington County Gas Co. specializes in all kinds of gas stoves and gas appliances, of which they carry a complete and well selected stock.

A daily capacity of 200,000 cu. Ft. of gas is recorded by the company. It has a coal and water gas plant of the most modern high pressure type; and twenty-eight miles of gas mains are in use at present.

The business occupies two brick buildings, one of which is 75 x 125 ft. and the other is 75 x 150 ft. An efficient delivery system is maintained, and fifteen employees are carried regularly on the payroll.

Under the supervision of E.J. Wagner as general manager, with long and technical experience in this line of industries, the business has prospered and is continuing to grow.

"Mr. Wagner is a public-spirited business man, popular in social life, and one of the leaders in business and civic circles. He is one of the constructive type and takes part in movements looking to the advancement and betterment of the community."⁹⁰

24 June 1926. Manufacturers Record.

"Johnson City – Washington County Gas Co. petitioned Railroad and Public Utilities Comsn. For permission to issue \$25,000 for extensions and improvements."⁹¹

13 November 1926. American Gas Journal.

"Federated Utilities Purchase Washington County Gas Co. – Nashville, Tenn. – Official announcement has been made by President E.J. Wagner of the Washington County Gas Company confirming the report that the local gas company has been purchased by the Federated Utilities Company of Battle Creek, Mich. The consideration was not made public. The local plant is the fourteenth now controlled by the Battle Creek corporation, most of them being in the South.

President Wagner stated that there would be no change in the personnel of the local organization of which he will be in charge, but he confirmed the report that plans for an immediate enlargement of the plant were now being made. It is understood that extensions are being considered to nearby industrial towns, as Johnson City is surrounded by a circle of live and growing towns which are without gas. With the city as the central point and plant location, it is understood that a network of lines will eventually be laid in this territory, Elizabethton, Erwin, Jonesboro and other close-in towns being mentioned."⁹²

1943. Moody's Manual of Investments, American and Foreign: Public Utility Securities.

"Washington County Gas Company (Controlled by Consolidated Electric & Gas Co. [since at least 1940])... Serves Johnson City and Elizabethton, Tenn., with manufactured gas. Population served, 33,348. Number of customers, 1,322. Miles of mains, 37.10. Franchises: Johnson City expires Nov. 6, 1944, Elizabethton, Tenn., expires Mar. 3, 1962."

"Johnson City," by Dessie Little Simmons, included:

"In 1915, the Washington County Gas Company was established. Gas service has been provided under the following company names: Federated Utilities Inc. (1927); Carl H. Schwyn Utilities, Inc. (1944); Watauga Valley Gas Company (1944); Rulane Corporation (1945); Watauga Valley Gas Company (1947); Volunteer Natural Gas Company (1953); Tennessee-Virginia Energy Corporation (1980); and United Cities Gas Company (1986).⁹³

"Washington County Gas Company Introduced Gas to City in 1914"

"An advertisement from a 1930 Johnson City Chronicle and Staff News stated, 'If it takes heat to do it, you can always do it cheaper with gas.' [See Figure 26]

The business paying for that ad was the Washington County Gas Company, which began operation in 1914 in Johnson City. It ushered in the first gas to the city, which then was manufactured from coal. The firm constructed a coal-gas manufacturing plant along the south end of Tennessee Street near Walnut adjacent to the Southern Railway tracks.

A 1917 Johnson City directory shows the business office located at 240 E. Main (future site of the Nettie Lee Ladies Shop). Initially, service was available only to Johnson City residents, but a growing demand for gas prompted management to enlarge the plant in 1922, doubling capacity and allowing gas lines to be extended to serve nearby Elizabethton. The growth of the company resulted in the company changing its name to Watauga Valley Gas Company.

By 1923, the office was relocated just up the street to 329 E. Main where it shared the location with the National Life and Accident Insurance Co., Metropolitan Life Insurance Co. and National Mortgage Co. It was sandwiched between the Wofford Building on the west and the businesses of Security Investment Co. and G.W. Toncray and R.P. Eaton (notary publics) on the east. The location would later become the site of the Home Federal Savings and Loan Association. In 1928, the general manager of the operation was E.J. Wagner.

During 1946, there was a shift in technology. The manufacture of gas from coal was discontinued and replaced with gas made from liquefied petroleum (propane). The company's new facility had an output of one million cubic feet a day, which more than doubled the capacity of the discontinued coal-gas facility.

One year later, the business was sporting a new name – the Watauga Valley Gas Co. located at 331 E. Main. Three years later, the address was shown to be at 334 E. Main. The officers were H.W. Gee, president; T.F. Dooley, secretary/treasurer; and L.L. 'Skinny' Hyder, salesman. The new business logo was 'Gas Has Got It.'

Beginning in the 1940s and continuing into the early 1959s, officials of the local gas company and another firm, the East Tennessee Natural Gas Company (ETNGC), worked diligently with the Federal Power Commission to bring natural gas into East Tennessee. After several long frustrating delays, the FPC granted a certificate in November 1952 to ETNGC for construction of a 100-mile pipeline from Knoxville to Bristol.

Work began on the project in August 1953, the same month the board of directors of the gas company adopted a new name, the Volunteer National Gas Company, which was indicative of the expanded territory to which service was to be rendered. The arrival of natural gas into the Tri-Cities area was a welcomed and significant event. A ceremony was held on January 16, 1954 at Tri-Cities Airport with Senator Albert Gore, Sr. lighting the long-awaited flame. In attendance were more than 200 area leaders.

With the availability of natural gas in the surrounding area, the company increased sales by more than 300% and added 500 additional customers during 1954. By 1976, the company had 8,000 customers in Johnson City, Elizabethton, Kingsport and Greeneville.

From its humble beginnings in 1914, gas became a true success story."94

Table 26. Extract: "Directory of Industries Inspected, with No. Employes... Washington County – Johnson City", for the Year Ending 31 December 1921.⁹⁵

Style of Firm			No. Em	ployes	
	Business	Over 16		Under 16	
		Male	Female	Male	Female
Washington County Gas Co.	Gas Mfg.	3	1		

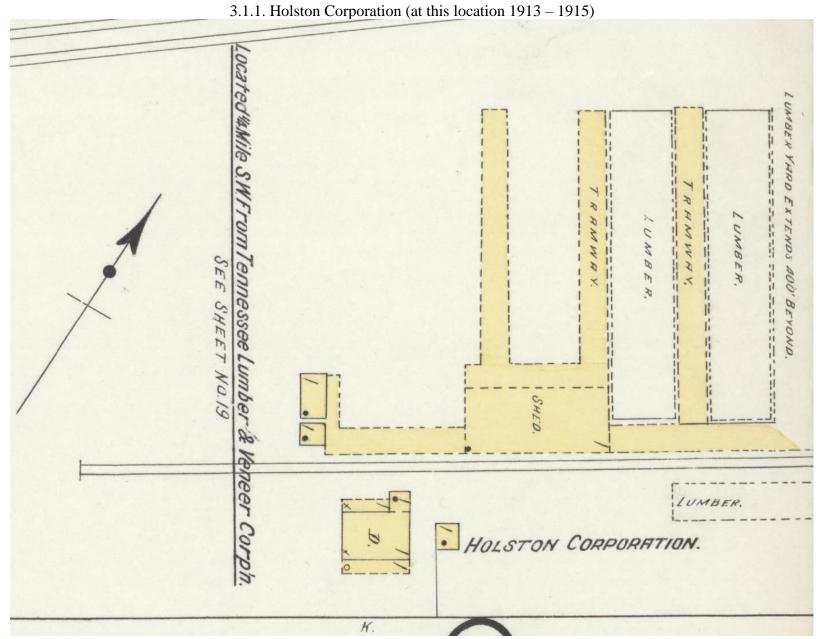
Table 27. Extract: "Directory of Industries Inspected, with No. Employes... Washington County – Johnson City", for the Year Ending 31 December 1922.96

Style of Firm			No. Em	ployes	
	Business	Over 16		Under 16	
		Male	Female	Male	Female
Washington County Gas Co.	Gas Mfg.	6	2		

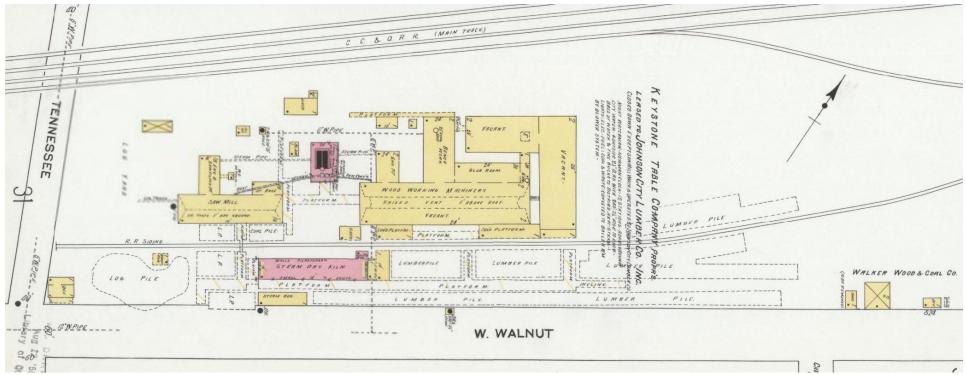
Table 28. Extract: "Location and List of Industries Inspected 1935... Washington County – Johnson City", for the Year Ending 31 December 1935.⁹⁷

Style of Firm			No. Em	ployes	
	Business	Over 16		Under 16	
		Male	Female	Male	Female
Washington County Gas Co.	Gas	19	2		

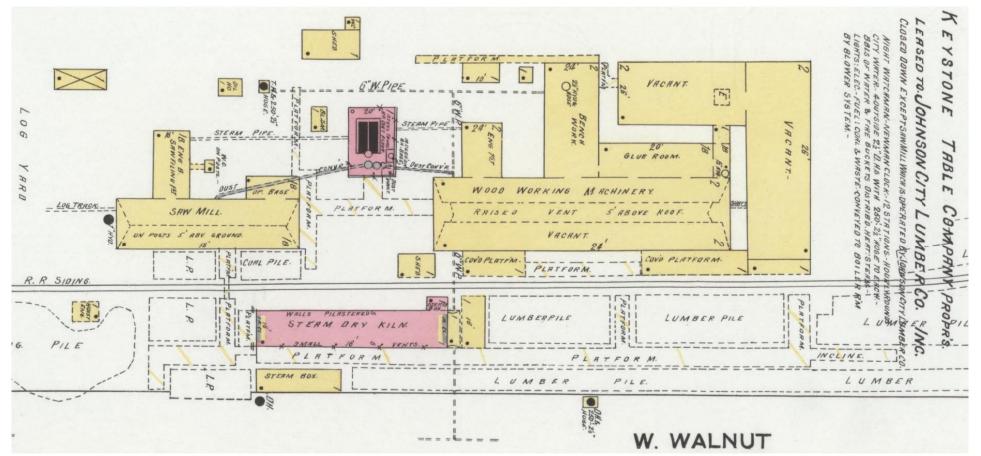
Properties in the Area Bounded by Cherokee and Tennessee Streets (East to West) and the Clinchfield Barrett Yard and West Walnut Street (North to South) Holston Corporation (at this location 1913 – 1915) Johnson City Lumber & Manufacturing Company (1915 – 1916) Keystone Table Company (1916 – 1920) C.B. Voncanon Company (1920 – 1931?) Tennessee Box Company (leased? 1928 – ?) Walker Wood & Coal Company (? – 1920) Served by the Clinchfield Railroad Holston Corporation (at this location 1913 – 1915), Johnson City Lumber & Manufacturing Company (1915 – 1916), Keystone Table Company (1916 – 1920), C.B. Voncanon Company (1920 – 1931?), Tennessee Box Company (leased? 1928 – ?)



Map 3D. A detail of the Holston Corporation lumber yard along West Walnut Street in July 1913. This property was acquired by the Johnson City Lumber & Manufacturing Company in 1915. See also Map 1.



Map 5. This map shows the Keystone Table Company, located on the north side of West Walnut, between Tennessee and Cherokee streets; as well as the Walker Wood & Coal Company, in February 1920. The Keystone Table Company property on the left was leased to the Johnson City Lumber Company at this time.⁹⁸ By 1913, this property was owned by the Holston Corporation, which sold it to the Johnson City Lumber & Manufacturing Company in 1915. In 1920, this property was acquired by the C.B. Voncanon Company. In 1928, this facility was acquired or leased by the Tennessee Box Company. Regrettably, the author has not located any additional information or images pertaining to the Walker Wood & Coal Company, on the right side of this map.



Map 5A. A Detail of the Johnson City Lumber Company plant at the time it was leased to the Keystone Table Company, February 1920.



Figure 33. "C.B. von Cannon Company, West Walnut Street".⁹⁹ Apparently, this property was previously owned by the Holston Corporation (1913 – 1915) and the Johnson City Lumber & Manufacturing Company (1915 – 1916, which leased it to the Keystone Table Company from 1916 until 1920). Note the office on the left, which was on the north east corner of West Walnut and Tennessee streets. The building with the sign (which reads in part "C.B. Voncanon Company… Wholesale and Retail. Lumber & Building Materials Custom Millwork (?) & Kilndrying" appears to be the sawmill. Also note the standard-gauge gondola of the Southern Railway behind the automobile on the right.



Figure 34. "C.B. Von Canon Company, West Walnut Street".¹⁰⁰ Note the Johnson City Foundry & Machine Company Fabrication Division Building and the water tower of Rollin Chemical Corporation on the left. The Fabrication Division Building was reportedly built by 1926, see Figure 14.

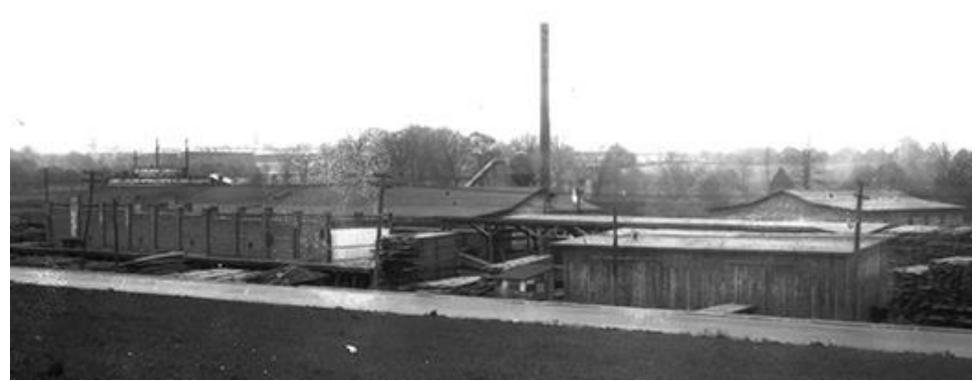


Figure 34A. A detail of the Voncanon Company plant. The building on the left appears to be the Steam Dry Kiln, with the sawmill and powerhouse, with the smokestack and cyclone, behind it. The two buildings on the right do not seem to match those depicted on the Sanborn map of February 1920. Behind the Steam Dry Kiln is a structure near three utility poles, which appears to be the sawmill of the Voncanon Company. Some buildings of the "Mountain Branch, National Home for Disabled Volunteer Soldiers" appear on the skyline behind the Steam Dry Kiln. See Map 5.

3.1.2. Johnson City Lumber & Manufacturing Company (1915 – 1916)

1915. Reports of Cases Argued and Determined in the Supreme Court of Tennessee.

"Some time prior to the occurrences [about 1915] which are the subject of the present controversy the [Johnson City] lumber company had received a deed from the Holston Company for a lot on which its buildings were erected. This deed was made with the aid of the Chamber of Commerce of Johnson City. In order to forward the transaction, and advance the interests of Johnson City, the Chamber of Commerce paid to the Holston Company \$1250, and in that way the lot was secured..."¹⁰¹ Regrettably, the author found very little information and no photographs of the operations of the Holston Corporation at this location.

6 May 1915. The Iron Trade Review.

"Johnson City Lumber & Mfg. Co. will build a factory for the production of vehicle and table rims and other wood specialties. Edgar Wallin is buying the machinery which will cost about \$25,000."¹⁰²

6 May 1915. The Iron Age.

"The Johnson City Lumber & Mfg. Company, Johnson City, Tenn., incorporated with a capital stock of \$25,000, will erect three factory buildings, the largest 400 ft. long and containing 30,000 sq. ft. of floor space. T.B. Wallace, Greeneville, S.C., is president; W.O. Nelson is vice-president and general manager, W.S. Smith is superintendent, both of Johnson City."¹⁰³

10 May 1915. Hardwood Record.

"The Johnson City Lumber & Manufacturing Company has recently been organized at Johnson City, Tenn. Foundation work for the building was started a few days later. The plant will manufacture vehicle materials, textile mill loom supplies, special heat [beat?] woodwork, etc."¹⁰⁴

13 May 1915. The Iron Age.

"The Johnson City Lumber & Mfg. Company, Johnson City, Tenn., will equip a 200-h.p. steam plant, and is also in the market for a band saw mill, band ripsaw, circular ripsaws and swing cut-off saws, saw and knife-grinding machinery, hoisting engine, etc. W.S. Smith is superintendent in charge of machinery purchases."¹⁰⁵

20 May 1915. The Iron Trade Review.

"Johnson City, Tenn. – Johnson City Lumber & Mfg. Co. will take bids at once on the equipment of a 200-horsepower, steam plant, as well as woodworking equipment for its new sawmill and planning mill."¹⁰⁶

May 1915. Packages.

"Sawmill – Johnson City Lumber & Mfg. Co., T.B. Wallace, president, Greenville, S.C., wants estimates on band sawmill, band ripsaw, circular ripsaws and swing cut-off saws."¹⁰⁷

10 June 1915. Lumber World Review.

"New Mills... Johnson City, Tenn. – The Johnson City Lumber & Manufacturing Co. will erect three buildings to contain 20,000 square feet of floor space. It will also install a band sawmill, planing mill and woodworking plant."¹⁰⁸

June 1915. The Wood-Worker.

"On a 7-acre site, recently purchased, the Johnson City Lumber and Mfg. Co., Johnson City, Tenn., has started work on a plant to cost \$25,000. T.B. Wallace, of Greeneville, S.C, is at the head of the plant."¹⁰⁹

June 1915. Packages.

"Woodworking Machinery. Johnson City Lumber & Mfg. Co., Johnson City, Tenn., wants estimates on rim benders, planers, moulders, band sawmill, hand jointers, band ripsaw, circular ripsaw, swing cut-off saws, multiple spindle boring machine, saw and knife-grinding machinery, hoisting engine without boiler, automatic spoke machinery, shaving exhaust blower system; felloe planers and 200 h.p. steam plant."¹¹⁰

15 December 1915. The St. Louis Lumberman.

"The Johnson City Lumber and Manufacturing Co. at Johnson City, Tenn., has been organized, with a capital stock of \$40,000, by S.E. Miller, E.C. Walling, W.S. Smith, and others."¹¹¹

1 February 1921. <u>Marvyn Scudder Manual of Extinct Or Obsolete Companies</u>. "Johnson City Lumber Co. Tennessee charter cancelled February 1, 1921."¹¹²

3.1.3. Keystone Table Company (1916 – 1920)

1916 – 1920. Reports of the United States Board of Tax Appeals.

"The taxpayer is a Pennsylvania corporation engaged in the manufacture of furniture at Mount Wolf, Pa. In 1916 the corporation purchased a factory at Johnson City, Tenn. This factory was a losing venture and was sold in 1920 at a loss of \$43,249.60..."¹¹³

27 October 1917. The Southern Lumberman.

"Johnson City Plant Changes Hands. Johnson City, Tenn., Oct. 23. – The Keystone Table Co., of Pennsylvania, recently purchased the Johnson City Lumber & Mfg. Co., of Johnson City, Tenn., and improvement are being made to the plant. They are building a new dry kiln of the Moore moist air type. Contract was let to the L. Moore Dry kilns Company, Jacksonville, Fla."¹¹⁴

November 1917. The Furniture Worker.

"A New Concern at Johnson City, Tenn. The Johnson City Lumber and Mfg. Co., located at Johnson City, Tenn., is succeeded by the Keystone Table Co., a branch of the Keystone Table

Co., of Mt. Wolf, Pa. W.S. Smith is the Johnson City manager and preparations are being made to manufacture tables on a larger scale. The general manager of the two concerns is C. [Chauncey] J. Eisenhower, of Mt. Wolf, Pa. This factory is making library and parlor tables, and the Johnson City Plant has every facility for turning out a large quantity of work."¹¹⁵

10 October 1919. Hardwood Record.

"The Modern Manufacture of Walnut – Illustrating the Operations of the Penrod Walnut and Veneer Company of Kansas City, Mo... In connection with its war work, the company leased the plant of the Keystone Table Company at Johnson City, Tenn., which was operated exclusively on war contracts for about two years..."¹¹⁶

> 3.1.4. C.B. Voncanon Company, 1920 – 1931? Apparently also known as the C.B. Voncanon/Von Canon Lumber Company

15 July 1922. Wood Construction, The Lumber Forum of the Central States.

"C.B. Von Cannon is Killed – Charles B. Von Cannon, 52, one of the most prominent lumbermen of the south, was instantly killed at Johnson City, Tennessee, on July 3rd, when his automobile was struck by a gasoline powered passenger car on the C., C. & O. Railway. Mr. Von Cannon, seeing that an accident was impending, leaped from the car as he approached the crossing but fell on the track. The car got across safely. Mr. Von Cannon was president of the C.B. Von Cannon Lumber Company, operating two plants in Johnson City, and was vice president of the J. Walter Wright Lumber Company, of Bristol, Tennessee, the latter concern having several plants in Tennessee and North Carolina. He was also president of the Bank of Avery, at Avery, North Carolina. He is survived by his widow, two daughters, his parents and two brothers. The burial was at Banner Elk, North Carolina, his former home."¹¹⁷

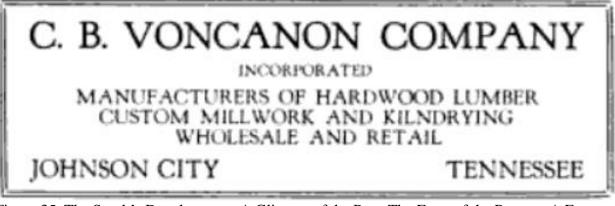


Figure 35. <u>The South's Development: A Glimpse of the Past, The Facts of the Present, A Forecast of the Future</u>, 11 December 1924.¹¹⁸

February 1928. The Packages.

"Acquire Plant – The lumber plant formerly occupied by the Von Cannon Lumber Co. at West Walnut and Tennessee streets, Johnson City, Tenn., has been acquired by the Tennessee Box Co. of which Frank McNeill is president. Machinery will be installed which will double the present capacity of the plant."¹¹⁹

3.1.5. Tennessee Box Company, at this location 1928 – ?

February 1928. The Packages.

"Acquire Plant – The lumber plant formerly occupied by the Von Cannon Lumber Co. at West Walnut and Tennessee streets, Johnson City, Tenn., has been acquired by the Tennessee Box Co. of which Frank McNeill is president. Machinery will be installed which will double the present capacity of the plant."¹²⁰

18 February 1928. American Lumberman.

"Tennessee, Johnson City – Tennessee Box Co. installing additional machinery in plant of the Von Cannon Lumber Co., recently purchased, and will double its capacity; will manufacture boxes."¹²¹

March 1928. The Packages.

"The Tennessee Box Co. has started the installation of box machinery in the plant of the Von Cannon Lumber Co., Johnson City, Tenn., which it recently purchased. The concern will manufacture only boxes in the plant acquired."¹²²

15 July 1931. Southern Lumberman.

"Planing Mill Fire. Johnson City, Tenn., July 3. – The Voncannon Lumber Company suffered the loss of its planning mill and several hundred thousand feet of lumber by fire Thursday. It is thought that the fire originated from lightning. The damage is estimated at \$50,000, partly covered by insurance."¹²³ Perhaps this report applies to a different plant or the Tennessee Box Company had leased this property.

Table 29. Extract: "Manufacturing Industries and Firms Inspected and Reported... Johnson City, Washington County", for the Year Ending 1 December 1915.¹²⁴

			-	oyes at ti	me	No. Hours		No. Hours		
Eirm Nome	Firm Nama Character of Business	(of insp	pection.		Labor I	Males	Femal	e & Min.	General
Firm Name. Character of Business.	Over 16. Under 16. Over		16	5 Under 16		Condition.				
		М.	F.	М.	F.	Da.	Wk.	Da.	Wk.	
Johnson City Lbr. & Mfg. Co.	Wagon & Carriage Material Mfrs.	50				10	60			Good

Table 30. Extract: "Manufacturing Industries and Firms Inspected and Reported... Johnson City, Washington County", for the Year Ending 1 December 1916.¹²⁵

		No.	No. Employes at time			No. Hours		No. Hours			
	Firm Name	Character of Business		of insp	ection	l	Labor	Males	Fema	le and	General
	Firm Name	Character of Busiliess	Ove	r 16	Unde	er 16	Ove	er 16	Min. U	nder 16	Condition
			М.	F.	М.	F.	Da.	Wk.	Da.	Wk.	
	Johnson City Lbr. & Mfg. Co.	Wagon Material Mfrs.	45				10	60			Good

Table 31. Extract: "Directory of Industries Inspected, with No. Employes, December 1, 1916, to December 31st, 1917... Washington County – Johnson City".¹²⁶

Style of Firm			No. Em	ployes	
Style of Firm	Business	Over	: 16	Und	er 16
		Male	Female	Male	Female
Johnson City Lumber & Mfg. Co.	Mfrs. Loom & Wagon Matl.	33			

Table 32. Extract: "Directory of Industries Inspected, with No. Employes... Washington Co. – Johnson City", for the Year Ending 31 December 1918.¹²⁷

Style of Firm			No. Em	ployes	
	Business	Over 16		Under 16	
		Male	Female	Male	Female
Keystone Table Works, Inc.	Table Mfrs.	55			

Table 33. Extract: "Directory of Industries Inspected, with No. Employes... Washington County – Johnson City", for the Year Ending 31 December 1922.¹²⁸

Style of Firm			No. Em	ployes	
Style of Firm	Business	Over	: 16	Unde	er 16
		Male	Female	Male	Female
Vancorman, C.D., [C.B. Voncanon?] & Co.	Lumber and Mill Work	28			

Note: The author found no references to a Vancorman Company in Johnson City. It appears that "Vancorman" should be read as "Voncannon".

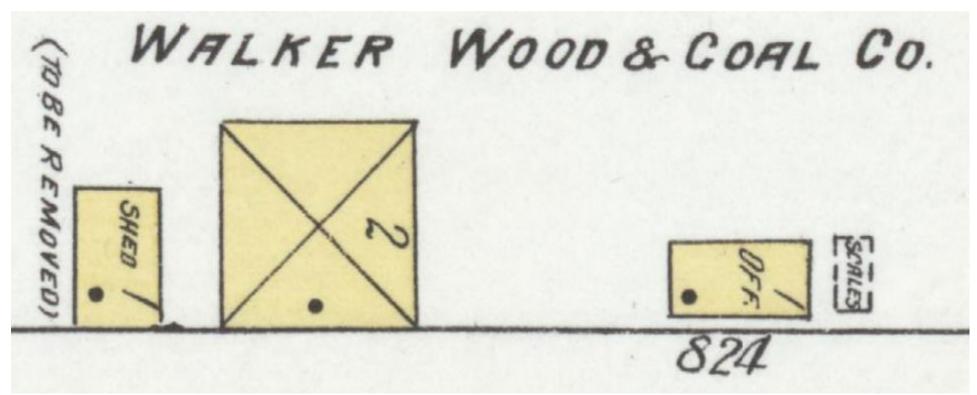
Table 34. Extract: "Directory of Industries Inspected with Number of Employes... Washington County – Johnson City", for the Year Ending 31 December 1925.¹²⁹

Style of Firm			No. Em	ployes	
	Business	Over 16		Under 16	
		Male	Female	Male	Female
Vancorman [Voncanon?] & Co., O.D.	Lumber	31			

Table 35. Extract: "Directory of Industries Inspected with Number of Employes... Washington County – Johnson City", for the Year Ending 31 December 1926.¹³⁰

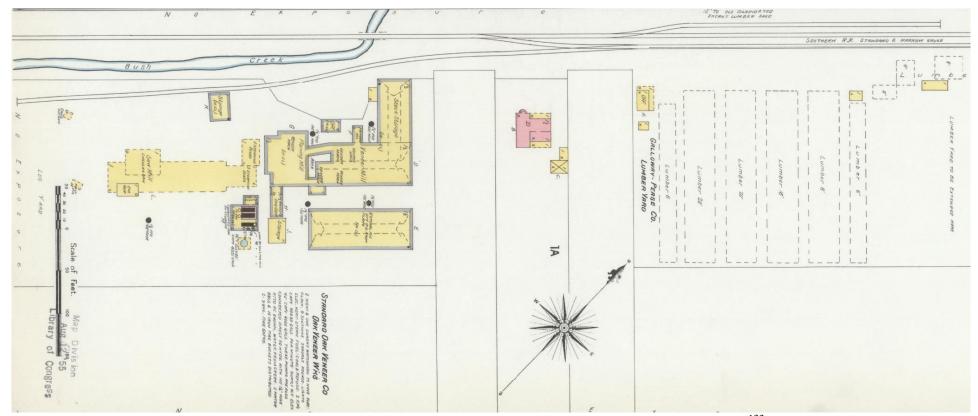
Style of Firm			No. Em	ployes	
	Business	Over 16		Under 16	
		Male	Female	Male	Female
Vancorman [Voncanon?] & Co.	Planing Mill	30			

3.2. Walker Wood & Coal Company, 1920

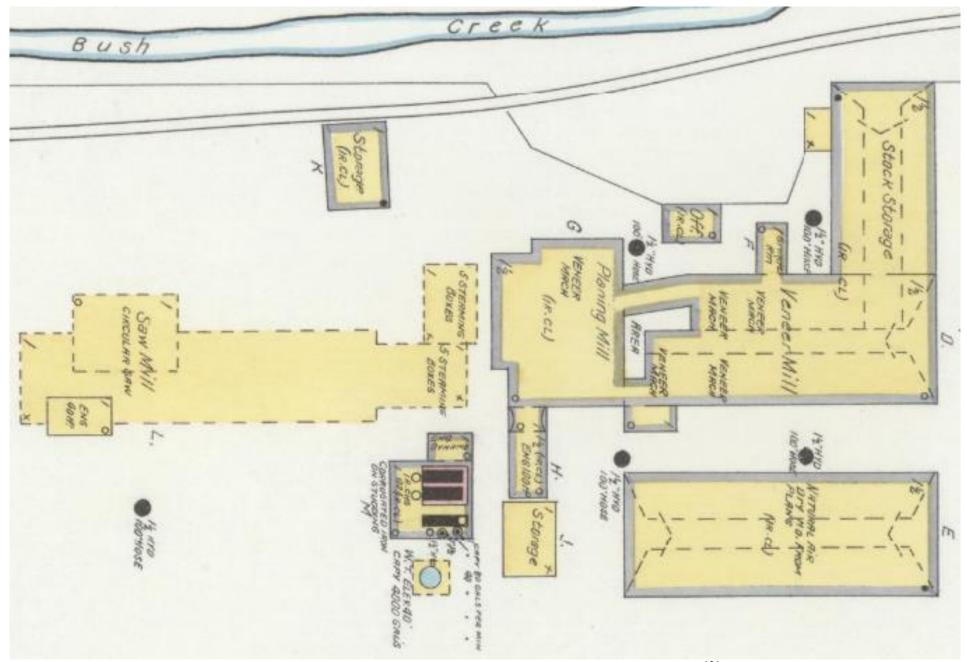


Map 5B. Detail of "Walker Wood & Coal Co.", "To Be Removed", February 1920.

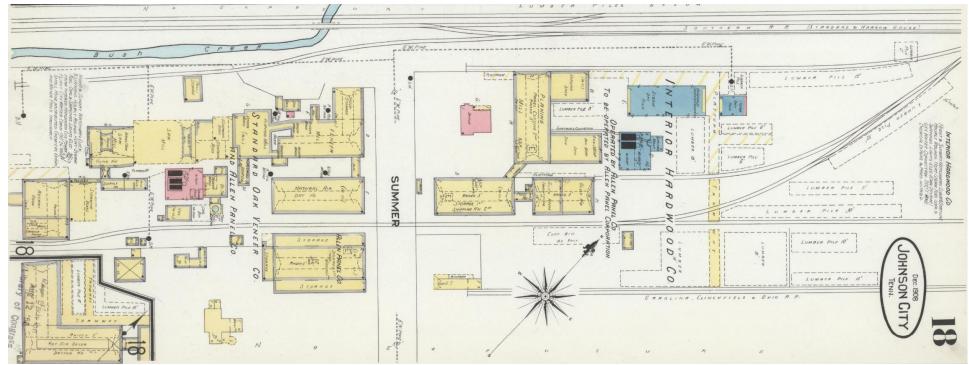
4.0. Properties in the Area Bounded by Summer and Cherokee Streets (East to West) and the Clinchfield Barrett Yard and West Walnut Street (North to South) Johnson City Veneer Mills, 1901 – 1902 Edwin F. Smith Veneer Company, 1902 Standard Oak Veneer Company, 1902 – 1910¹³¹
Tennessee Veneer Company/Tennessee Oak Veneer Company, 1910 Tennessee Lumber and Veneer Corporation, 1910 – 1920?
Whiting Lumber Company/Elizabethton Flooring Company, leased this plant in 1920 Burned on 7 May 1920 and, apparently, not rebuilt Served by the Clinchfield and E.T. & W.N.C. (?) Railroads¹³²



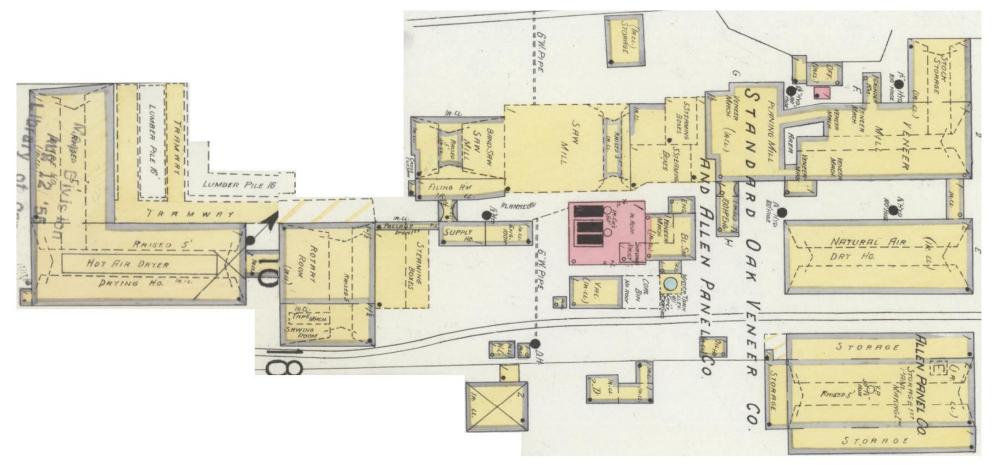
Map 6. The Standard Oak Veneer Company plant and the Galloway – Pease Company lumber yard, April 1903.¹³³ Regrettably, the author has not found any images of the Standard Oak Veneer Company plant. Note the dual gauge track reaching the Galloway – Pease Lumber Yard in the top right of the map.



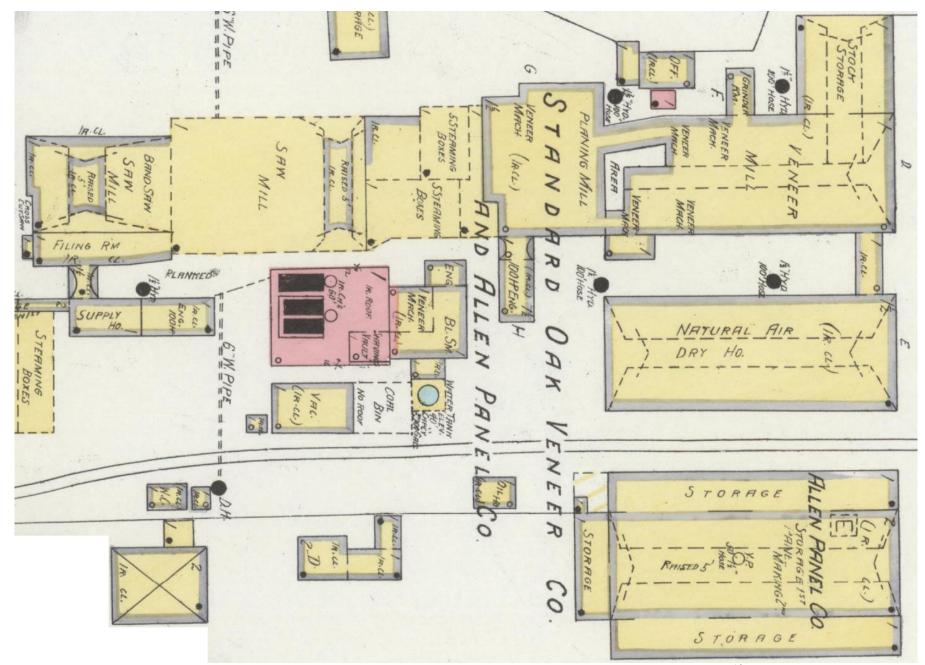
Map 6A. A detail of the Standard Oak Veneer Company plant in 1903.¹³⁴



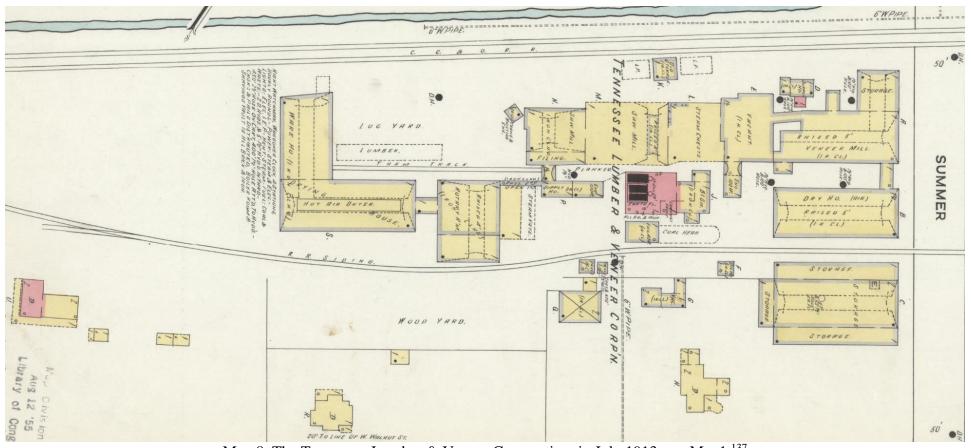
Map 7. The Standard Oak Veneer Company, Allen Panel Company, and Interior Hardwood Company, December 1908. These properties were located at the junction of Summer and West Walnut Streets.¹³⁵ Note the single length of dual gauge track depicted along the top right of this map, see also Map 6. The Interior Hardwood Company will be addressed in the next section.



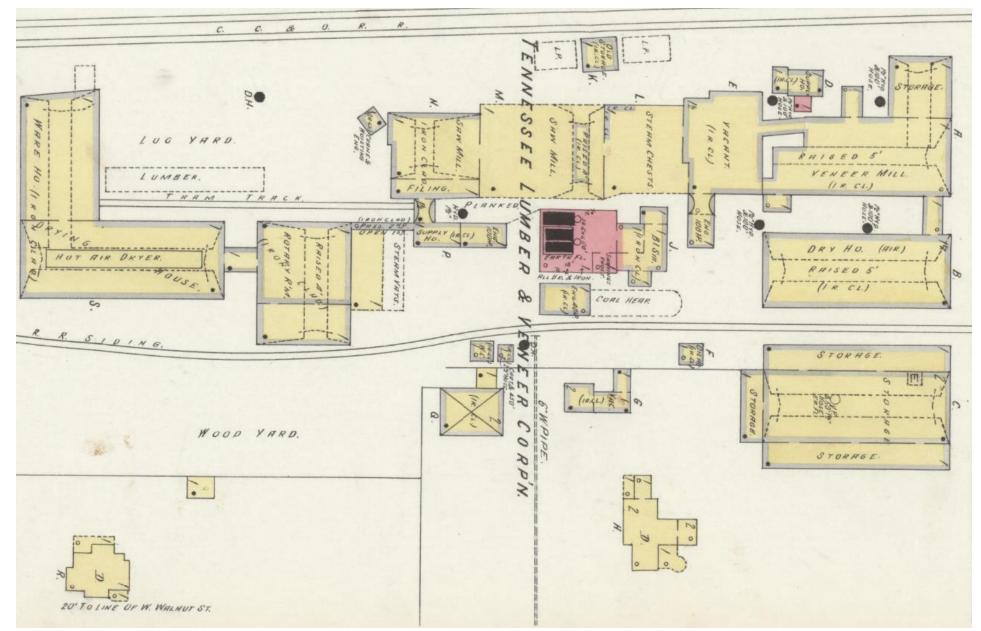
Map 7A. A detail of the Standard Oak Veneer Company and Allen Panel Company, December 1908.



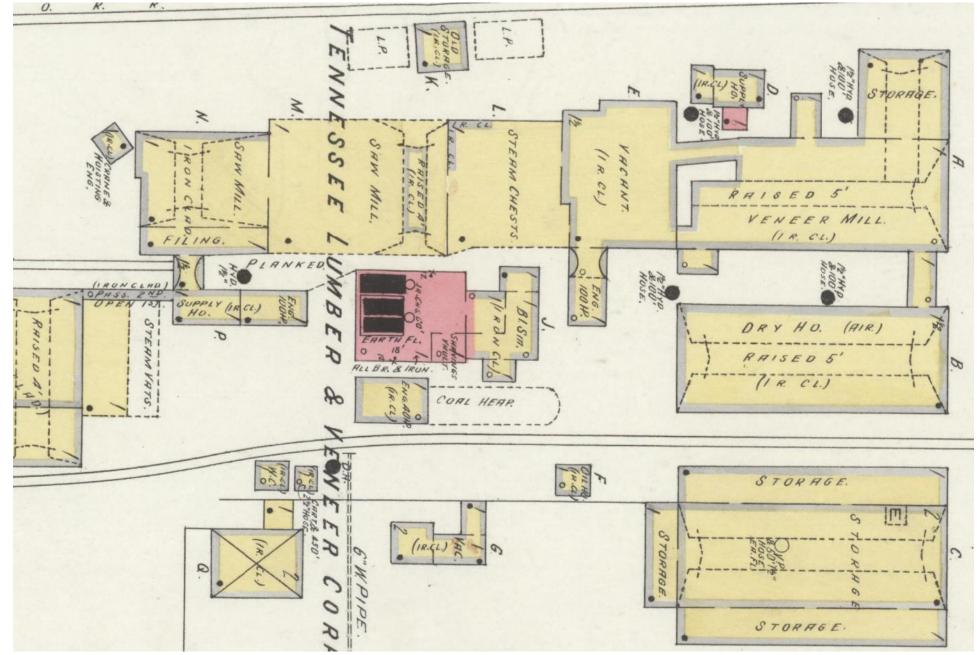
Map 7B. Standard Oak Veneer Company and Allen Panel Company, December 1908.¹³⁶



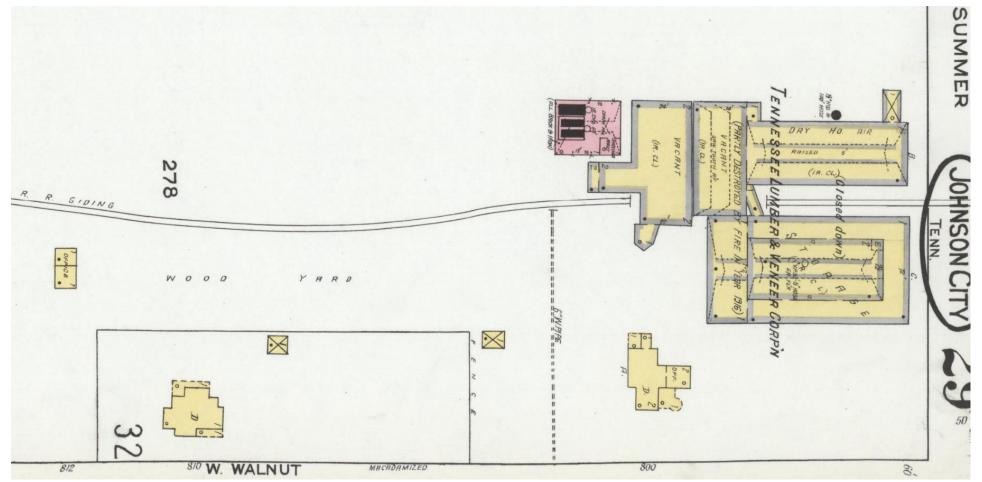
Map 8. The Tennessee Lumber & Veneer Corporation, in July 1913, see Map1.¹³⁷



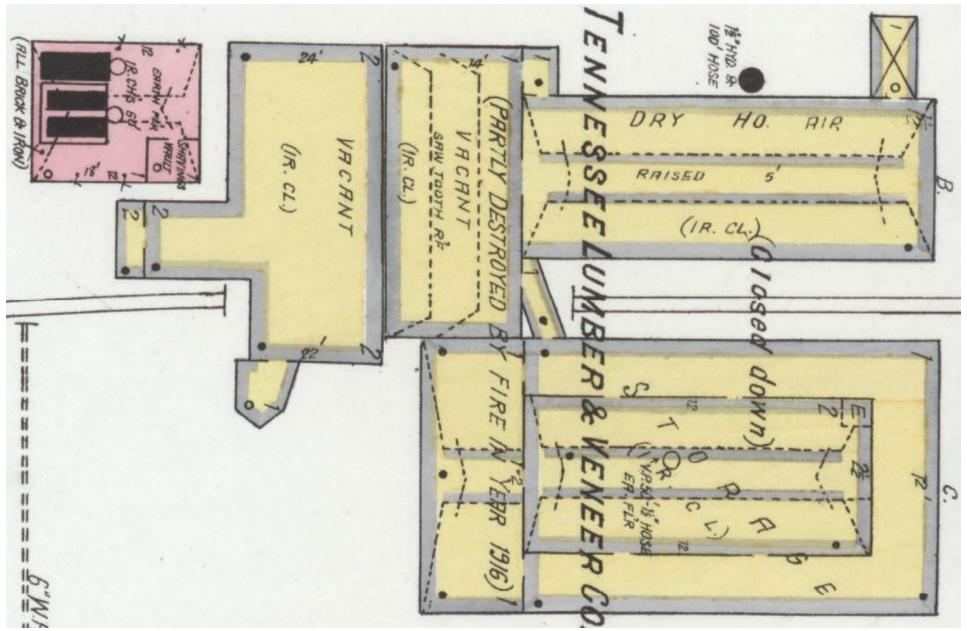
Map 8A. A detail of the Tennessee Lumber & Veneer Corporation, this plant was previously owned by the Standard Oak Veneer Corporation and the Allen Panel Corporation, see Map 7. July 1913.¹³⁸



Map 8B. A detail of the Tennessee Lumber & Veneer Corporation, July 1913.



Map 9. The Tennessee Lumber & Veneer Corporation Plant was partially destroyed by fire on 23 December 1916 and "closed down", as shown by this map from February 1920. Previously, this plant was owned by the Standard Oak Veneer Corporation and the Allen Panel Corporation, see Map 7. Notice the greatly reduced number of buildings in this complex in comparison to those depicted in Map 8.¹³⁹



Map 9A. A detail of the "closed down" Tennessee Lumber & Veneer Company, February 1920. It appears that this plant was not rebuilt.

4.1.1. Johnson City Veneer Mills, 1901 – 1902

24 October 1901. Johnson City Comet.

"The foundation for the new plant of the Johnson City Veneer Mills is being put in place and a nest of large boilers being set. The plant will cover three acres just west of the foundry, a land purchased from the Millers, and when completed will furnish employment to about 75 people." Previous to the occupation of this plant, the Johnson City Veneer Mills were located in the old Johnson City Foundry plant, when it was located on Cherry Street. The operations of the Johnson City Veneer Mills at the Cherry Street location will be addressed in a later document.

26 December 1901. Johnson City Comet.

"Our Veneering Plant. J.B. Thomas, general manager of the Wm. E. Uptegrove & Bro. cigar lumber plant at Johnson City, was a guest at the Imperial last night, on route home from a business trip to Cincinnati, says the Sentinel... It is learned from Mr. Thomas that there is another prospering veneering works at Johnson City. This is the oak veneer plant of E.F. Smith [also Superintendent of the Uptegrove Cigar Box factory]. It cuts two cars a day of the finest oak veneering in the United States. The Singer Sewing Machine company takes the entire output of the plant..."

4.1.2. Edwin F. Smith Veneer Company, 1902

16 January 1902. Johnson City Comet.

"Company Charter. The Edwin F. Smith Veneer Company, of this city, has been granted a charter with \$25,000 capital stock. The incorporators are Edwin F. Smith [also Superintendent of the Uptegrove Cigar Box factory], Chester B. Allen, Jerome B. Thomas [also General Manager of the Uptegrove & Brother operations in Johnson City], Tate L. Earnest and John H. Bowman. This company is now building a large plant on the Southern just above the [Johnson City] Foundry and Machine Co. and will soon have it in operation. The intention is to cut quartered oak veneers and for this purpose they have the best equipped plant in the United States."¹⁴⁰

"Messrs. Allen & Smith are erecting a big veneering plant and various other industries are springing up in and about the city. – Knoxville Sentinel."

13 November 1902. Johnson City Comet.

"Trustee's Sale. By virtue of a trust deed executed on February 4, 1902, (registered Trust D.B. 15 pp. 309, et seq. R.O.W.C.) by Edwin F. Smith Veneer Company, a body corporate, to the undersigned Trustee, default having been made in the payment of interest coupons on bonds thereunder secured entitling the holder of said bonds to demand foreclosure of said trust deed, and demand to that end having been made, the undersigned as trustee will proceed on Saturday, December 20, 1902, to sell the property and franchises conveyed therein, the sale to be on the premises formerly occupied by the grantor Company (tract of realty No. 1 below) said property and franchises being as follows, to-wit:

(1). That realty conveyed to the grantor Company by Wm. E. Uptegrove, January 30, 1902, registered at Jonesboro, and theretofore conveyed by P.Q. Miller by deed of September 24, 1901 (R.O.W.C.D.B. 80, pp. 215, 216) being the parallelogram tract 530 x 265 feet adjoining the Southern Railway right of way in Johnson City, Tennessee, on which the plant of said grantor

Company was erected, a minute description being given in the said recorded deeds, reference to which is here made.

(2). A certain house and lot in Johnson City, Tennessee, fronting 90 feet on Cherry street and running back of even width 165 feet to Ashe street, adjoining Earnest street on the northeast side and the Sutton lot on the southeast side, conveyed to the grantor Company January 15, 1902, deed registered at Jonesboro.

(3). All personality conveyed to the grantor Company by deed of Edwin F. Smith [who was also Superintendent of the Uptegrove Cigar Box factory], doing business under the style of Johnson City Veneer Mills, said deed being dated January 15, 1902, registered as above: One roller dryer, one small rotary, one trimmer, one 8 h.p. engine, one 20 h.p. engine, one 40 h.p. engine, one 40 h.p. boiler, one 100 h.p. boiler, saw mill complete, opening saw, tanks and piping, two veneer machines, planers, cut-off saw, jointer, grinding machine, hoisting machine, derrick, tackle, etc., knives for veneer machines, shafting, pulleys, belting, trolley and equipment, crane, saw edger, two extra saws, pipe, dry rack, dynamo, tools, etc., and other personality fully described in said conveyance here refereed to. Also all plant, stock, contracts, easements, and leases of the grantor Company, and all of its corporate property of every kind held at the date of said trust conveyance or thereafter acquired, as is in said trust conveyance set forth.

(4). All corporate franchises and privileges of the grantor Company.

All of the realty is situated in the Ninth Civil District of Washington County, Tennessee.

Terms of Sale.

The property will be offered for sale by items 1, 2, 3 and 4 as above, and then as a whole, the highest aggregate to be adopted; note or notes to mature one year from date of sale, to be executed with solvent personal surety or sureties, retaining vendor's lien on the property represented by same; sale in bar of the equity of redemption.

This November 13, 1902.

The Banking and Trust Company of Jonesboro, Trustee. By S.C. Williams, Vice-Pres't."

4.1.3 Standard Oak Veneer Company, 1902 – 1910

1902. "Standard Oak Veneer Co. Incorporated 1902 New York."¹⁴¹

November 1902. The St. Louis Lumberman.

"Among the recent fall sales of Wm. E. Hill & Co., 321 - 329 Park street, Kalamazoo, Mich., we note the following... Standard Oak Veneer Co., Johnson City, Tenn., $41\frac{1}{2}$ drag saw machine..."¹⁴²

5 March 1903. Johnson City Comet.

"The City Council... On motion of Alderman Mathes a fire plug was placed at the intersection of Summer and Walnut streets for the especial protection of the plant of the Standard Oak Veneer Co."

June 1903. The Wood-Worker.

"The Coe Manufacturing Co. this company, at Painesville, O., has on hand orders for over six hundred tons of veneer-cutting and drying machinery, for, among others... Standard Oak Veneer Co., Johnson City, Tenn..."¹⁴³

2 June 1904. Johnson City Comet.

"The Standard Oak Veneering Company has shut down ten days for the purpose of putting in some new machinery."

15 November 1904. The New York Lumber Trade Journal.

"The Standard Oak Veneer Company has recently acquired several more acres of property adjacent that which it already owns at Johnson City, Tenn., and has begun the erection of another factory. It is to be 50 feet by 120 feet and will be two stories high. Panels will be manufactured."¹⁴⁴

26 November 1904. American Lumberman.

"The Standard Oak Veneer Company has recently acquired several acres of property adjoining that which it already owned at Johnson City, Tenn., and has begun erection of another factory. Panels will be manufactured. Fifty to seventy-five men will have employment. The Standard company already employs over 100 men and the weekly payroll amounts to about \$600."¹⁴⁵

6 December 1904. Acts of the State of Tennessee Passed by the Fifty-Fourth General Assembly.¹⁴⁶

Table 36. "Domestic Corporations"

Name of Corporation	County where registered.	When registered in Secretary of State's office	Book	Page
Allen Panel Co.	Washington	Dec. 6, 1904	U6	199

December 1904. The Packages.

"The Standard Oak Veneer Co., Johnson City, Tenn., will build panel-making plant. C.B. Allen is manager."¹⁴⁷

April 1905. The National Coopers' Journal.

"At Johnson City, Tenn., the Standard Oak and Veneer Co. are doing a good business."¹⁴⁸



Figure 36. "120 K.W. Dynamo – Allen Panel Co. Johnson City, Tenn."¹⁴⁹

April 1905. Packages.

"The Coe Veneer Dryers. Speaking of methods of drying veneers heretofore employed, the Coe Mfg. Co., of Painesville, O., has the following to say:

'After years of disappointing experiments and after having seen a vast expenditure of time and money go for naught, veneer manufacturers seem at last to have found a satisfactory method of drying their product. The automatic roller dryer process, conceived and perfected by the COE Mfg. Co., Painesville, O., is a complete solution of the drying problem.

These dryers will bone-dry any veneer or thin lumber up to ¹/₄-inch in thickness, any shape or size sheets, in from eight to 80 minutes, the time, of course, depending on the thickness of the stock, and the amount of moisture to be extracted. There is simply no comparison between these results and even the best obtained by any other method. The saving in time is tremendous, and the stock can be dried in any weather. These dryers can be run night and day, and can easily keep up with the cutting capacity of the mill, so that there need never be any shut-downs in the cutting department so that the accumulated stock can be dried.

Not only is the stock dried very quickly, but there are a great many other important points to be considered. The stock is all dried perfectly flat, without checks, wrinkles, splits or discolorations. Not one piece is wasted, and the saving right here over ordinary methods of drying will soon pay for the machine. The dryer is very simple in operation, and two cheap boys can work it up to its full capacity of 25,000 to 150,000 feet of perfectly-dried veneer per day. These machines are built to meet special requirements of each user, and are installed under a positive guarantee as to output and quality of stock. The first cost is not excessive, being about the same as that of a good kiln.

Here we have all the points that go to make up a money making proposition for the young man. Quick and perfect drying, large output, low operating cost, low operating expense, low first cost, and no waste product. The following list of recent installations of these machines shows how widely and favorably they are known... Wm. E. Uptegrove & Bro. Co. New York City... Allen Panel Co., Johnson City, Tenn...

Two of the above are above are installing their second mill, which, in itself, is an eloquent testimonial as to the value of these dryers. Any one interested in the rapid and economical drying of veneers should write the makers for their new catalog No. 7, and inquire into the details of their special proposition on the installation of these machines. Address, the Coe Mfg. Co., Painesville, O., 107 Lewis street, and mention Packages.¹¹⁵⁰

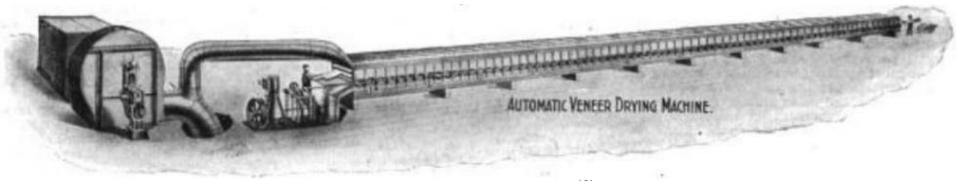


Figure 37. Packages, April 1905.¹⁵¹



Figure 37A.

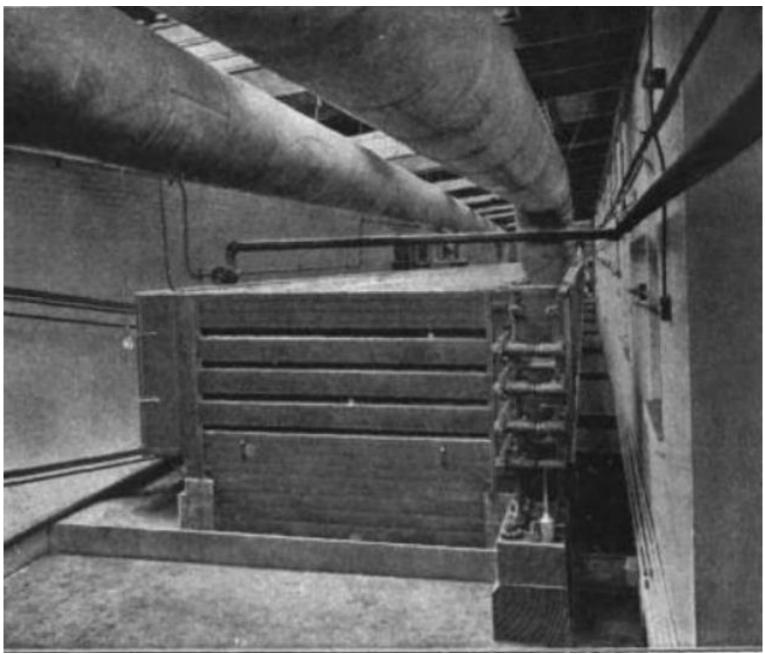


Figure 38. "Coe Veneer Dryer – feed end, showing feed chain tightener."¹⁵²

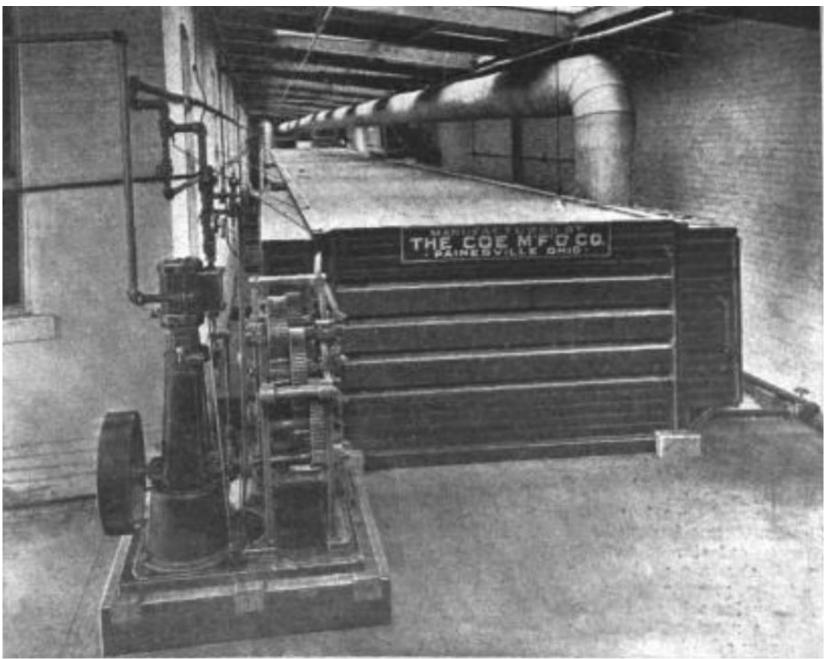


Figure 39. "Coe Veneer Dryer – delivery end, showing feed works and engine."¹⁵³

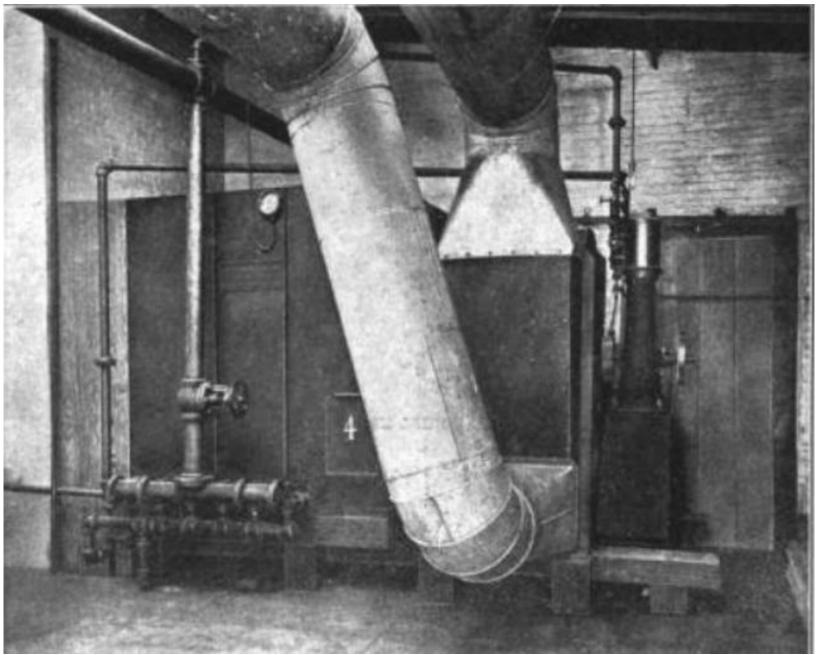


Figure 40. "Coe Veneer Dryer – Blower Apparatus."¹⁵⁴

How Are You Going to Dry Your Veneers in 1905?

Are you satisfied with your present methods? Wouldn't you like to find a way to dry veneers flat and without wrinkles, checks, splits or discolorations? Wouldn't you like to be able to dry any veneer or thin lumber up to 1/4 inch in thickness and any size sheet at the rate of from 25,000 to 150,000 feet per day? It can be done, and it has been done, but

BREATEST CAPACITY

THE COE WAY IS THE ONLY WAY.

AUTOMATIC VENEER DRYING MACHINE

LEAST EXPENSI

Our Automatic Roller Dryer will not only dry your veneer perfectly and quickly, but it will save you its cost every year in the saving of labor alone. The price of these machines is not excessive—not more than you would pay for a good kiln. They are in use in nearly all the best mills in the country and our order books show that the balance are following.

The following recent installations give some idea of the kind of people who use these Dryers:

Carrison Veneer & Woodwork Co., Columbus, Ga. Wm. E. Uptegrove & Bro., New York City. Oden Wilkinson & Co., Parma, Mo. Bacon-Underwood Veneer Co., Mobile, Ala. Allen Panel Co., Johnson City, Tenn. Moore-Whitmore Co., So. Milwaukee, Wis. Acme Tea Chest Co., Glasgow, Scotland. A. M. Luther, Reval, Russia. Setter Bros. Co., Cattaraugus, N. Y.

You had better investigate. Full description in our new catalog No. 7. A copy free for the asking.

THE COE MANUFACTURING CO. 107 LEWIS STREET, PAINESVILLE, OHIO.

Figure 41. Packages, June 1905.¹⁵⁵

August 1905. The Craftsman.

"Wood Panels Ready for Use. It is a pleasure again to call attention to the recent enterprise of the Allen Panel Company, of Johnson City, Tennessee, who are placing upon the market their built up wood panels for wainscoting, doors and ceilings, which can be shipped direct to house builders and cabinet makers ready for use. Architects and builders will appreciate the advantage of being able to order these panels, made of carefully selected figured wood and built up of either three- or five-ply cross banded wood of any suitable kind, that will not shrink, check or warp, and can be made to any size. The broad wainscot panels shown in the illustrated advertisement convey their own sense of beauty and dignity, and it is worth while to note the fact that these wide panels can be made lasting only when built up in this way. The Company has every advantage of mills and modern machinery situated in the heart of the timber country, affording the best materials without extra cost of handling. Cost and particulars will be given upon application to the Company."¹⁵⁶

August 1905. Box and Barrel.

"Newest Veneer Dryer. The Automatic Roller Dryer process conceived and perfected by The Coe Manufacturing Co., Painesville, Ohio, is a complete solution of the drying problem. These dryers will bone dry any veneer or thin lumber up to 1/4 in. thickness, any shape or size sheets in from eight to eighty minutes, the time, of course, depending on the thickness of the stock, and the amount of moisture to be extracted. There is simply no comparison between these results and even the best obtained by any other method. The saving in time is tremendous and stock can be dried in any weather. These dryers can be run night and day, and can easily keep up with the cutting capacity of the mill so that there need never be any shut downs in the cutting department so that the accumulated stock could be dried. Not only is the stock dried very quickly, but there are a great many other important points to be considered. The stock is all dried perfectly flat without checks, wrinkles, splits or discolorations. Not one piece is wasted, and the saving right here over ordinary methods of drying will soon pay for the machine. The dryer is very simple in operation, two cheap boys can work it up to its full capacity of from 25,000 to 150,000 ft. of perfectly dried veneer per day. These machines are built to meet special requirements of each user and are installed under a positive guarantee as to output and quality of stock. The first cost is not excessive, being about the same as that of a good kiln. Here we have all the points that go to make up a money making proposition for the veneer man.

Quick and perfect drying, large output, low operating expense, low first cost, and no waste product. The following list of recent installations of these machines shows how widely and favorably they are known:

Carrison Veneer & Woodwork Co., Columbus, Ga. Wm. E. Uptegrove & Bro. Co., New York City. Oden Wilkinson Co., Parma, Mo. Bacon – Underwood Veneer Co., Mobile, Ala. Allen Panel Co., Johnson City, Tenn. Acme Tea Chest Co., Glasgow, Scotland. Moore – Whitmore Co., Milwaukee, Wis. A.M. Luther, Reval, Russia. Setter Bros. Co., Cattaraugus, N.Y.

Two of the above are installing their second kiln which in itself is an eloquent testimonial as to the value of their dryers. Any one interested in the rapid and economical drying of veneers should write the makers for their new catalogue No. 15, and inquire into the details of their special proposition on the installation of these machines.

Address, The Coe Mfg. Co., 115 Davidson Street, Painesville, O., and mention The Barrel and Box."¹⁵⁷

NO TAPED READY TO L Joursan Crivierx October 16th. 1905. The Coe Hamufacturing Company, Paineeville. Ohio. Gentlemen:---We want to add our testimonial in behalf of your automatic Roller Dryer. We have been operating one of these machines for the past year and are very much pleased with the results obtained from it. The stock comes from the machine perfectly dry and flat, and a can heartily recommend the dryer as being all that you claim for it. Yours very truly.

Figure 42. Box and Barrel, December 1905.¹⁵⁸

24 May 1906. Johnson City Comet.

"Will Add Several New Features. – The Standard Oak Will Largely Extend Their Line. – Ten Thousand Dollars has been Spent for Soil on Which to Erect a New and Commodious Plant. A deal was closed at 4 o'clock Tuesday afternoon between P.Q. and J.R. Miller and C.B. Allen [Manager of the Uptegrove affiliated Standard Oak Veneer Company, President of Allen Panel Company and (at various times from 1905 to 1909) vice president, secretary, and/or traffic manager of the Johnson City, Bakersville & Southern Railway] and associates by which the former sold eight acres of land to the latter for \$10,000. The land lies just west [east?] of the Standard Oak plant and adjoins it. The purchasers will erect at once suitable buildings for the manufacture of high grade interior finish, making specialties of mantles, doors and panel work. This plant in connection with the veneer plant of the Standard Oak will turn out the finished work in all its primitive beauty and go abroad as the biggest advertisement the city has ever had. [Apparently upon completion, this plant would be occupied by the Interior Hardwood Company.]

This enterprise has ample capital and will equip with modern machinery one of the largest plants of the kind in the state. The fact that C.B. Allen is behind it means that it will go."

The Best Evidence

of the wide spread popularity of

The Coe Automatic Roller Veneer Dryer

is to be found in the following list of the recent purchasers of this machine.

White Veneer Co.
Astoria Veneer Mills.
Louisville Veneer Mills.
Kentucky Veneer Works.
Salamanca Veneer & Panel Co.
Setter Bros. Co. (2)
Hanson Ward Veneer Co.
Paine Lumber Co.
Wisconsin Veneer Co.
St. Louis Basket & Box Co.
Hinson Veneer & Crate Co. Schier & Walter.
High Point Veneering Co.
Sigler Butcher Co.
Medford Fruit Package Co.
Wm. E. Uptegrove & Bro.
Bacon Underwood Co.
C. H. White.
Allen Panel Co.
Standard Oak Veneer Co.
J. F. Conant Mfg. Co.
Acme Tea Chest Co.

FOR FURTHER DETAILS SEND FOR CATALOG NO. 10.



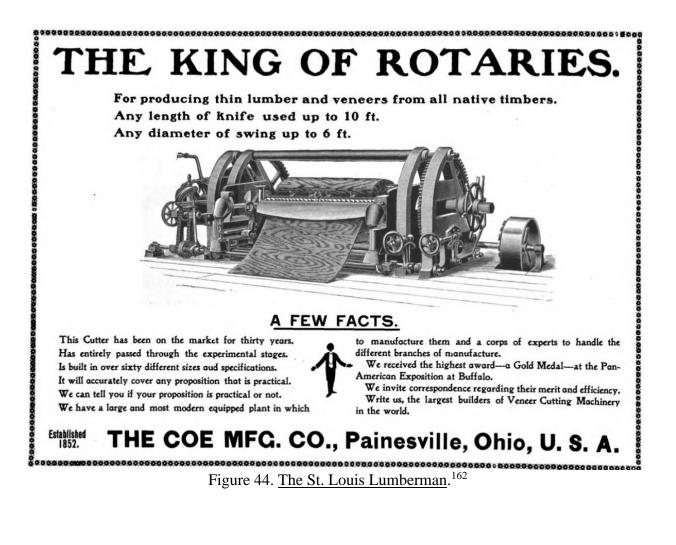
Figure 43. American Lumberman, 30 June 1906.¹⁵⁹

14 June 1906. The Iron Age.

"C.B. Allen, Johnson City, Tenn., [Manager of the Uptegrove affiliated Standard Oak Veneer Company, President of Allen Panel Company and (at various times from 1905 to 1909) Vice President, Secretary, and/or Traffic Manager of the Johnson City, Bakersville & Southern Railway] with a number of associates, is interested in the erection of a \$50,000 wood working plant. An 8½-acre site has been purchased for a plant and a full equipment is required, as well as 250 horse-power in boilers and 200 horse-power in engines."¹⁶⁰

July 1906. Wood Craft.

"C.B. Allen, Johnson City, Tenn. [Manager of the Uptegrove affiliated Standard Oak Veneer Company and President of Allen Panel Company and (at various times from 1905 to 1909) vice president, secretary, and/or traffic manager of the Johnson City, Bakersville & Southern Railway], and associates, have purchased an 8½-acre site [between West Walnut Street and the Southern Railway] on which they will erect a woodworking plant to cost \$50,000. A full equipment of woodworking machinery will be required."¹⁶¹



2 August 1906. Johnson City Comet.

"Great and Rapidly Expanding Local Industry – One of Heaviest and Most Useful Industrial Enterprises and the Pride of Johnson City – A Plain Statement of the Remarkable Growth and Development of the Standard Oak Veneer Company and its Associated Allies – A Model Plant of Well-Designed Factory Structures – (By Benedict Burr) By far the heaviest and most useful industrial activity here and of which Johnson City is loyally and consciously proud, is that of the Standard Oak Veneer Company (incorporated) which had its inception only some five years ago, and which, literally, like a great portion of the product used – Oak – has grown to majestic proportions.

It is the purpose of this article to note in the briefest, most matter-of-fact form, a plain sketch of the rise and expansion of this capital industry, and in the limited space at my command only meager, bare outline can be drafted.

To attempt anything like an adequate portrayal of this splendid industry, its ingenious processes, its superb equipment, magnitude and extent of operations, and all else, other than by a skilled, expert mechanical writer, proficient in his line and gathering careful facts and statistics thereto, would be doing an injustice to this industry. In making this prefacial statement the writer is but relieving himself of the duty which would accompany this task, were the reader to erroneously to assume that this brief and imperfect digest in any manner assumed to be a faithful recapitulation of facts, figures and lore of this grand industry. Quite to the contrary, it is but a fragmentary attempt to delineate a few partial features which will somewhat serve to show our readers and the outside world the splendid success achieved, in a very brief time, by one well managed manufacturing enterprise in Johnson City, and to direct attention thereto, as a notable, praiseworthy example of what one forceful, energetic manufacturing concern has accomplished since settling within its boundaries, and somewhat serving as an index for others to emulate in the future. It can rightly be said that this well ordered, progressive concern - the Standard Oak Veneer Company – since its inception hither has played a most important part in the development, upbuilding and general welfare of this city and district, and by their well-directed efforts, liberal business spirit and undeviatingly fair methods have won an unmeasured degree of appreciation from all dwellers here. From the outset this concern has, in every manner, well identified itself with all prime local affairs. It has nobly displayed its faith and interest in this city and region by its works, and has steadily and continuously made heavy investiture and costly improvements and developments. Besides, whatever improvements or additions that are affected are done in the best and most through manner, commensurate with the ample manufacturing structures erected in the start.

Some slight idea of the immensity of this plant may be gathered when it is stated that the group of structures composing the present plant, many of which are similar in general design and pattern – warehouses, boiler and engine rooms, electric systems and dynamos, yards, inner private tramways, connecting bridge runs, etc., – now occupy over five acres or ground at the western edge of the city, adjacent to the main line tracks, freight and passenger depots of the Southern Railway, spur tracks conveying cars to the yards and platforms of this concern and giving it the very finest unloading and shipping facilities. In brief, the ponderous machinery devices and equipment assembled throughout this plant are of the most approved modern class, much being of original pattern from designs of their own. Powerful engines and dynamos contribute above 400 horse power, electric lighting is provided by their own system, and the works are manned by a force of 150 skilled employees.

The productions of the Standard Oak Veneer Company's works may be manifested as sliced quartered oak and rotary cut veneers [see Figure 44]. Dimension stock is a specialty. The most select oak and poplar are utilized. The universe may be said to be this company's market, large cities as Chicago, Cincinnati, San Francisco, Grand Rapids, Boston, New York, and others being large buyers.

But this is only a portion of the company's operations – the initial part, as it were. Pass along, and we enter the Allen Panel Company premises, just adjoining. This is an associate concern, also incorporated. This company manufactures taped veneers, matched jointed tape, all ready to lay in any size. Also built up panels or compound using entirely the raw material furnished from the Standard Oak Veneer Company. The equipment of this company is in equal high correspondence with the Standard Oak Veneer Company.

Operations are now well under way and costly construction has begun on new, spacious buildings which will comprise the plant of the Interior Hardwood Company, a newly added industry, whose productions will be the only ones made in this city, and which, when shipped, will distinctively advertise Johnson City as their special mart of manufacture, and the Interior Hardwood Company as their maker. Unlike other staple products and exports from here, which go out as raw material to enter into manufactured products elsewhere and thus lose their original identity, these finished productions will all bear the imprint of the Interior Hardwood Company, Johnson City, Tenn., and thus serve to advertise alike the name, fame and success of the city and the manufacturer for productions of high class worth.

An ample tract of some ten acres, to the eastward of the two others mentioned, has been purchased and apportioned for this enterprise. A series of special buildings, dry-kilns, warehouses and yards will comprehend this new plant, which will be a model of its class for the purposes designed. In the immense yards will be stored mammoth stacks of lumber for proper seasoning, a period of over one year's time being required for seasoning before being used, this safeguarding against all future atmospheric changes, a matter of much concern that receives vigilant, careful attention and which necessitates having a large surplus stock in seasoning. It should here noted that, through the presence of this great industry, timber owners hereabouts are paid much higher prices than otherwise they would in the general market for this class of timber, as this concern pays a premium price in spot cash for all choice offerings.

The special products of the Interior Hardwood Company will be the very finest varieties of quartered white oak materials, made up from product manufactured by the Standard Oak Veneer Company and the Allen Panel Company, thus making a finished product to be used in fine residences, office buildings, bank structures, etc.

In resumption, in a very concise manner have general facts been adduced relative to the rise and rapid expansion of this notable local industry. The remarkable success achieved has been due, in a very marked degree, to the indomitable energy and forceful, well directed efforts of its management. The manager, Mr. C.B. Allen, under whose superintendence this enterprise has grown to such satisfactory proportions, is a native of the Empire State, and is of that quick, farseeing type of men, to whom the methodical direction of large concerns is but a matter of fact. Moreover, he displays commendable interest in all movements tending to the advancement and upbuilding of this municipality, and is ever ready to co-operate in all prime affairs that betoken enlargement.

The Standard Oak Veneer Company with its associate concern, the Allen Panel Company, have in the past been most important factors here, and with this added associate, the Interior Hardwood Company, this trio of splendid manufacturing enterprises has for the future a career of

promise which can hardly be forecasted. From the very outset and throughout an unbroken period of steady triumph, they have acquired the good will and popular regard of all manner and classes of citizens here, whom are pleased to observe the continued advancement and well deserved prosperity of this grand industry."

9 August 1906. Manufacturers Record.

"Johnson City, Tenn. – Woodworking Plant. Interior Hardwood Co. has begun the erection of \$50,000 factory for the manufacture of veneer doors, hardwood interior finish, etc."¹⁶³

27 December 1906. Johnson City Comet.

"Woodworking Plant. This week the Interior Hardwood plant of the Standard Oak Veneer Co. opens for business. It is situated close to the other buildings and is equipped with the very latest and finest machinery. C.B. Allen [Manager of the Uptegrove affiliated Standard Oak Veneer Company and vice president, secretary, and/or traffic manager of the Johnson City, Bakersville & Southern Railway (at various times from 1905 to 1909), as well as President of Allen Panel Company and Interior Hardwood Company] will look after the interests of the plant and seventyfive men will be employed to start with. The capacity of the plant will be increased from time to time as business justifies."

December 1906. Packages.

"Over at Johnson City, Tenn., the Standard Oak Veneer Co. is manufacturing hard oak veneers and the Allen Panel Co. built-up panels. C.B. Allen is manager. These companies employ 160 to 175 men."¹⁶⁴

23 February 1907. American Lumberman.

"The large woodworking plant [apparently the Interior Hardwood Company], at Johnson City, of William E. Uptegrove, of New York, went into operation last Thursday. Hardwood veneers and interior finish work will be made. R.P. Mitchell, of Birmingham, installed a 500-horsepower engine in the new plant. Mr. Uptegrove is interested in two other Johnson City plants, the American Cigar Box Lumber and the Standard Oak Veneer Company [as well as the Allen Panel Company], which are under the management of J.B. Thomas [also General Manager of the Uptegrove & Brother operations in Johnson City] and C.B. Allen [Manager of the Standard Oak Veneer Company, President of Allen Panel Company, and vice president, secretary, and/or traffic manager of the Johnson City, Bakersville & Southern Railway], respectively. These factories employ about 500 men."¹⁶⁵

2 March 1907. American Lumberman.

"The large hardwood finishing plant [apparently the Interior Hardwood Company] of W.E. Uptegrove, Frank Ketcham and C.B. Allen near Johnson City has commenced partial operations. The plant is established in two massive three-story buildings, dry houses and an engine house. The

plant occupies 28,000 square feet not including the dry house, boiler room, glueing room and engine house. The weekly pay roll is \$1,800."¹⁶⁶

2 June 1907. Johnson City Comet.

"Through the City. – South & Western now Building in Corporate Limits... The large brick warehouse at the Standard Oak Veneer Co.'s plant is to be removed to allow the track to pass that point and manager C.B. Allen has been notified to vacate."

20 June 1907. Johnson City Comet.

"Hail Storm... The roof was blown off the ware house of the Standard Oak Veneer Co. and a large lot of stock damaged..."

25 July 1907. Johnson City Comet.

"Johnson City Products. It goes without saying that Johnson Citians are pleased with everything produced here but there is one product of which we have every reason to be especially proud and that is the interior finish and hardwood doors made by The Interior Hardwood Co. This company is under the management of C.B. Allen [also Manager of the Uptegrove affiliated Standard Oak Veneer Company, President of Allen Panel Company, and vice president, secretary, and/or traffic manager of the Johnson City, Bakersville & Southern Railway] and is manufacturing a line of goods that cannot be excelled in the United States. The veneered doors are beauties and are the best that can be made, perfect in every detail. The factory is equipped with the latest and most improved machinery and only the most skilled labor is employed under the supervision of a competent superintendent and only the best workmanship is permitted to go to market. It will be a revelation to you to take a look into this factory. One of the doors is on exhibition at the Summers-Parrott Hardware Co.

Mr. Allen has fitted up his office in keeping with his line of business. His private office is finished in quartered oak, dark, and the rooms are occupied by his secretary and cashier are in quartered sycamore, finished natural. They are paneled throughout but his office has a very high wainscoting and the paneled ceiling. The large vault makes a complete office and a thing of beauty."

1907. "Autobiography of William E. Uptegrove"

Gifford Mills Uptegrove wrote: "I entered Princeton in the class of 1906... After graduation I entered my father's business... it was in the Greenpoint office that I started my business career in the summer of 1906. But it was not to last long. In the Fall of 1907 came 'the Panic'. Money tightened overnight, and Banks suspended their usual 'accommodations'. This caught my father, who was financing a business in Tennessee for the purpose of protecting the American Cigar Box Lumber Company from the inventor of the slicing machines [apparently a reference to Edwin F. Smith, who had been Superintendent of the Uptegrove Cigar Box factory]. Although this man had sold the patents to my father he nevertheless built and sold some similar machines to competitors. Instead of resorting to law, my father yielded to blackmail and enabled that man to start up another business. From an original outlay of \$5,000, it grew to \$400,000 by the time of the Panic, and this

necessitated asking for a Receivership for Wm. E. Uptegrove & Bro. [William E. Uptegrove also had significant financial involvement in the Standard Oak Veneer Company, the Allen Panel Company, the Interior Hardwood Company, and Johnson City, Bakersville & Southern Railway at this time.] Thus, at an age of 55, my father lost everything tangible except our home in Brooklyn and country place in New Canaan, Conn. But the intangibles he did not lose...¹⁶⁷ See "A Draft Documentary History of William E. Uptegrove & Brother and Their Operations in East Tennessee, 1897 – 1933..." for a more extensive coverage of the financial troubles of the Uptegrove organization.¹⁶⁸

1 December 1907. The Lumber World.

"Receiver for W.E. Uptegrove & Bro. New York, Nov. 23. – A hearing in court on November 14 resulted in the appointment of a permanent receiver for the business of W.E. Uptegrove & Bro., of Brooklyn...

Among the loans, open accounts, acceptances, etc., in the liabilities are various amounts assumed by the firm in connection with the Standard Oak Company, the Interior Hardwood Company and the Allen Panel Company, of Bristol [actually Johnson City], Tenn., in all of which W.E. Uptegrove & Bro. have a substantial interest, but these companies are in no wise affected by the Uptegrove embarassment, but are all doing well and paying substantial returns...¹⁶⁹

10 February 1908. Hardwood Record.

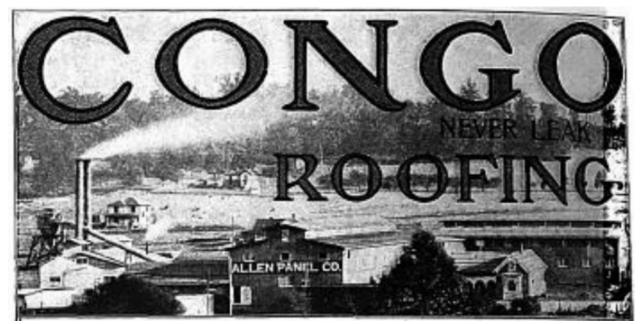
"C.B. Allen of the [Uptegrove affiliated] Allen Panel Company [, Interior Hardwood Company] and the Standard Oak Veneer Company has just returned from a trip to the East and Middle West, where he landed sufficient business to keep his mills at Johnson City in operation for some time."¹⁷⁰

4 June 1908. Johnson City Comet.

"Heavy Rain Storm – Johnson City Visited by Great Flood. – Great Damage Done – buildings Flooded, Bridges and Fences Disappear Rapidly... The Southern main line through the city was submerged a foot from the Standard Oak plant to the Tannery... The Standard Oak Lumber Co., had a foot of water in its warehouse and the new buildings had water up to their floors, logs were floating away and the belts, pulleys, shafting, etc., under the buildings were covered with mud and great damage was done, much finished stock was also ruined..."

15 June 1908. The Lumber World.

"The large mills of the [Uptegrove affiliated] Standard Oak Veneer Company and the Allen Panel Company at Johnson City, which were damaged by the recent high waters and floods, are about ready to resume operation, the repairs having been completed. President C.B. Allen, of the concerns, was on the ground and personally superintended the work. The two concerns lost about \$10,000 by the floods."¹⁷¹



"Plant of Allen Panel Co., Johnson City, Tenn., Roofed with Congo."

CONGO ROOPING is made for all weathers. An unusually severe storm won't hurt it. An extraordinary hot spell won't hurt it. An extra long cold anap won't hurt it. It will stand any kind of exposure. It is the "Neverleak-roof"the kind that stays tight after it gets old as well as when it is new.

CONGO ROOFING is a real protection to any building. Some roofings are nothing but paper that will take a layer of paint or coating. In that case the paint is your real roof, and when it wears off, the roof is ruined. It is an actual fact that many so-called roofings will dissolve under the action of water if not protected by the paint or coating.

Congo Roofing is a different proposition. The weather finds no way in which to attack it.

RAIN can't damage it because there is nothing in it that is affected by water in any way. If Congo Roofing were put at the bottom of a pond, the water would not disintegrate it in years.

AIR can't damage it because there is nothing in it that is volatile - nothing that will evaporate. If Congo Roofing were hung out like a flag for years, so that air could get at both sides of it, it would stay just as pliable and elastic as when new.

CLIMATE can't change it because there is nothing in it that is affected by either heat or cold. The heat on roots in summer is often terrific, and in winter the snow thaws and freezes there for weeks, but Congo has never shown any effects of such exposure.

It can't rot because there is nothing in it that can decompose. It is because we know the nature of the materials we use that we venture to make these claims.

EVERY foot of Congo Roofing is care fully inspected as it comes of the machine. No imperfect rolls are allowed to leave the factory. Every pound of the material that enters into the composition is carefully tested before being used, and strictly held to standard. Should it full in the slightest way, it is immediately discarded.

CONGO ROOFING is put up in rells 36 inches wide. Each roll contains 108 square feet, sufficient to cover 100 square feet and allow for a two-inch lap.

The rolls are finished with an attractive wrapper and label, and are capped with a special metal cap to protect the ends of the roofing. A steel rod runs through the center to hold the fixtures securely in place.

S UFFICIENT Congo cement, nails and in the center of each roll, so that you pay nothing for extras.

CONGO ROOFING is easy to apply. Skilled labor is not necessary. You don't have to hire an expert to help. If you can drive a sail you can do all the work that is necessary.



Figure 45. The Saturday Evening Post, 27 June 1908.¹⁷²



Figure 46. The Southern Planter.¹⁷³

1 July 1908. The Lumber World.

"The plants of the Standard Oak Veneer Company, Allen Panel Company and the Interior Hardwood Company, which were heavily damaged by the floods and high waters of a month ago, are now able to resume operation. The total loss was about \$15,000."¹⁷⁴

24 September 1908. Johnson City Comet.

"Big Plant Closed Down. - The Standard Oak Veneer Works and Kindred plants in the Hands of Receivers. The Standard Oak Veneer Co., Allen Panel Co. and Interior Hardwood Co. are in the hands of receivers appointed by Judge Sanford, of the federal court. The receivers are C.B. Allen, manager of the plant [as well as Vice President, Secretary, and/or Traffic Manager of the Johnson City, Bakersville & Southern Railway (at various times from 1905 to 1909)], S.C.

Williams and J. Fred Johnson, representing respectively the Unaka and City national banks, both creditors of the concerns. The situation is further complicated by some New York creditors who are also stockholders filing involuntary bankruptcy proceedings in New York, the home of the corporations.

The action in bankruptcy was instituted first and then the Tennessee creditors asked for receivers in Judge Sanford's court.

The three corporations are practically under one management and is the largest wood working plant in the city and in closing down a large number of skilled mechanics and laborers were thrown out of employment.

The receivers, accompanied by J. Norment Powell, left Tuesday evening for New York to see if order could not be brought out of chaos and some agreement reached by which the plants could be operated by the receivers.

Manager [Chester B.] Allen declined to make a statement as to the liabilities and assets, but expressed the hope that an understanding could be reached so the plants could be operated again at once. He stated, however, that the New York creditors who were instituting proceedings were also stockholders or one or more of the corporations.

Creditors Bill Filed. As a result of the litigation over the above plants, in which Wm. E. Uptegrove & Bro. are largely interested, the City National Bank filed a general creditors bill in the chancery court here Tuesday to wind up the insolvent corporation of Wm. E. Uptegrove & Bro. The bill seeks to impound the assets of the company in Tennessee and apply the same upon the liabilities. Chancellor Hayes named J.R. Gardner receiver. The bill does not indicate the amount of property involved, but intimates that it is improved real estate."¹⁷⁵

1 October 1908. Johnson City Comet.

"Big Plants Resume – The [Uptegrove affiliated] Allen Panel Co. and Standard Oak Plants Being Operated by Receivers. Yesterday morning the Allen Panel Co. resumed operations with a full force and the Standard Oak Veneer Co. on reduced scale. The Interior Hardwood Co. is being operated also by the Allen Panel Co. by agreement in the lease. For a time the plants will be operated by receivers Fred Johnson, S.C. Williams and C.B. Allen until the re-organization agreed upon by the creditors can be consummated.

The receivers returned Monday from New York where they had a long conference with the creditors and the result above agreed to and signed by all one of the creditors, who will sign later.

The resumption of work by these factories will be glad tidings to Johnson City people, particularly the hundreds of workmen who were temporarily idle by the shut down."

OAK WAINSCOTING

Something Entirely New

This wainscoting may be purchased by the running foot or yard, just as you would buy carpet or wall-covering. It is made in paneled sections and in heights running from two to six feet. It is of quartered white oak of choice quality of grain, and is so made as to adapt itself to any sort of room, and can be put up by your own carpenter. It is shipped "knocked down" and is easily put together and in place. The baseboard is in two parts, the lower conforming to inequalities in floor and the upper forming the base proper. Base and cap rails are grooved to engage edges of panels and styles, so that any size panel, as well as adjustment to any variation of wall space, is possible.

INTERIOR HARDWOOD COMPANY, Johnson City, Tennessee Send for Illustrated Catalogue of Wainscoting and Doors, Giving Sizes, Prices, Full Instructions for Putting in Place, and a Number of Illustrations Showing Uses of Wainscoting in Different Schemes of Interior Decoration,

Figure 47. The Craftsman, September 1908.¹⁷⁶

1 October 1908. The Lumber Trade Journal.

"Receivers have been named for several Johnson City, Tenn., allied lumber companies, under the management of C.B. Allen. The [Uptegrove affiliated] concerns this tied up are: Interior Hardwood Company, Standard Oak Veneer Company and the Allen Panel Company, all of which jointly operate a factory at Johnson City. The receivers named for the Standard Oak Veneer Company and the Allen Panel Company are J. Fred Johnson and S.C. Williams, while J. Fred Johnson and C.B. Allen are named as joint receivers for the Interior Hardwood Company. The plant is temporarily closed. The list of assets and liabilities is not given out. The creditors are scattered over the East and middle West. The Standard Oak Veneer Company sustained a heavy loss by floods last spring and this with the panic has had something to do with the embarrassment."¹⁷⁷

1 October 1908. The Lumber World.

"Receivers Appointed for Tennessee Concerns. Bristol, Tenn., Sept. 26. – Receivers were this week named for the [Uptegrove affiliated] Allen Panel Company, the Interior Hardwood Company, the Standard Oak Veneer Company and William E. Uptegrove & Bro., by Chancellor Hal H. Haynes, of this city, the chancery court at Johnson City, where they are all located. J. Fred Johnson and C.B. Allen were names as the receivers for the first three concerns, along with S.C. Williams while J.R. Gardner is named as receiver for William E. Uptegrove & Bro.

The Standard Oak Veneer Company, the Allen Panel Company, and the Interior Hardwood Company are allied concerns, of which C.B. Allen is president and in which William E. Uptegrove & Bro. are largely interested. The filing of a general creditors' bill against William E. Uptegrove & Bro. by the City National Bank of Johnson City followed the failure of the Allen concerns.

The failures were not unexpected, as the concerns have been in financial straits for some time. No statement of the assets and liabilities can be obtained and it is doubtful if such a statement could easily be prepared; so entangled are the concerns with each other."¹⁷⁸

15 October 1908. The St. Louis Lumberman.

"Bristol, Va., Tenn., Oct. 12, 1908... As a result of an agreement made with creditors in New York, by attorneys S.C. Williams and J.N. Powell and receivers Johnson and Allen, the [Uptegrove affiliated] mills of the Standard Oak Veneer Company, the Allen Panel Company and the Interior Hardwood Company, are all in operation again. These corporations, headed by C.B. Allen, were thrown into the hands of receivers some weeks ago, owing to financial entanglements with eastern interests, and it is now believed as a result of the operation of the properties the business can be placed back in the hands of the owner at no distant day and the receivers discharged.

Following the failure of these concerns, a receiver was appointed for William T. Uptegrove & Bro., of here and New York, and J.R. Gardner this week qualified as receiver and is in charge of the firm's assets in Tennessee. The Uptegrove concern was largely interested in the Allen lumber concerns, for which receivers were appointed on petition of creditors...¹⁷⁹

1 November 1908. The Lumber World.

"Uptegrove Adjustment in Sight. New York, Oct. 24. – A meeting of the creditors of William E. Uptegrove & Bro., the large hardwood and veneer house of Brooklyn, with extensive allied interests at Johnson City, Tenn., which was recently petitioned into bankruptcy, was held at the offices of Decker, Allen & Storm, attorneys for the bankrupt, 100 Broadway, October 12...

The mills of the Allen Panel Company, Standard Oak Veneer Company, and Interior Hardwood Company, which were suspended on account of insolvency proceedings instituted against them. Following which receivers were appointed, are now in operation regularly, under the receivership."¹⁸⁰

24 December 1908. Johnson City Comet.

"What the City did Last Year – A Brief Review of the Things Accomplished in 1908... The few failures recorded were not serious, though one of them, the Standard Oak Veneer Co., came near having to close down. This institution was involved with the New York failure of the Uptegroves, and but for local assistance given it would have been closed, but as it was involved but a short while, being only closed down a few days, its laborers were not long idle, consequently but little harm was done..."



Figure 48. Johnson City Comet, December 1908.¹⁸¹

24 June 1909. Johnson City Comet.

"Bid Raised and Sale Confirmed. Creditors of the Oak Veneer company, of Johnson City, which is in bankruptcy, met in Bristol in the office of referee H.H. Shelton Monday.

The referee declined to confirm the sale of the real estate of the company to C.B. Allen, its former president for \$3,000. Attorney E.K. Bachman, of Bristol, was present and on behalf of one of his clients raised the bid to \$4,000, presenting a certified check for that amount. H.M. Allen raised the bid to \$5,250. The sale of the property to him was then confirmed by the referee.

The plants of the defunct company were bid in last week by C.B. Allen at \$15,000, and it is rumored that they may again be in operation soon. Trustee J.B. Gardner, of Johnson City, C.B. Allen and others attended. – Herald Courier...

Bankruptcy Sale Confirmed. Referee Harry Shelton has confirmed the sale of the plants of the Standard Oak Veneer company, which was made by the trustee a few days ago. These properties, located at Johnson City, were bought by C.B. Allen, former president of the company, whose bid was \$13,000. The properties had been subject to a petition in bankruptcy for some weeks. – Bristol News."

July 1909. Veneers.

"The [Uptegrove affiliated] plants of the Standard Oak Veneer Co. and the Allen Panel Co., both of Johnson City, Tenn., were sold at auction to C.B. Allen, former president of both concerns, for \$13,000. It is understood that Mr. [Chester B.] Allen will reorganize and operate the plants again."¹⁸² Apparently, the Interior Hardwood Company was included in this transaction.

1 August 1909. St. Louis Lumberman.

"It is reported that C.B. Allen, who purchased the plants of the Standard Oak Veneer company and the Allen Panel company [and apparently the Interior Hardwood Company], at Johnson City, when they were sold at public auction in Bristol some weeks ago, will soon put them in operation again."¹⁸³

26 August 1909. Johnson City Comet.

"Wood Working Plants Started this Week. The Allen Panel Company and the Standard Oak Veneer Company resumed operations Tuesday of this week, after several months' idleness. The plants were recently purchased by Hon. J. Norment Powell, Fred Powell and J.A. Wilson. The latter will have charge of the operating department and it will not be long until the factories will be running at their full capacities."

9 October 1909. American Lumberman.

"Bristol, Tenn., Oct. 6. – On application of C.B. Allen, Judge H.H. Haynes, of this city, has appointed C.L. Marshall receiver for the Allen Panel Corporation, of Johnson City. The receivership came as a surprise, as the Allen corporation was organized only a short time ago, taking over property of the defunct Allen Panel Company. Mr. [Chester B.] Allen interested Ferd Powell and others in the new company and it resumed operation of the large plant at Johnson City. A disagreement followed and Mr. Allen came into court to ask for a receiver. Mr. Allen was president of the [Uptegrove affiliated] Standard Oak Veneer Company, the Allen Panel Company, the Interior Hardwood Company and allied corporations, all of which failed in the panic."¹⁸⁴

October 1909. Barrel and Box.

"The Allen Panel Corporation has been organized at Johnson City, Tenn., by C.B. Allen, former president of the defunct Allen Panel Company, and allied corporations; F. Powell, J.D. Ford and others, and will at once resume operation of the plant lately owned by the old company. This plant was sold at public auction in Bristol some time ago and bought by C.B. Allen and associates."¹⁸⁵

4 November 1909. Johnson City Comet.

"Receiver Discharged. Two weeks ago at the instance of C.B. Allen a receiver was appointed for the recently reorganized Allen Panel Corporation by a Knoxville judge. A motion was made before Chancellor Haynes several days ago to remove same and the chancellor rendered his opinion yesterday dismissing Receiver C.L. Marshall and restoring the property to its proper officers and allowing the matters in controversy to be tried on their merits."

15 November 1909. The St. Louis Lumberman.

"Bristol, Va., Tenn., November 11, 1909... The big plant of the Allen Panel Corporation, at Johnson City, Tenn., will now go steadily forward, Judge Haynes, of the chancery court of Bristol, having dismissed Receiver Marshall and ordered the property turned back to the former officers of the company. C.B. Allen instituted the suit for a receiver three weeks ago, but the court dismissed the receiver on motion of J.A. Wilson, F. Powell and others, holding that the complaints made by the complainant could be cured by injunction. The reorganized company, which took over the property of the old Allen Panel Company and Standard Oak Veneer Company [and apparently that of the Interior Hardwood Company as well], now has bright prospects."¹⁸⁶

4.1.4. Tennessee Veneer Company/Tennessee Oak Veneer Company, 1910

23 June 1910. Johnson City Comet.

"Name will be changed – Ferdinand Powell, Jos. A. Wilson and C.B. Allen Compromise Law Suit – Mill Will Start. It was learned here today that a compromise of the litigation affecting the veneers plants formerly owned by the Standard Oak Veneer Company, Allen Panel Company and Interior Hardwood Company have been made between Messrs. Joseph A. Wilson and Ferdinand Powell on the one hand and Mr. C.B. Allen on the other. It is understood that as a result of this compromise Mr. [Chester B.] Allen ceases to make any claims as to the stock held by Messrs. Wilson and Ferdinand Powell, and that those gentlemen will at once proceed to put the plant into active operation.

It is reported that the name will be changed at once to the Tennessee Veneer Corporation.

The compromise of the suit in no way effects the matters in controversy between C.B. Allen and Hon. J. Norment Powell, which will be settled in the courts, as charges have been made that do Mr. Powell a great injustice and he will not think of a compromise." This is the last mention of Chester B. Allen playing an active role in these concerns that the author has found.

15 September 1910. The Lumber Trade Journal.

"The Tennessee Oak Veneer Company at Johnson City, Tenn., is in more active operation now. Joe Wilson is manager of the plant and veneers are turned out for sewing machines, planes, furniture and coffins."¹⁸⁷

November 1910. Veneers.

"The Tennessee Oak Veneer Co., Johnson City, Tenn., is again in operation manufacturing quartered oak veneers. Joseph Wilson is manager of the plant."¹⁸⁸

1 January 1911. The Lumber World.

"Buys Idle Plant. The Standard Oak Veneer Corporation, of Johnson City, Tenn., whose large plant in that town has been idle for a year as a result of litigation involving the company, has been purchased by the George L. Carter interests and the big plant will be put in operation the first of next week after having been idle continuously for nearly two years. It will employ a large force of men and do a heavy business. It now has plenty of capital behind it. C.B. Allen was formerly at the head of the company."¹⁸⁹

15 January 1911. The Lumber World.

"The plant of the Standard Oak Veneer Company, which was recently reported purchased by the George L. Carter interests, and which is located in Johnson City, Tenn., is now in operation and turning out a large amount of stock. The plant is giving employment to a big force of men."¹⁹⁰

4.1.5. Tennessee Lumber and Veneer Corporation, 1910 – 1920?

19 January 1911. Johnson City Comet.

"Tennessee Lumber and Veneer Corporation will be operated now by Mr. George L. Carter. Johnson City's strongest mill will soon be running on full time. George L. Carter, the financial wizard, waived his golden word over the plant of the Standard Oak and associated concerns and it is now a thing of life again. The Tennessee Lumber and Veneer corporation is the name of the revived industry and it is the creature of George L. Carter. This means that its success is assured. Several months ago the Standard Oak Veneer company closed down and has been in financial distress since. The plant was acquired by several local capitalists headed by J. Norment Powell, S.C. Williams, J.A. Wilson and Fred Powell, who sought to operate it, but the breakers of litigation loomed up and no satisfactory arrangement could be made. While in this condition Mr. Carter became interested and acquired control, which means that it now has sufficient capital to operate. H.T. Spencer will have charge of the plant. He was formerly superintendent of construction of the C., C. & O. and is in every way competent to operate the extensive plant, He is now gathering a corps of assistants to take charge of each department in the office and shop and will start the machinery as soon as they can be obtained."

April 1911. Veneers.

"H.S. Spencer, treasurer of the Tennessee Lumber and Veneer Corporation, Johnson City, Tenn., writes that the corporation is successor to the Standard Oak Veneer Co., the Allen Panel Co., and the Interior Hardwood Co., all of Johnson City. The new concern is said to be well backed financially and is remodeling the plant and expects to have it in operation in the near future."¹⁹¹

26 October 1911. Johnson City Comet.

"Love-Thomas Building is Being Remodelled. George L. Carter is transforming the threestory building that has been occupied by the Love-Thomas Co. into an office building to accommodate the offices of the Unaka Corporation, Tennessee Veneer Co. and the Model Mill Co., all corporations exclusively or largely owned by him. A commodious fire proof vault is being built and the extensive remodelling will make the building one of the most modern office buildings in the city."¹⁹²

14 December 1911. Johnson City Comet.

"W.J. Lacy and William Daniel shipped two cars of fine oak logs to the Tennessee Lumber and Veneer Co. at Johnson City last week."

18 September 1913. Manufacturers Record.

"Johnson City Industries. – Influences in the Upbuilding of its Manufacturing Interests. (Special Cor. Manufacturers Record.) Johnson City, Tenn., September 15... The Tennessee Lumber & Veneer Co. has a big plant engaged in making sliced and rotary cut veneers of oak and poplar, all kinds of hardwood flooring, table tops and a general line of interior trim..."¹⁹³

20 November 1913. <u>Public Acts of the State of Tennessee</u>, Passed by the Sixty-First General <u>Assembly</u>.

Name of Corporation	State where chartered	Where located	Date of filing copy of charter in Secretary of State's Office
Tennessee Lumber & Veneer Co.	Virginia	Johnson City, Tenn.	Nov. 20, 1913

Table 37. "Foreign Corporations..."¹⁹⁴

15 October 1916. The St. Louis Lumberman.

"The Tennessee Lumber & Veneer Corporation, at Johnson City, Tenn., is operating its large hard wood plant in that city on full time and is also interested in parquetry flooring work."¹⁹⁵

4 January 1917. Manufacturers Record.

"Tenn., Johnson City. – Tennessee Lumber & Veneer Corp. advises Manufacturers Record concerning lately-noted fire: Veneer department, comprising about ¼ of buildings, destroyed; panel and flooring departments are in full operation; already having surplus room, will re-erect only iron-clad sawmill building; construction by company force; purchase rebuilt machines, including band and veneer sawmills, and veneer slicer, dryer, lathe and clippers...

Tennessee Lumber & Veneer Corps... Prices on rebuilt machines, including 7-ft. band sawmill, veneer sawmill, veneer slicer, veneer dryer of large capacity, 100-in. veneer lathe and one or more veneer clippers."¹⁹⁶

4 January 1917. Rough Notes.

"Johnson City, Dec. 23 [1916], Tennessee Lumber & Veneer Corp., plant; loss \$100,000."¹⁹⁷

4 January 1917. The Iron Age.

"Fire destroyed the electric power plant, sawmill and other departments of the Tennessee Lumber & Veneer Company, Johnson City, Tenn., at a loss of more than \$100,000."¹⁹⁸

10 January 1917. Lumber World Review.

"Johnson City, Tenn. – Part of the plant of the Tennessee Lumber & Veneer Corporation burned, loss between \$100,000 and \$150,000; insured for \$35,000."¹⁹⁹

11 January 1917. The Iron Age.

"The Tennessee Lumber & Veneer Corporation, Johnson City, Tenn., is asking for prices on rebuilt equipment, including a 7-ft. band sawmill, veneer slicer, veneer dryer, 100-in. veneer lathe and veneer clippers."²⁰⁰

27 January 1917. Southern Lumberman.

"Knoxville, Tenn., Jan. 24. – The plant of the Tennessee Lumber & Veneer Corporation, which was recently burned at Johnson City, is being rebuilt. New machinery has been ordered and in a few weeks this plant will be giving employment to 200 men.

L.W. King is president of the corporation, the plant being owned by George L. Carter and associates." 201

January 1917. Barrel and Box.

"The plant of the Tennessee Lumber & Veneer Co., Johnson City, Tenn., burned Dec. 23; loss \$100,000, partly covered by insurance."²⁰² Nevertheless, it does not appear that the Tennessee Lumber & Veneer Company plant (formerly the plant of the Standard Oak Veneer Company and Allen Panel Company) was actually rebuilt. See maps 7A and 9A.

10 October 1918. Manufacturers Record.

"Industrial Plants for Sale – Woodworking plant – Manufacturing Plant for Sale – Veneer plant located on 12 acres land and is served by 3 railroads – Sou., C.C.& O. and E.T. & W.N.C.; has 8' new band mill, 14' rotary mill, new 120' Coe Dryer, two taping machines and every machine that is needed in manufacturing panels. Has two glue outfits, one for hide and one for vegetable glue. Plant operated partially by steam and partially by electricity. Most of the machines were driven by individual motors. In interior is full line of machines for manufacturing interior trim and all kinds of built-up stock for the manufacture of furniture. Plant is equipped with 450 H.P. Corliss engine, 200 kilowatt generator, fine set of boilers. Has large concrete drykiln, and every machine that is used in first-class plant. Will sell entire plant or will sell machinery separate. Address Johnson City Development Co., Johnson City, Tenn."²⁰³ Note, this appears to be the plant of the Tennessee Lumber and Veneer Company (previously known as the Interior Hardwood Company), which had similar equipment, such as a large concrete kiln. However, the Sanborn Fire Insurance Company indicates that it had a 350-horsepower engine (not 450), as well as a smaller 90-kilowatt generator (see maps 10A and 15). The Elizabethton Flooring Company, controlled by William S. Whiting, leased the former plant of the Interior Hardwood Company by February 1920.

4.1.6. Whiting Lumber Company/Elizabethton Flooring Company, leased this plant in 1920 Burned on 7 May 1920 and, apparently, not rebuilt

17 April 1920. The Southern Lumberman.

"Buys Saw and Veneer Mill – Wm. S. Whiting Takes Over Former Plant of Tennessee Lumber & Veneer Corporation. Johnson City, Tenn., April 12. – Wm. S Whiting, one of the largest lumber producers in this section of the country, has recently purchased the big plant formerly operated here by the Tennessee Lumber & Veneer Corporation. This will be immediately put into operation in conjunction with their present plant at Elizabethton, Tenn. They intend to operate the band mill here, also the rotary poplar veneer department, as well as the flooring plant in which they are making maple flooring, oak flooring, parquetry flooring and glued-up chestnut cores."²⁰⁴

7 May 1920. Safety Engineering.

"May 7, 1920. Johnson City, Tenn. W.S. Whiting Lumber Company, Walnut and Watauga streets. Flooring and finished lumber. One 1-story and one 2-story building destroyed. Walls, wood sheeting covered with corrugated iron. Floors, wood. Roofs, tin. Cause, unknown. Fire started near center of mill. Discovered by motorcycle police at about 11.30 p. m. Alarm, police blew factory whistle. Duration, 8 hours. Confined to building of origin. Fire was favored by building full of dry lumber. Firemen handicapped by headway before discovery. Private fire apparatus, none. Persons in building, 2. Killed, none. Injured, none. Means of escape, doors and stairways. Value of building and contents, \$150,000. Property loss, \$150,000. Papers were protected by vault and saved intact."²⁰⁵

22 May 1920. American Lumberman.

"Johnson City – W.S. Whiting Lumber Co., loss of 300,000 by fire originating in dry kiln; flooring department, hardwood stock and considerable machinery destroyed; loss covered by insurance."²⁰⁶

10 June 1920. Lumber World Review.

"Johnson City, Tenn. – The Elizabethton Flooring Co, will rebuild its plant recently burned... Fires... W.S. Whiting Lumber Co. Loss \$300,000, covered by insurance. Flooring department, hardwood stock and considerable machinery destroyed."²⁰⁷ Nevertheless, it appears that this plant was never reopened. See Map 12A.

7 July 1920. Fire and Water Engineering.

"Lumber Plant Destroyed in Johnson City. The Whiting Lumber Company's plant in Johnson City, Tenn., was completely destroyed by a fire that was discovered about 11.30 p.m. when the plant was already almost wholly involved, Chief Berry Wilson reports. The building, which was a one story frame, metal sheeted, about 12 years old, was falling in at the lower end when the department, under Chief Wilson, arrived with apparatus consisting of an American-LaFrance triple combination and a horse-drawn wagon used as trailer. Four 6-inch double hydrants, spaced about 250 feet, were available, with from 75 to 85 pounds pressure and 2,000 feet of hose were laid, of which 3 lengths burst. Eight hydrant streams were thrown from 1 1/8 to $1\frac{1}{2}$ inch nozzles. The factory whistle blowing gave the first alarm and the fire had such a start that it could not be stopped but it was prevented from spreading to other property. The loss was total on both buildings and stock and amounted to \$160,000."²⁰⁸

Firm Name	Nature of Business	No. Employe Inspe	es at Time of ection	Hours La	bor Week	Gen'l.	No.
		Male	Female	Male	Female	Cond.	Insp.
Tennessee Lumber & Veneer Co.	Mfrs. Lumber and Veneer	129	1	60	60	Fair	1

Table 38. "Manufacturing Industries and Firms Inspected and Reported... Johnson City, Washington County", for the Year 1913.²⁰⁹

Table 39. "Manufacturing Industries and Firms Inspected and Reported... Johnson City, Washington County", for the Year Ending 1 December 1914.²¹⁰

Firm Name	Character of Business	No. of Employes at time of inspec. Over 16 Under 16				No. Hrs. Lab. Males Over 16		No. Hrs. Lab. Females & Min. Under 16		Gen'l. Con.
		M.	F.	M.	F.	Day	Week	Day	Week	Con.
Tenn. Lbr. & Veneer Co.	Mfrs. Lbr. And Veneer	98	1			10	60	91/2	57	Good

Table 40. "Manufacturing Industries and Firms Inspected and Reported... Johnson City, Washington County", for the Year Ending 1 December 1915 ²¹¹ for

r the	Year	Ending	1	December	1915.	2
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Firm Name.	Character of Business.	No. Employes at time			No. Hours		No. Hours			
		of inspection.			Labor Males		Female & Min.		General	
		Over 16.		Under 16.		Over 16		Under 16		Condition.
		М.	F.	M.	F.	Da.	Wk.	Da.	Wk.	
Tenn. Lbr. & Veneer Co.	Mfr. Flooring & Veneer	110				10	60			Good

Firm Name	Character of Business	No. Employes at time				No. Hours		No. Hours		
		of inspection				Labor Males		Female and		General
		Over 16		Under 16		Over 16		Min. Under 16		Condition
		М.	F.	М.	F.	Da.	Wk.	Da.	Wk.	
Tenn. Lbr. & Veneer Co.	Veneer & Flooring Mfrs.	148		1		10	60	10	57	Good

Table 41. "Manufacturing Industries and Firms Inspected and Reported... Johnson City, Washington County", for the Year Ending 1 December 1916.²¹²

Table 42. "Directory of Industries Inspected, with No. Employes, December 1, 1916, to December 31st, 1917... Washington County – Johnson City".²¹³

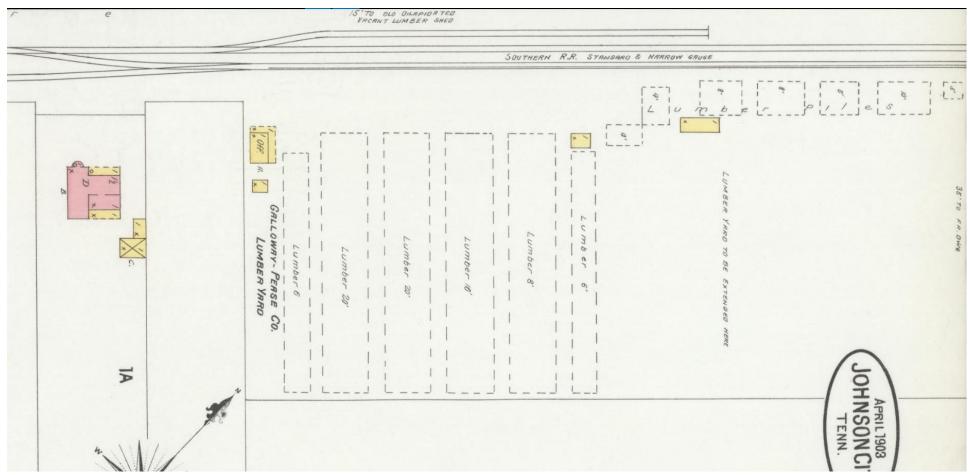
Style of Firm		No. Employes					
	Business	Over 16		Under 16			
		Male	Female	Male	Female		
Tennessee Lbr. & Veneer Co.	Veneer Tops, Mfrs.	170					

Table 43. "Directory of Industries Inspected, with No. Employes… Washington County – Johnson City", for the Year Ending 31 December 1919.²¹⁴

Style of Firm		No. Employes						
	Business	Over	16	Under 16				
		Male	Female	Male	Female			
Elizabethton Flooring Co.	Mfrs. Hardwood Flooring	72	5					

Properties in the Area Bounded by Sevier and Summer Streets (East to West) and the Clinchfield Barrett Yard and West Walnut Street (North to South) Galloway – Pease Company, (at this location 1901? – 1906) Interior Hardwood Company, 1906 – 1910 Tennessee Oak Veneer Company, 1910 Tennessee Lumber and Veneer Corporation, 1910 – 1920? Elizabethton Flooring Company, leased this plant in 1920 Burned on 7 May 1920 and, apparently, not rebuilt Served by the Clinchfield and E.T. & W.N.C. Railroads Galloway – Pease Company, (at this location 1901? – 1906) Interior Hardwood Company, 1906 – 1910* Tennessee Veneer Company/Tennessee Oak Veneer Company, 1910* Tennessee Lumber and Veneer Corporation, 1910 – 1920?* Whiting Lumber Company/Elizabethton Flooring Company, leased this plant in 1920* Burned on 7 May 1920 and, apparently, not rebuilt Served by the Southern, Clinchfield and E.T. & W.N.C. Railroads²¹⁵

*Note, the text pertaining to these operations was incorporated into the previous section, only the maps and figures pertaining to these operations are included in this section.



Map 6A. A detail of the Galloway – Pease Company lumber yard in 1903. This lumber yard occupied the land on which the Interior Hardwood Company plant would be built in 1906, see Map 10. Notice the dual gauge trackage at the top right of this map.

5.1. Galloway – Pease Company, (at this location 1901? – 1909) Served by the Southern, Clinchfield and E.T. & W.N.C. Railroads

Gallowa SPECIAL: 150,000 feet VERY CHOICE 'ease 4-4 "CUTTING." We have full stock of Company, band sawed 5-8 inch Poplar and quarter sawed White and Mountain Oak Johnson City, Tenn. in all grades. ~~~~~~~

Figure 49. American Lumberman, 2 January 1904.²¹⁶



Figure 50. American Lumberman, 16 January 1904.²¹⁷

2 May 1907. Johnson City Comet.

"Big Lawsuit Heard. The case of Galloway and Pease vs. The Unaka Lumber Co. was heard by Chancellor Haynes this week. It is one of the biggest cases ever tried in this court and involves over \$20,000. The record is voluminous and will not be reached by the chancellor for about three weeks. A decision is not expected under six weeks."

5 March 1908. Johnson City Comet.

"Report Filed. The report of the Clerk and Master, J.R. Gardner, in the case of the Galloway – Pease Company vs Unaka Lumber Company will be turned over to the Chancellor, Hal H. Haynes, on Monday, when the session is opened. The report shows that the Galloway – Pease Company overpaid the Unaka Company \$15,826 and are entitled to \$2,015 damages and \$1,605 interest, making a grand total of \$19,441.84. The amounts due the Unaka Lumber Company aggregates \$7,225.19, a balance due the Galloway – Pease Company of \$12,216.65."

10 March 1909. Hardwood Record.

"Change of Headquarters. The Galloway – Pease Company of Johnson City, Tenn., which has become one of the largest hardwood operators in that portion of the state, has gradually increased its output to such an extent that it has been found necessary to have more centrally located sales headquarters. The company has, therefore, concluded to move the main office of the company to Cincinnati, Ohio, where it will be located after April 1 in Rooms 809 and 810 Second National Bank building, corner Main and Ninth streets. The company as usual will maintain an office at Johnson City, Tenn., and will also have local representatives in the East. This year the company will manufacture about 20,000,000 feet of lumber. Its specialty is the red oak of that section, which is counted the most desirable oak for furniture in the country. Another of its specialties is chestnut, and it also produces a considerable quantity of white pine, hemlock and maple.

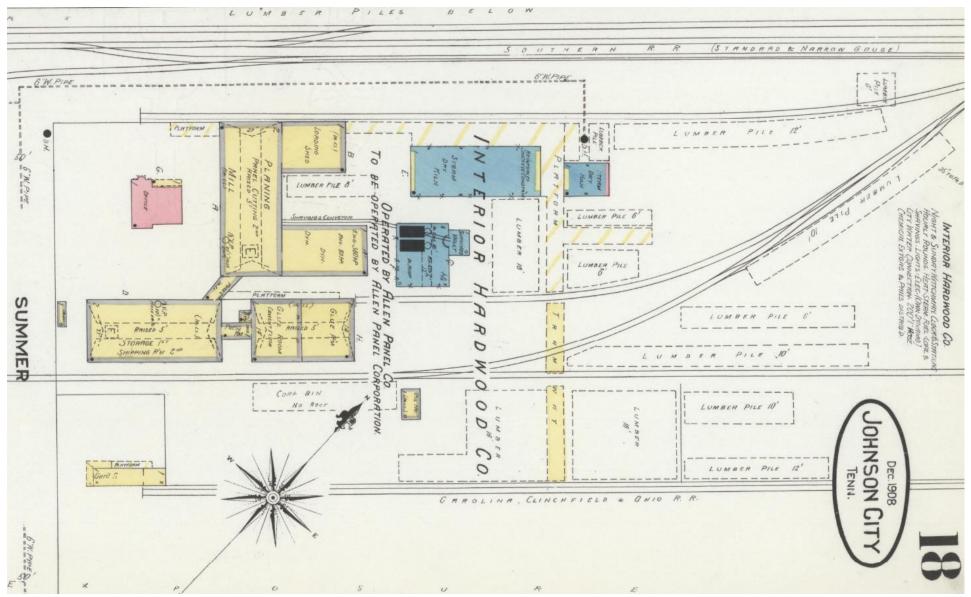
The president of the Galloway – Pease Company is E.D. Galloway; vice-president, M.L. Pease; secretary and treasurer, G.L. Humphrey of Saginaw, Mich. Messrs. Galloway and Pease have active conduct of the business, and are both well and favorably known in both the hardwood and softwood trade of the country. This change in headquarters of the company will doubtless add material strength to its sales department."²¹⁸

15 December 1936. The New York Lumber Trade Journal.

"Obituary – Max L. Pease. One of the best known lumbermen in the middle west and in sections of the south, Max L. Pease, of the old corporation of Galloway – Pease died in Philadelphia on December 1... He attended the Ypsilanti State Normal School and the Michigan Agricultural College in Lansing. Upon graduation from the latter institution he moved to Au Sable and continued his activity in all branches of the pine trade. Soon afterwards he became connected as a salesman with C.K. Eddy & Sons, of Saginaw, Mich., remaining with that concern until the late nineties, when he combined with E.D. [Elias Durfee] Galloway, of Howell, Mich., to form the Galloway – Pease Company, which did a wholesale business with headquarters in Detroit. In 1901 the enterprise was removed to Johnson City, Tenn., and the manufacture of pine and mountain hardwoods was entered upon in Eastern Tennessee and Western North Carolina. In 1909 the company acquired a band mill at Poplar Bluff, Mo., to which town Mr. Pease removed..."²¹⁹

Interior Hardwood Company, 1906 – 1910* Tennessee Veneer Company/Tennessee Oak Veneer Company, 1910* Tennessee Lumber and Veneer Corporation, 1910 – 1920?* Whiting Lumber Company/Elizabethton Flooring Company, leased this plant in 1920* Burned on 7 May 1920 and, apparently, not rebuilt Served by the Southern, Clinchfield and E.T. & W.N.C. Railroads²²⁰

*Note, the text pertaining to these operations was incorporated into the previous section, only maps and figures pertaining to these operations are included in this section.



Map 10. Interior Hardwood Company, in which William E. Uptegrove had significant financial "interest", on standard-guage trackage along the Southern Railway (top right of the map), southwest of downtown Johnson City, in December 1908.²²¹ This plant was built on land previously occupied by the Galloway – Pease Company lumber yard. By June 1909, Chester B. Allen had acquired this plant. See figures 51 and 52A.

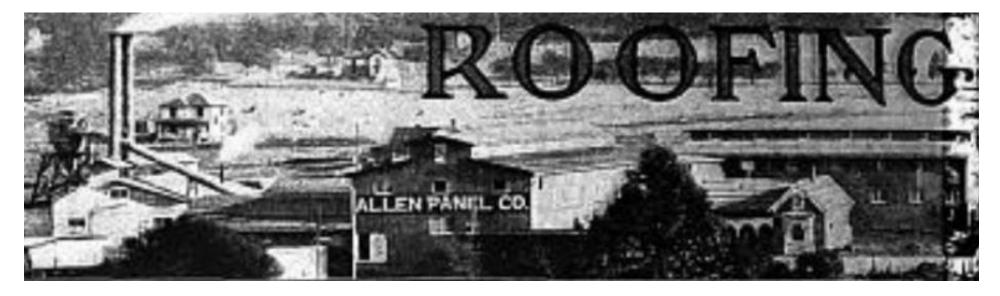




Figure 51. These two images of the "Allen Panel Co." appear to actually be of the Interior Hardwood Company, looking south. The building at the left houses the boiler, the one in the center with the "Allen Panel Co." sign is the Planing Mill, the long one on the right in the back is a storage facility, and the small one to the right of the Planing Mill is the office. See Map 10.

ALLEN PANEL CORPORATION

JOHNSON CITY, TENN.

MANUFACTURERS

Sliced Quartered Oak Veneers, Dimension Stock a specialty. White Oak Veneers, matched, jointed and taped ready to lay. Quartered White Oak Panels and Built-Up Stock. Quartered and Plain Oak Flooring, Maple Flooring (and matched) Mouldings, Casings, Baseboards, Doors and all kinds of mill work and building material.



Figure 52. Allen Panel Company.²²² It appears that this photograph looks south across the mainlines of the Southern and Clinchfield railroads. Interestingly, none of the trackage appears to be dual-gauge. This photograph dates to between December 1908 and sometime in 1909, see Map 10.

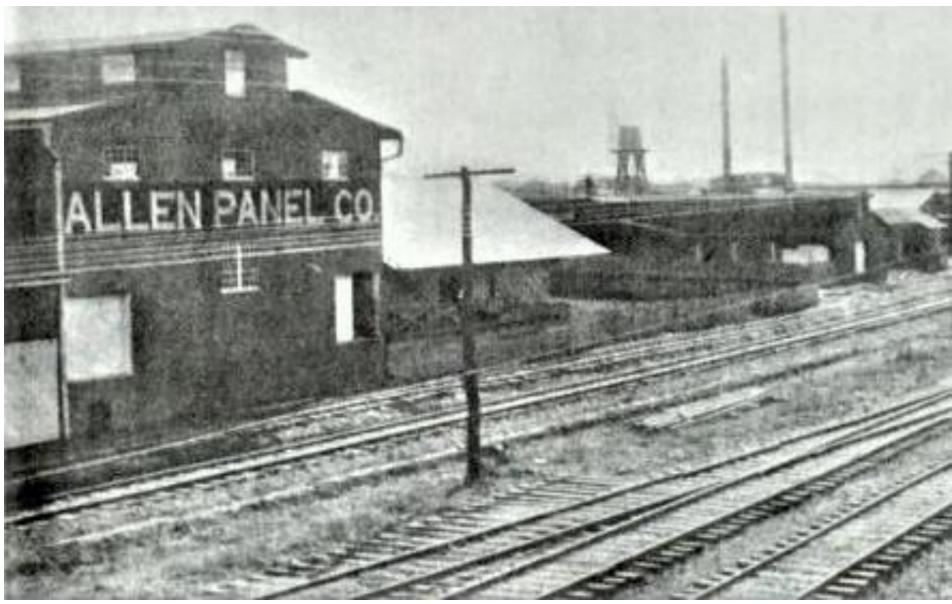
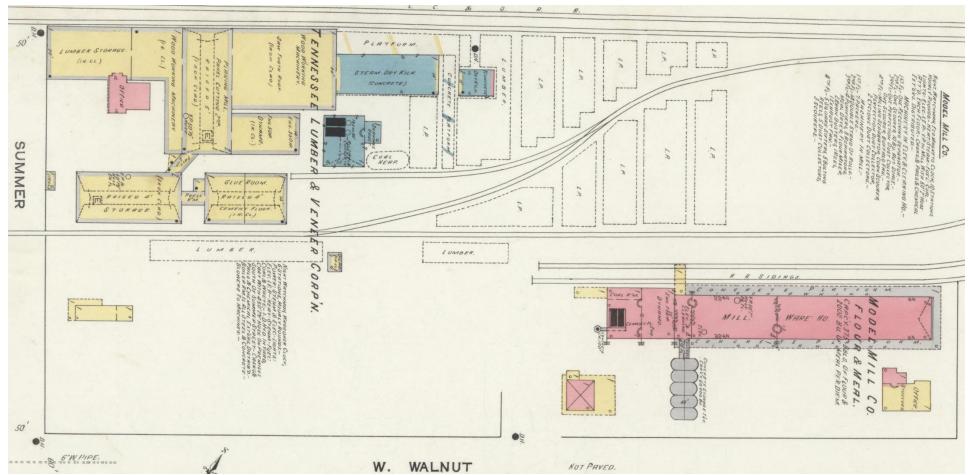
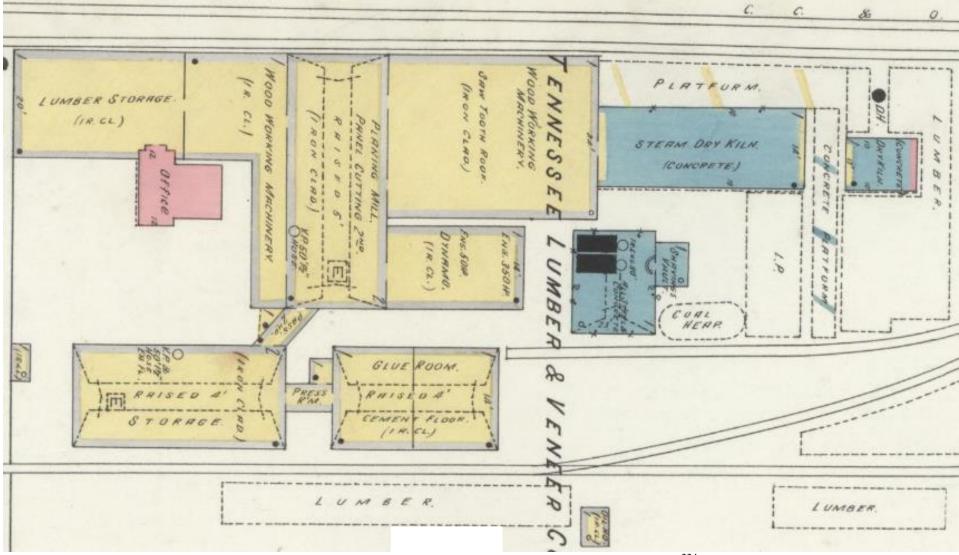


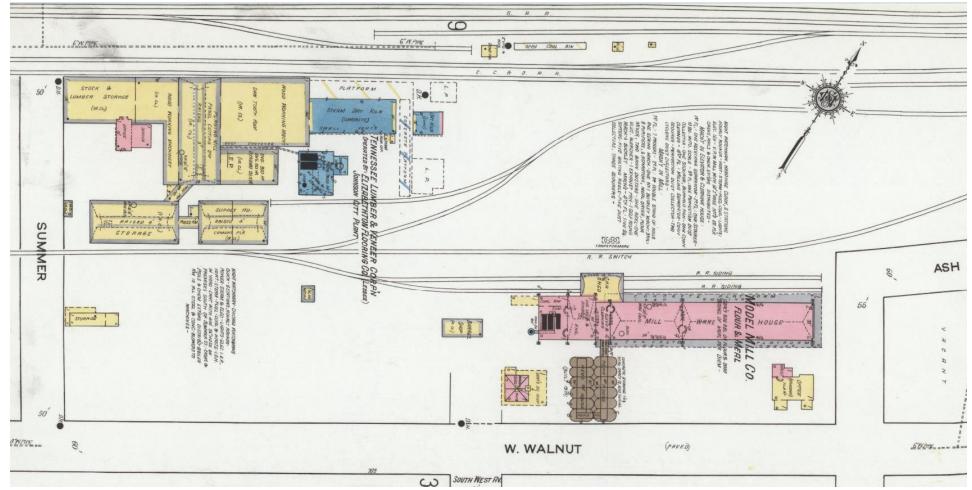
Figure 52A. The Allen Panel Company building is actually the plant of the "Interior Hardwood Company." The building on the left, with the "Allen Panel Co." sign was the Planing Mill, the one in the center, behind the utility pole, was lumber storage, and the building to the right, with the water tower and two smokestacks behind it, seems to be the Veneer Mill of the Standard Oak Veneer Company. The office building, shown in Figure 51, is behind the lumber storage building, see maps 10 and 11A.



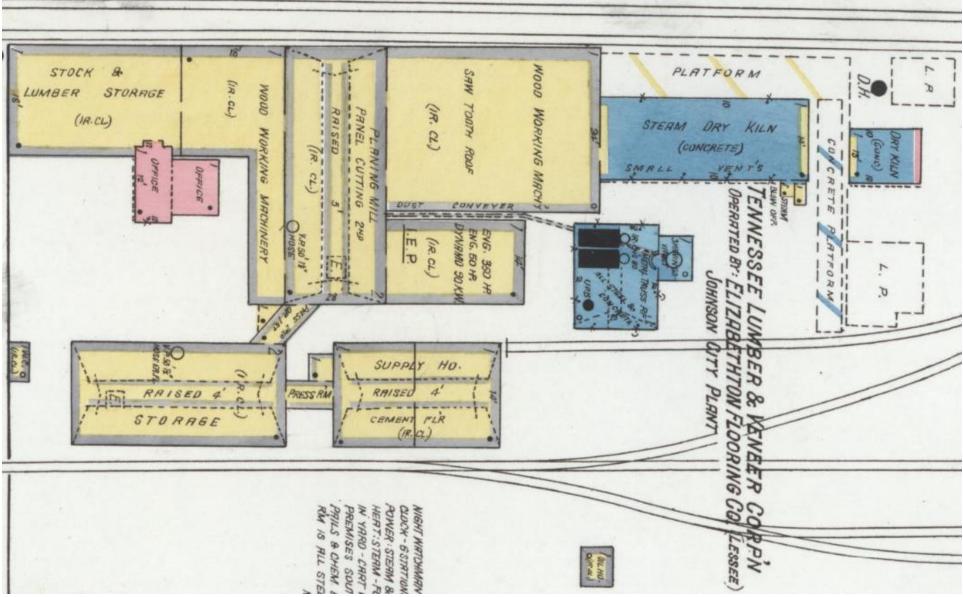
Map 11. The Tennessee Lumber and Veneer Corporation plant (previously the Interior Hardwood Company plant, see Map 10), on the northeast corner of West Walnut and Summer streets, as well as the Model Mill Company plant (on the right side of the map), July 1913.²²³ See Map 1.



Map 11A. July 1913, Tennessee Lumber & Veneer Corporation.²²⁴

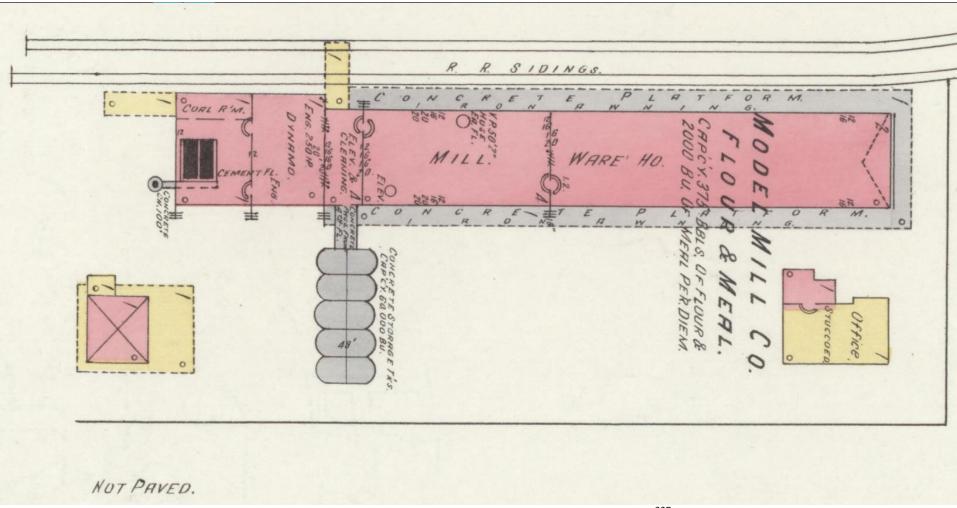


Map 12. A map, from February 1920, shows the Tennessee Lumber & Veneer Corporation plant (left) and the Model Mill Company (right). At this time, this Tennessee Lumber & Veneer Corporation plant was leased and operated by the Elizabethton Flooring Company, which was owned by William S. Whiting. Previously, this plant was owned by the Interior Hardwood Company.²²⁵



Map 12A. February 1920, "Tennessee Lumber & Veneer Corp'n Operated by: Elizabethton Flooring Co. (Lessee) Johnson City Plant". The Elizabethton Flooring Company was owned by William S. Whiting. Previously, this plant was owned by the Interior Hardwood Company, see maps 10 and 11, as well as figures 51 and 52A.²²⁶

Model Mill (1909 – 1933) General Mills (at this location 1933 – 2003) Remodeled and Used as an Office Building (2022 – Present) Served by the Clinchfield Railroad



Map 11B. Detail of the Model Mill Company, July 1913.²²⁷

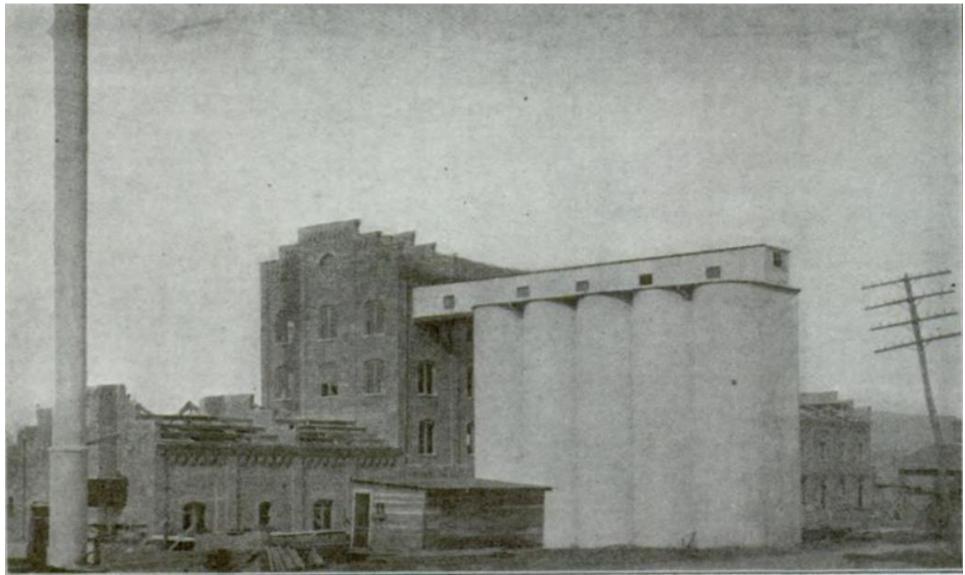


Figure 53. On West Walnut Street, "New Model Mill and Elevator now [1909] building. Cost, \$100,000."²²⁸ This photograph was published in 1909 in Johnson City: The Way We Were. The building on the left appears to be still under construction.

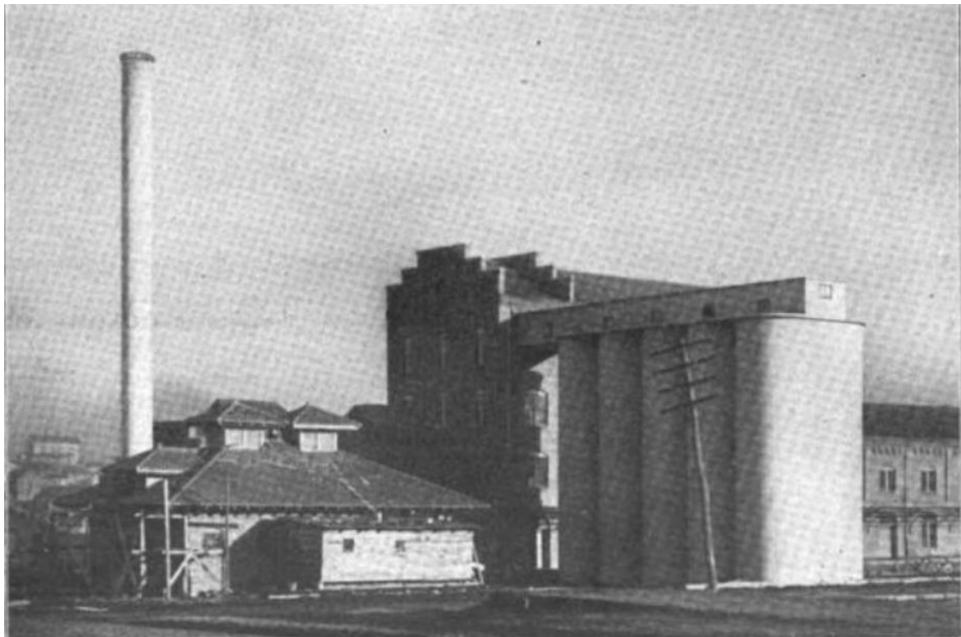


Figure 54. "New Concrete Grain Storage Bins of Model Mill Co., Johnson City, Tenn."²²⁹ This photograph was published in <u>Grain Dealers Journal</u>, 10 March 1910. The buildings on the left and right appear to be still under construction.

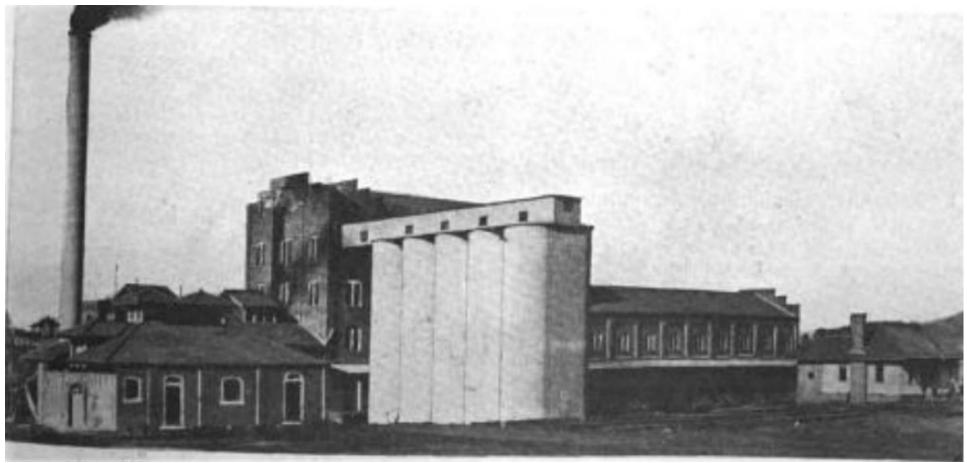


Figure 55. "Plant of Model Mill Company, Johnson City, Tenn."²³⁰ This photograph was published in <u>Rock Products</u>, 22 October 1910. Note that this photograph appears to show the completed plant of the Model Mill in operation.

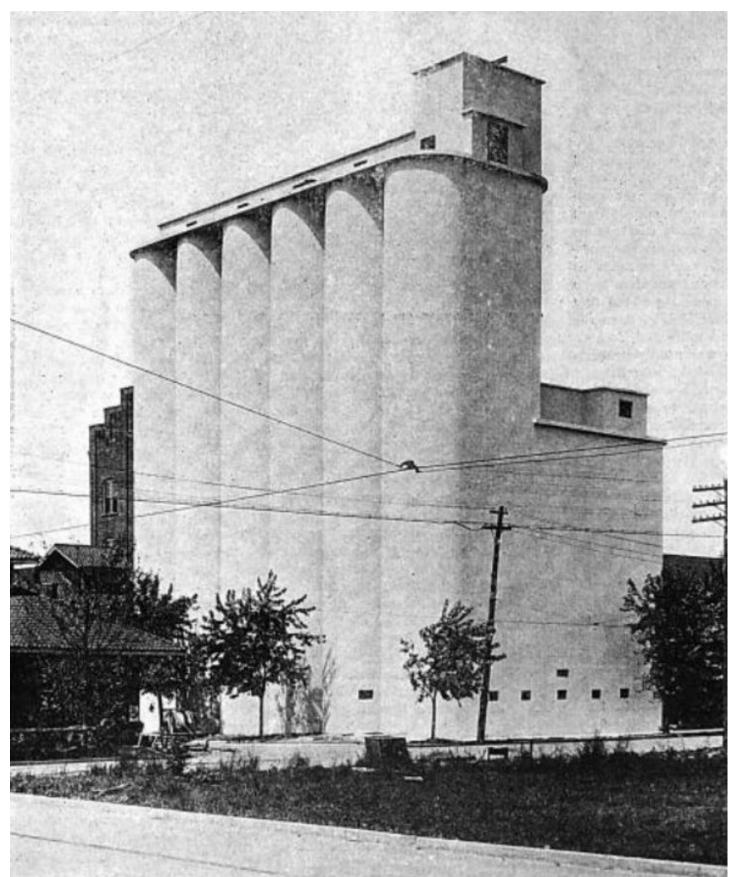
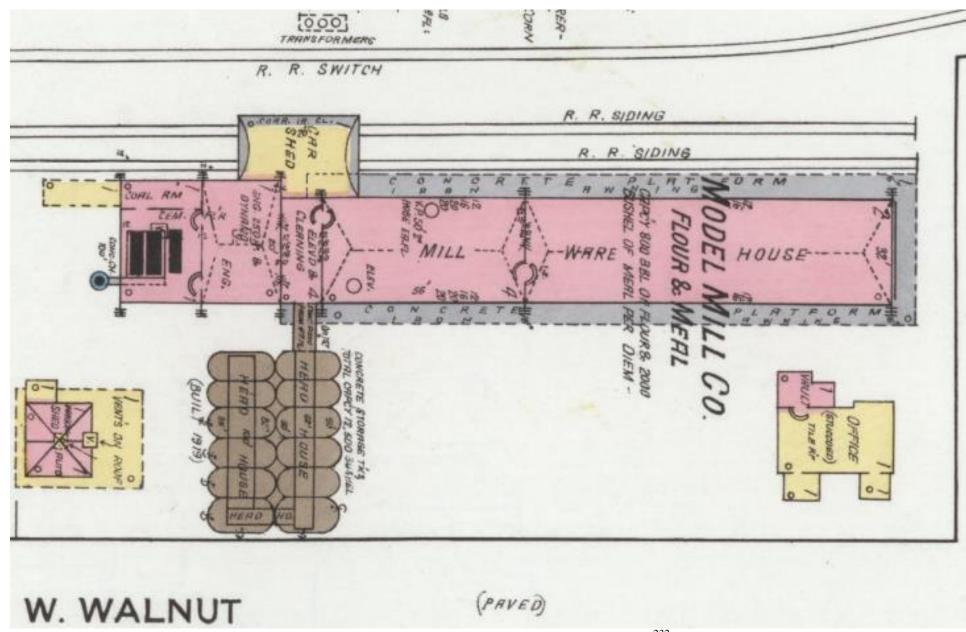


Figure 56. "New Concrete Elevator of the Model Mills Company, Johnson City, Tenn."²³¹ This photograph was published in <u>The American Elevator and Grain Trade</u>, 15 September 1919.



Map 12B. A detail of the Model Mill, February 1920.²³²

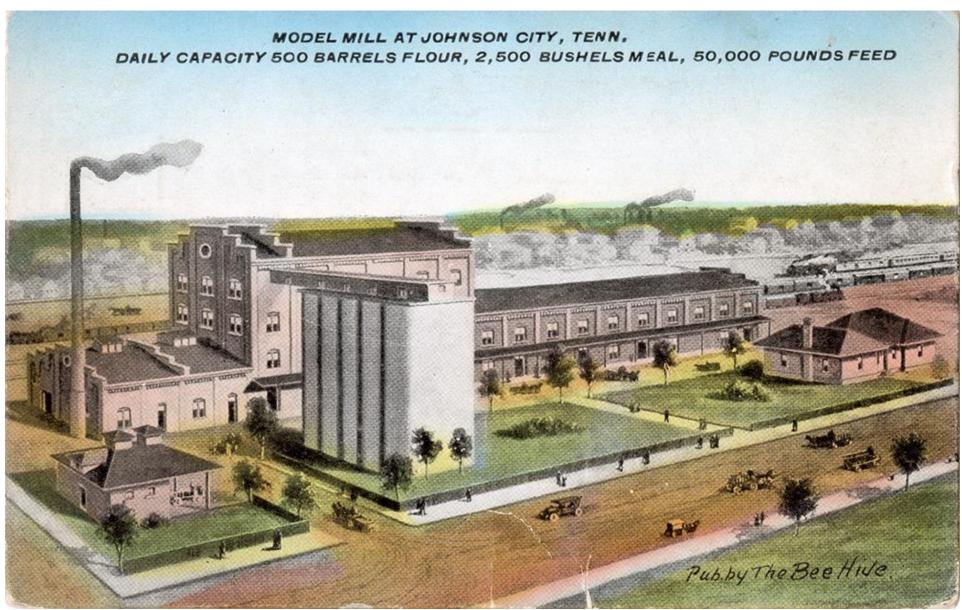


Figure 57. "Exclusive Millers of High Grade Soft Wheat Flour – White Corn Meal – Products that Please the Most Discriminating – daily Capacity – 1,000 Barrels Flour, 2,500 Bushels Corn Meal, 100,000 Lbs. Feed".²³³



Figure 58. "Concrete Grain Storage Tanks of Model Mill Co., Johnson City, Tenn."²³⁴ This photograph was published in <u>Rock Products</u>, 22 April 1910. Note that the building on the right appears to be still under construction.



Figure 59. The Model Mill, note the trolley car in the left foreground.²³⁵



Figure 60. "Model Mills (Red Band Flour, also known as General Mills), corner of West Walnut and Sevier Streets".²³⁶ This photograph appears to have been taken from Sevier Street, south of West Walnut Street, looking northwest.



Figure 61. "Model Mill".²³⁷ Apparently, this colorized postcard was based on the photograph in Figure 57, above.

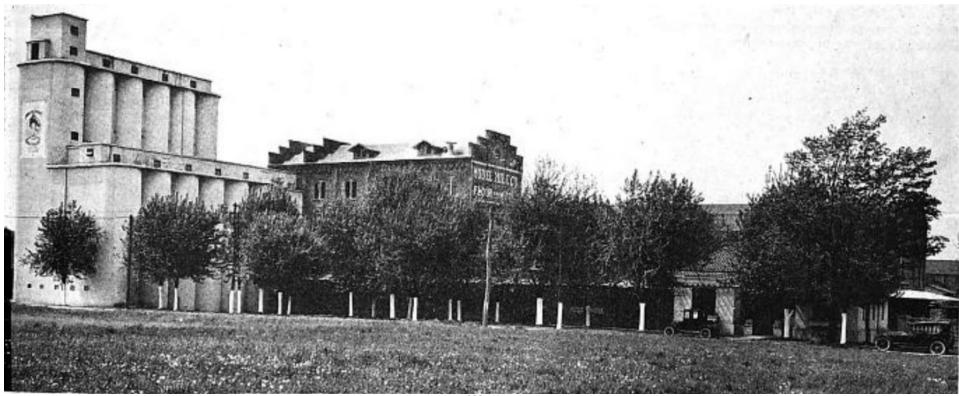


Figure 62. "Plant of the Model Mill Company, Inc., Johnson City, Tenn."²³⁸ Note the logo on the building on the left of the photograph. This photograph was published in <u>The American Miller</u>, 1 October 1925, and appears to have been taken after that in Figure 60.

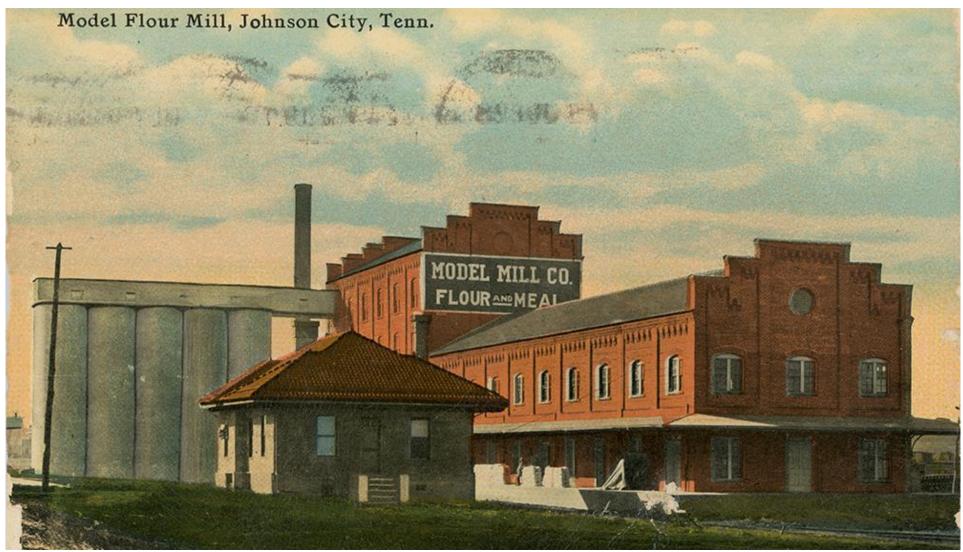


Figure 63. "Model Flour Mill. The Model Mill at 500 West Walnut Street was built by George L. Carter in 1909, with an opening day of Saturday, March 19, 1910. Upon opening, mill leadership consisted of J.W. Ring, president; J.W. Bates, head miller; J.T. Miller, head millwright, and S.A. Burnett, second miller. The mill's initial daily capacity was 1,000 barrels of flour, 3,000 bushels of meal, and 100,000 pounds of feed. It produced 94 percent bran-free flour under the old trade name Red Brand. In 1933, General Mills Inc. acquired it for a million dollars and operated the facility until 2003, when the plant closed. In 2016, R&G Ventures, owned by Grant Summers, the president of Summers – Taylor Inc., bought the property for renovation as Summers – Taylor's corporate headquarters as well as for several other tenants, including ETSU." This card was postmarked 28 July 1913.²³⁹



Figure 64. "The John Robinson Circus on Walnut Street, Johnson City, Tenn., 1921".²⁴⁰ Note the trolley tracks (under the elephants) and the Model Mill in the center background and the Allen Panel Company plant in the right background.



Figure 65. October 1995 – Model Mill Silos in Downtown Johnson City. Historian Chris Ford captioned this photograph: "Here is the old Model Mills complex just west of the ET station. It was served by the CC&O and the ET&WNC. Although a few new manufacturing structures have been added to it, the main mill buildings are the original old structures. The original silos are the shorter ones on the far side and are still in use..."²⁴¹



Figure 66. The Model Mill after it was shut down.²⁴²

5.2.1. Model Mill (1909 – 1933) Served by the Clinchfield Railroad

13 February 1908. Manufacturers Record.

"Johnson City, Tenn. – Flour Mill. – Model Mill Co. incorporated with \$100,000 capital stock to establish mill with daily capacity of 200 barrels of wheat flour and 2400 bushels of corn. Plans are being prepared for the erection of reinforced-concrete building. About \$50,000 will be invested. A.L. Bauhard, Bristol, Va. – Tenn., is president and general manager. W.H. Small, Indianapolis, Ind., and James B. Jackson, Altapass, N.C., are among incorporators."²⁴³

15 May 1909. Johnson City Comet.

"New Flour Mill Assured – Bristol Parties are Interested in Enterprise and the Contract will be Let Saturday. The new flour mill for Johnson City is now almost in sight. Johnson City Bristol Capitalists are interested in the enterprise and the information now has the true Ring, so to speak. Property has been secured in the Carter addition on the line of the C., C. & O. and bids invited for the construction of the buildings. Mr. Ring is president of the Twin City Mills at Bristol, and in an interview with a Herald – Courier reported gave the following facts that will be of interest:

J.W. Ring, president of the Twin City Mill Co. was seen by a Herald Courier reporter Wednesday in reference to the story from Johnson City, published in the Herald – Courier of Wednesday, to the effect that he would at once erect a modern flouring mill at Johnson City. Mr. Ring confirmed the report, adding that the bids for the construction of the main building would be opened Saturday of this week, or the beginning of next week, and that the contract for the reinforced concrete elevator has already been let to the McDonald Engineering company, of Chicago.

'We will make a strenuous effort to have the mill complete and ready for operation by September 1,' continued Mr. Ring. 'The enterprise will represent an investment of \$100,000, and the mill will have a capacity of 400 barrels of flour daily, and 3,000 bushels of meal.'

Johnson City has been without a mill for four or five years, and the new industry will fill a much-needed want in this section. The new mill will have connections with the Southern, Carolina, Clinchfield and Ohio, and the East Tennessee and Western North Carolina railroads."²⁴⁴

27 May 1909. Johnson City Comet.

"Our New Flour Mill will be in Good Hands if Managed by J.W. Ring, a Practical mill Man. J.W. Ring, president of the Twin City Mills, is leading a company to build a \$100,000 flour mill at Johnson City. Contracts have nearly all been let... Herald Courier.

Actual work has commenced upon the excavation for the foundation of the mill and elevator and completion of the plant hurried as rapidly as possible."

1 June 1909. The American Miller.

"J.W. Ring of Bristol, Tenn., is planning to erect a 400-barrel mill at Johnson City, Tenn. A site has been secured and a contract has already been let for a 40,000-barrel concrete grain elevator, to be completed by June 30."²⁴⁵

22 July 1909. Johnson City Comet.

"Big Flouring Mill – The big flouring mill under construction by J.W. Ring is sufficiently advanced for bids to be made for the installation of machinery. About a dozen men, representing the big machinery houses, have been quartered at the Carnegie hotel during the past week in consultation with Mr. Ring. The machinery will cost approximately \$40,000. The mill when completed will be one of the best in the south."

5 August 1909. Johnson City Comet.

"Elevators and Stack Nearly Completed – Mr. Devereaux, superintendent for the McDonald Construction company, the contractors who are building the new Model Mill and elevator for J.W. Ring, says he will finish his job this week, and that by Thursday he will be ready to turn over the complete elevator and smoke stack, which is built of reinforced concrete. The smoke stack will be 110 feet high, and has been built at the rate of ten feet a day. The elevators built by these contractors are patented forms, and entirely different from the elevators one usually sees. There are five columns or tubular rooms, joined together and running fifty feet high. Underneath is a large basement where the grain can be run out on the floor and gathered up again by the carrying cups for cooling when overheated, and the grain shoots are arranged so as to take the grain into the mill from each section of the operating mechanism. The reinforcement of the concrete is of long steel rods."

16 September 1909. Johnson City Comet.

"Mr. Ring's New Model Flour Mill – Ready for Operation January 1 - 4,000 Bushels of Grain per Day required for this Plant. Surpasses Anything ever Undertaken in the South. – J.W. Ring, of this city is at present actively engaged in the construct ion of one of the most important flouring mill plants that has ever been undertaken in the south. The new mill is located at Johnson City, occupying a convenient position between the Southern and the C., C. & O. railways.

While Mr. Ring's home is in Bristol, most of his time during the last two months has been spent in looking after the construction of this large plant, which is being superintended by T.G. Martin, of Bristol...

The elevators are now completed, and are built entirely of concrete and steel. They are therefore absolutely fireproof. The smokestack for the power plant is also constructed of reinforced concrete, and is the highest stack in Johnson City, with possibly one exception, that of the Carnegie iron furnace.

The building, including mill and engine house, will be more than 300 feet in length, while it will have a width of nearly one-sixth of that.

The entire plant was planned and diagrammed by Mr. Ring, and is considered by those who have inspected the plans or seen the work, as far as it has progressed, as being the model mill of its kind in the south.

The machinery has been purchased to fully correspond with the character of the exterior of the plant, and will be of the latest, most approved pattern for a mill of great capacity; and it is estimated that it will require 4,000 bushels of grain per day for this plant.

The main building is being constructed of red pressed brick, with cement mortar, while the interior finish will be of long-leaf yellow pine. The handsomely designed elevators stand at right angles with the main building. And the manner of their construction surpasses anything of the kind ever undertaken in the south.

It is expected that Mr. Ring will have the new mill completed and in operation by January 1, 1910. In order to do this it will be necessary to push the work with all possible speed, which Mr. ring is doing... Bristol News."

1 October 1909. The American Miller.

"J.W. Ring of Bristol, Tenn., is building a mill at Johnson City, Tenn. Concrete and steel elevators have been erected. The mill, including the engine house, will be 300 feet in length and about 50 feet wide. It is expected that the mill will be in operation about January 1."²⁴⁶

14 October 1909. Johnson City Comet.

"This week will see the roof going on the new Model mill. It is to be of Spanish tile. The interior work will be rushed, but with the length of time it will take to install the machinery, it is not expected to start operations before January or February."

25 November 1909. Johnson City Comet.

"New Mill is Nearing Completion – J.W. Ring, who is erecting the Modern Flouring Mill plant at Johnson City, said today as he was leaving for that place that the big new mill was nearing completion, and that millwrights had been ordered to the scene to place machinery. This will be one of the largest and most modern mills ever erected in the south, and will have a capacity of 300 barrels of flour per day, besides a very large corn meal capacity. It will probably be the first of February before the new plant is ready to put in operation. – Bristol News."

27 January 1910. Johnson City Comet.

"Model Mill About Ready – J.W. Ring, proprietor of the new Model Mill, says they will be ready to commence grinding within two weeks. The work of finishing up is progressing rapidly and favorably, and unless something happens to delay them, Johnson Citians will be served with products from this mill."

10 March 1910. Grain Dealers Journal.

"New Grain Storage Plant at Johnson City, Tenn. We illustrate herewith a reenforced concrete storage elevator and smoke stack which were designed and erected by the Macdonald Engineering Co. for the Model Mill Co., of Johnson City, Tenn. Both the elevator and stack were built entirely of reenforced concrete.

Concrete for grain storage gives excellent results and is rapidly replacing all other materials for the construction of smoke stacks. No other materials offer such strength, durability, safety from damage by fire, water and the elements, and consequently low insurance rate and low cost of maintenance as reenforced concrete. The contractors use an improved system in handling this material which brings the first cost of buildings of this character in sharp competition with that of other materials and in nearly every case may be built practically as cheap as in wood. Another important factor in the erection of buildings of this kind is the time required for their erection. It may be safely said that no other materials can be obtained, delivered on the site and erected in the same time that is possible with concrete. The buildings herewith illustrated required just sixty days for their erection. The smoke stack shown is four feet in diameter and one hundred' feet high and was erected in ten days, including the foundation.

The elevator has a storage capacity of 50,000 bus, and consists of ten circular tanks 12' in diameter and 50' high, each holding 4,400 bus. The interspaces formed between the cylinders are also used for storage and each holds 1,200 bus. The building is intended for the storage of grain to be used in the Model Mill. The grain is received by suitable elevator machinery at the mill and transferred through the overhead gallery into the storage bins by means of screw conveyors. As the grain is required for milling purposes, it is returned to the basement of the mill by means of a screw conveyor constructed in a tunnel formed in the foundation under the bins. All bin bottoms are hoppered so that the grain will flow freely from the bins and leave no residue.

Twisted bars of ¹/₂" diameter were used for the reenforcing of the cylinders both in the horizontal and vertical courses. The windows were made with metal frames and sash and glazed with 4" wire glass. No wood of any kind or quantity has been used in the construction, consequently the building as it stands represents the highest efficiency in respect to fire resistance, strength and durability."²⁴⁷ See Figure 54.

17 March 1910. Johnson City Comet.

"Opening of the New Model Mill – The New Model Mill will have their opening on Saturday and invite everybody to come and look over and inspect the cleanliness and workings of this large plant. This is one of the largest mills in the South and the people of Johnson City should attend this opening and show their appreciation of the upbuilding of the city. Mr. Ring wishes to urge the citizens of this city and other towns to attend, as they will be shown through the mill by the employees, and he especially invites the ladies and children."

24 March 1910. Johnson City Comet.

"Model Mill Auspiciously Opened – Many People See the Plant – Finest Mill in the South – Johnson City People Extremely Proud of Plant and Patronize it with Great Pleasure. – Last Saturday was opening day at the Model Mill. From 8 o'clock in the morning until 10 in the evening the Johnson City people poured into this mammoth plant and viewed with wonder and amazement the structure that has been properly named, Model Mill.

It is indeed a model in every particular. It is practically fire-proof and is absolutely verminproof. It is one of the largest mills in the south and has a capacity of 500 bushels of flour a day and 2,500 bushels of meal. Over \$100,000 was spent in its construction...

The mill is in charge of J.W. Ring as president; J.H. Bates, head miller; J.T. Miller, head millwright, S.A. Burnett, second miller.

Johnson City is proud of this institution and is showing its appreciation of Mr. Ring's efforts to furnish pure food by universal patronage. The hundreds of guests who visited the plant during the day and night left their enthusiastic boosters for Model Mill products and nothing was omitted that would add to the quality of the flour produced or reduce the cost of production. The automatic machinery was a marvel, almost human in its operation."

22 April 1910. Rock Products.

"Concrete Grain Storage. – Model Mill Company of Johnson City, Tennessee Erect Building in Record Time. – Reinforced concrete is rapidly replacing other materials in the construction of grain elevators and smoke stacks. No other form of construction offers such strength, permanency and safety as does concrete. Especially is this true in the storage of grain, as nothing protects it from loss better than concrete. With such durable material, grain storage tanks do not require constant repairs; in fact, there is practically no money spent on the cost of maintenance or repairs. Again, with this type of construction the products stored are immune from fire, at least, less liable to be set on fire from outside causes than would ordinarily occur in using wood for constructing the building. The first cost of the building is no more expensive than the ordinary type, which has been used for so many years, and when one considers how much better the reinforced concrete is and how much more durable, it is inconceivable why every concern which desires to erect a building should use anything but concrete.

The Model Mill Company, of Johnson City, Tenn., were progressive enough when they wanted to build a new storage elevator and smoke stack to decide in favor of using reinforced concrete construction. They awarded the contract for designing and erecting the building to the MacDonald Engineering Company, of Chicago.

The elevator has a storage capacity of 50,000 bushels and consists of ten circular bins twelve feet in diameter and fifty feet high, each holding 440 bushels. The interspaces between the cylinders are also used for storage and each holds 1,200 bushels. The building is intended for the storage of grain to be used in the business of the Model Mill Company. The grain is received by suitable elevator machinery at the mill and transferred through an overhead gallery into the storage bins by means of screw conveyors. As the grain is required for milling purposes it is returned to the basement of the mill by means of screw conveyors constructed in a tunnel, formed in the foundation under the bins.

The walls of the cylinders are reinforced with one-half inch twisted rods. The windows are made of metal frames and sash and glazed with one-quarter inch glass. No wood of any kind has been used in the construction. Certainly the building has been constructed with the highest efficiency in regard to fire resistance, strength and durability.

The concrete smokestack is 148 feet in diameter and 100 feet high. It was erected complete, including the foundation, in ten days.

The building was erected complete and turned over to the owners for operation in sixty days after the work was commenced. The walls of the bin story alone required only ten days for erection.

Besides using concrete in the foundation, bins and cupola, the gallery and tunnel connecting the storage with the mill building are also of the same material. Superior Portland cement was used in the construction of the building and was sold to the contractor by the Summers-Parrott Hardware Company, of Johnson City, Tenn.²⁴⁸ See Figure 58.

22 October 1910. Rock Products.

Model Mill Company. The view of the Model Mill Company's plant at Johnson City, Tenn., illustrates a very fine piece of concrete work that was done by the MacDonald Engineering Company, of Chicago. Many of the personal ideas of J.W. Ring, president of flour milling companies at Johnson City, Tenn., and Bristol, Va., were embodied."²⁴⁹ See Figure 55.

19 January 1911. Johnson City Comet.

"Farmers Benefited by Model Mill – The market quotations on flour, feed stuff and grain elsewhere in this issue will make interesting reading to our farmers. It will be noticed that the Model Mill Co. is paying an attractive price for wheat and corn, a price much higher than could be expected if the mill was not located here. In fact is furnishes a ready market for all the wheat and corn this section can produce and at fancy prices that farmers should appreciate."

Farmers, Attention!

We will pay following top-market prices for Corn delivered at our mill and buy all that is offered. In Bulk, per bushel, - - - 70c In Sacks, per bushel, - - 73c We are anxious to furnish the farmers a market for their corn and will always pay the highest possible price. Bring on your corn.

Model Mill Co.

Phone 483.

Johnson City, Tenn.

Figure 67. Johnson City Comet, 18 May 1911.²⁵⁰



Figure 68. Johnson City Comet, 25 May 1911.

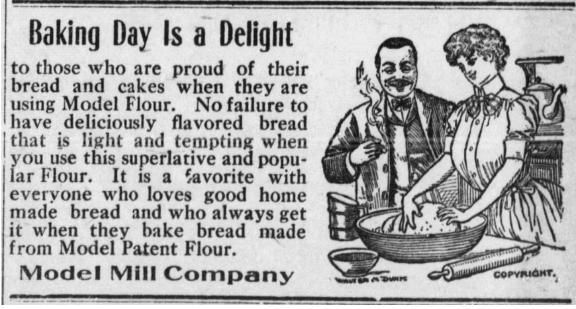


Figure 69. Johnson City Comet, 8 June 1911.

26 October 1911. Johnson City Comet.

"Love – Thomas Building is being Remodeled. – George L. Carter is transforming the three-story building that has been occupied by the Love – Thomas Co. into an office building to accommodate the officers of the Unaka Corporation, Tennessee Veneer Co. and the Model Mill Co., all corporations exclusively or largely owned by him. A commodious fire proof vault is being built and the extensive remodelling will make the building one of the most modern office buildings in the city."

4 September 1913. Manufacturers Record.

"Johnson City. – Model Mill Co., J.W. Ring, Prest., will install equipment to increase daily capacity to 1000 bbls. Flour, 3000 bu. meal and 200,000 lbs. feed; machinery ordered...

Nordykee & Marmon Flour Mills in the South. The Model Mill CO., G.W. Ring, President, of Johnson City, Tenn., has placed an order for machinery to double the capacity of its 300-barrel mill. The order was placed with Nordyke & Marmon Company, Indianapolis, Ind., for the N. & M. system. The original mill was also equipped with this machinery. Construction work on the new machinery is practically completed at the factory, and shipments are expected to be made in a short time...²⁵¹

18 September 1913. Manufacturers Record.

"Johnson City Industries. – Influences in the Upbuilding of its Manufacturing Interests. (Special Cor. Manufacturers Record.) Johnson City, Tenn., September 15... The Model Mill, one of the most modern flouring mills in the entire country, possessing every needed equipment to put it in the front rank of its class. It produces 500 barrels of flour daily, together with 200 barrels of meal and a large quantity of feedstuff. It buys all the local wheat that offers and ships in trainloads from other States. In the handling of the grain from the car to the grinding rollers every bit of equipment is of the most up-to-date character, and in no mill is the work done more economically..."²⁵²

25 June 1914. Johnson City Comet.

"The Model Mill has purchased and put into service one of the largest and handsomest auto trucks in the city."



Figure 70. Johnson City Comet, 9 July 1914.

13 August 1914. Johnson City Comet.

"Advance in Price. We are paying this week 95 cents delivered to the mill for all good wheat the farmers will bring in. Model Mill Company."



Figure 71. Johnson City Comet, 19 November 1914.

17 December 1914. Johnson City Comet.

"Elevator Falls Three Stories, Two Men Hurt. – Paul Mitchell and Jack Lane were severely injured in an elevator wreck at the Model Mills. Both of Mitchell's ankles were broken and Lane's back was injured.

The elevator fell from the third story of the mill, and Mitchell was struck with a piece of timber. He was taken to the Memorial Hospital, where he is resting."

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1		1911	La la caracteria	

Special Patent

SENSATION Prepared Flour

Model Mill Co.

Johnson City, Tenn.

MANUFACTURERS MILLED PRODUCTS OF QUALITY

FLOUR

1,000

MEAL 3,000 Bushels FEED 100,000

Buchels

Barrels

DAILY OUTPUT

A SPECIAL GRADE FOR EACH SPECIAL REQUIREMENT

 MODEL PATENT
 MONOGRAM

 Superlative Patent
 Best Fancy Patenat

Figure 72. Johnson City Comet, 17 June 1915.

31 January 1918. Johnson City Comet.

"Only Fifty Per Cent of Wheat Flour Sold – Instruction is received to restrict Sales on this Basis Here – The Model Mill Company of this city has received instructions from the federal food administrator to sell flour 50 - 50. In other words to sell a pound of meal with every pound of flour to the dealers. The dealer will sell likewise to the consumer. This does not mean that the consumer will have to buy a pound of corn meal with every pound of flour, but may make up his meal portion with any or all of the following kinds of flour or meal: Barley flour, corn meal, corn starch, corn grits, feterita flour and meals, hominy, oatmeal, potato flour, rice, rice flour, rolled oats, soy bean flour and sweet potato flour.

County food administrators are prohibited from adding to the above list of substitutes and are not allowed to make any temporary modification of per centages. To prevent hoarding the largest per centage of substitutes must and will be enforced."

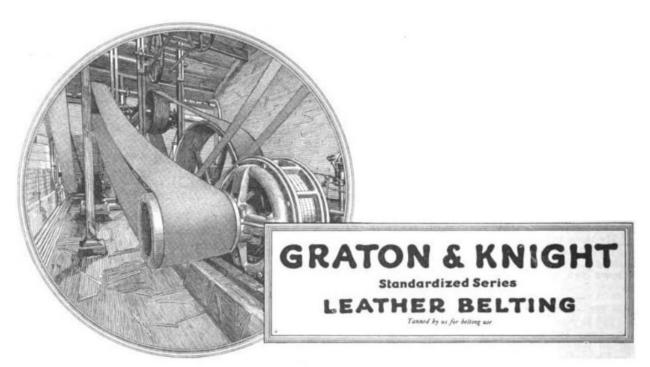


Figure 73. "Here is pictured a 75 foot Graton & Knight Heart Brand Belt in the plant of the Model Mill Company, Johnson City, Tenn. It is 24 inches wide, double thick. It transmits 241 Horse Power. It has been in continuous hard service for five years. Its cost per week has been \$1.35, or five mills per horse power, per week." <u>The Literary Digest</u>, 17 May 1919.²⁵³

15 August 1919. The American Elevator and Grain Trade.

"A new elevator of 250,000 bushels' capacity is to be erected at Johnson City, Tenn., for the Modern [Model] Mill Company. The plant will be of steel and concrete, and will include 14 tanks each 100 feet high."²⁵⁴

15 September 1919. "New 150,000-Bushel Elevator at Johnson City, Tenn.," in <u>The American</u> <u>Elevator and Grain Trade</u>.

"The only difference between a mill elevator and a shipping or transfer house is in the discharge from the bins. In a mill elevator, as a rule, the entire storage capacity empties to the conveyor belt in the tunnel. This eliminates the shipping leg and bin. Otherwise the houses are alike. The modern ideas of elevator construction were well developed in commercial grain houses before any but the largest and most progressive mills adopted them. Now, however, concrete tanks and modern conveying systems are a regular equipment for every new mill.

An example of this progressive development in mill storage is found in the history of the Model Mills Company of Johnson City, Tenn. The mill was built in 1910, a substantial brick building of full mill construction. In 1914 new storage was needed and, as a matter of course, four concrete tanks, 50 feet high, were added, connected with the mill by an overhead gallery by which wheat was conveyed from the receiving leg in the mill to the tanks, and discharged back to the mill by a tunnel under the bins in which was another belt conveyor.

This year the requirements of the mill again outgrew its grain storage and additional capacity of 150,000 bushels was added to the 45,000 bushels already provided. Two more 50-foot bins were added, together with five interstice and two pocket bins of the same height. Connected with these and forming a monolithic whole, 12 round bins, 12 feet in diameter and 92 feet high, were erected. This made room for five interstice and two pocket bins of this height, 92 feet, more than quadrupling the former capacity on a ground space of little over twice the original area.

In addition to this storage plant, six tempering bins were put in between the mill building and the storage annex, supported above the concrete driveway by concrete beams. These bins are 6 feet 1 inch by 7 feet 6 inches in size and are 50 feet high, with a capacity of 5,200 bushels. The wheat is conveyed to and from the tempering bins by screw conveyors, which, in addition to their carrying work, thoroughly mix the moisture laden wheat. This tempering of the wheat before it is milled is an important part of the process, as it enables the rolls to take off the bran in large flakes, which can then be scalped off without injuring the color of the flour.

The storage tanks have two conveyor galleries, one over the battery of 92-foot bins and the other at the 50-foot level. The grain comes from the mill receiving leg to the 50-foot gallery and is carried by an 18-inch belt to any of the 50-foot tanks, or to a spout which discharges to an elevator leg in the new addition. This elevator carries the grain to the gallery above the 92-foot tanks and the 20-inch belt conveyor distributes it to any space desired.

In discharging the grain from the tanks an opposite course is followed. There is a conveyor tunnel under the new tanks which connects, by a short cross tunnel, to the main conveyor under the 50-foot tanks which takes the grain back to the mill to be processed into flour.

The Macdonald Engineering Company, 53 West Jackson Boulevard, Chicago, were the engineers and contractors who designed and erected the storage structure and installed all the machinery. The machinery was furnished by the Skillen & Richards Manufacturing Company of Chicago, and the belting by the United States Rubber Company. The B. S. Constant Manufacturing Company of Bloomington, Ill., furnished the sheet metal work.

Johnson City is in a direct line between the North and South. Grain from the wheat fields of the West is easily available and the products of the mill supply the great territory south and east of them, which have but few mills of more than local capacity to supply a consuming demand which is very large. New elevators are being built in the South and new milling companies are organizing, but not fast enough to keep pace with the natural increase in population, so that the Model Mill Company is taking no chances in enlarging its storage capacity.

The South is developing rapidly in its grain interests. It has been held back in the past by the general poverty of the section and the necessity of a quick and sure money crop. Cotton and tobacco have supplied this need and have been planted year after year, too often without regard to

soil deterioration or the gradual infestation with insect pests. Since the second year of the war, however, the South has prospered and the entire territory is in a position to make crop rotation the basis of its agricultural program. In such a program the cereals will have a prominent place. Progressive men have realized that grain production can only be successful where there is a local market for grain which can and will pay the full market price from day to day."²⁵⁵ See Figure 56.

21 December 1921. <u>National Miller</u>. "Jefferson Milling Company Charlestown, W. Va. Mr. W.D. Berry, Supt.,

Dec. 21, 1921. Model Mill Company. Johnson City, Tenn. Dear Sir:

In reply to your favor of the 19th inst. Beg to say we have had the Garlic Extractor installed and are very much pleased with its work.

As you know, we are not connected with the builders in any way, but merely the first to purchase a machine from them, therefore we give you the impartial verdict of the user.

We believe this machine will absolutely take out all of the garlic, but of course we have not had a summer's trial, when garlic is soft and green.

Where we were washing the rolls about every three hours, as you know from having talked to the writer in person, we made a straight run of six days on the worst wheat stored here, which we had saved for testing out this machine, and after the test, there was nothi8ng to wash from the rolls, therefore under present conditions, this test has proven the machine to be about 20 times better than the method we were using.

We are giving you are actual experience and you can draw your own conclusions. We are guaranteeing our flours to be absolutely free of garlic.

With the writer's best wishes for you in your new position and with the compliments of the season, we beg to remain, Yours Truly, Thos. A. Bowling."²⁵⁶ See Figure 74.



Figure 74. National Miller, May 1922.²⁵⁷

October 1922. National Miller.

"Bristol. – The Model Mill Co., inc., has been granted a charter with a maximum capital of \$250,000. J.W. Ring is president; Thos. R. Wolfe, secretary; and H.W. Ring, all of Johnson City, Tenn."²⁵⁸

1 October 1925. "The Model Mill Is Remodeled – New Management Makes Improvements, Installs New Machinery and Completely Rebuilds Plant of the Model Mill Company, Johnson City, Tenn.", in <u>The American Miller</u>.

"The model mill of one generation is likely to have little claim to the distinction of being a model mill in the next generation unless a stringent effort is made to keep it up-to-date and in first class mechanical condition. The present age has long been recognized as chiefly distinguished by unusual progress in mechanical lines, and new devices are being perfected and marketed at such a rapid rate that one of the main responsibilities of operating executives in any line is that of keeping abreast of the times in a mechanical way. New machines inevitably lead to new economies and cuts in manufacturing costs and unless these conditions are met, competing interests are liable to predominate.

It is not sufficient to keep up with the times in installing new kinds of equipment. It is also necessary to exert considerable effort in maintaining existing equipment at a certain standard of efficiency. Repairs are necessary from time to time and constant vigilance on the part of plant managers is the price of a high standard of operating efficiency.

The indirect results of a run down mill are just as badly felt in the balance sheet as are the direct results. Among the indirect effects are the demoralizing of the working force and depreciating interest of the personnel. This is a sure result when a plant loses its appearance of neatness and its machinery is allowed to get into a decrepit condition. Direct losses in quality and costs are, of course, too obvious to require comment.

One important mill which has just recently passed through a general remodeling, and which is again a model mill is that of the Model Mill Company, Inc., at Johnson City, Tenn. This plant, which has a capacity of 900 barrels per 24 hours, and operates on Soft Red Winter wheat, has been under the able management of J.B. McLemore since the beginning of the present year. Mr. McLemore, who has long been a prominent national figure in the milling industry, supervised extensive alterations and improvements after taking charge, and now has a mill which compares favorably to any other plant of a similar size.

A careful survey of the buildings and equipment was made in January 1925, when the present management took charge. It was decided to completely rebuild the mill, and since that time the company has been making tremendous strides toward putting its plant in ideal operating condition. The Nordyke & Marmon Company of Indianapolis had nothing too good for the new organization and expenses were not stinted in taking fullest advantage of the opportunity. Practically everything is now new, except the walls and the shafting.

Entirely new cleaning machinery has been installed, the handling capacity of the elevator increased, new rolls put in, sifters rebuilt and equipped with the latest types of Nordyke & Marmon Self-Balancing Driving Irons, and such necessary minor changes as were required to consummate improved mechanical features were also introduced. The motive power has been changed from steam to electricity, and to provide neatness of arrangement and elimination of unnecessary line shafting, the group system, with Link-Belt Silent Chain Drives, has been adopted. For the manufacture of self-rising flour an entirely new department has been created. Instead of one batch mixer, there are now three, each motor driven, with storage bins above and below the mixers. This installation is claimed to be the last word in the manufacture of self-rising flour, all operations being controlled from one platform or floor.

While these changes were being made, a chemical laboratory and baking laboratory were installed. In these laboratories are to be found all of the most modern devices for grading and testing wheat and its products. Here the chemist and domestic science expert exercise constant supervision over both the raw material and the finished product. Nothing is left to chance.

Not content with new machinery, the new management gave the entire plant a bath in a carbolic acid preparation, and then with the use of a spraying outfit, painted all walls and spouting in enamel white, with a wainscoting of battleship gray. In this way the sanitary needs of the plant received protection at the same time that better lighting facilities were assured.

Realizing that the successful operation of the mill and the quality of its products depended to a large extent upon the morale of the employes, there has been erected for their comfort a section containing shower baths. Other provision for the personnel was made when locker rooms and rest rooms were installed. Each mill employe will be supplied with a white washable uniform and required to wear this whenever on duty. The management is well aware that unless the employes are properly interested and imbued with good will for the organization, the providing of modern equipment still will not solve all the problems of efficient and profitable operation, and with this idea in mind, everything possible has been done to insure contented and capable employes with minimum labor turnover being at the company's disposal.

Motor trucks are used to supplement the transportation facilities offered by the railroads, and the older trucks have recently been remodeled to put them in first class condition like the rest of the company's equipment. A new one has just been added to the fleet, and at the present time the mill is well provided for in connection with means of delivery.

As will be seen in the accompanying illustration, made from a photograph of the mill, the buildings are of excellent appearance, and the layout of the various units is compact. While no space has gone to waste, there has been no cramping of the plans to save where anything could be gained by pursuing a liberal policy. Everything has been designed to further production of good quality at a minimum cost.

The mill is five floors in height and is of brick construction, with an inside finish of white and battleship gray. The mill builder was the Nordyke & Marmon Company, and the concern also furnished equipment for the mill. Grain storage is provided in a reinforced concrete elevator which has a capacity of 200,000 bushels.

There are two grain separators, one a receiving separator and the other a milling separator, both of the Eureka type, built by the S. Howes Company. The same manufacturer provided the three Size 22 Scourers that are in use. The other cleaning machines are two Carter Disc Separators. All of this equipment is up-to-date and maintained in first class condition.

The mill proper has 18 roll stands, 9 by 36, 9 by 30 and 9 by 24, all of Nordyke & Marmon manufacture; and they operate on five breaks and 14 reductions. Eight sifters of the same make are included in the complement of machinery, as well as six reels, 32 by 8 feet and 26 by 8 feet. There are eight Nordyke Purifiers, 33 by 76 and 27 by 76. Prinz & Rau Manufacturing Company has contributed 10 dust collectors in various sizes to the equipment, and the plant has three Nordyke Bran Dusters, Nos. 4, 5 and 6. Five Buckley Middlings Mills, size No. 1, are in use, and one Williams Attrition Mill.

For handling the finished product there are five Nordyke Sack Packers for flour and two bran packers. One of the latter is a Eureka and the other a Nordyke. For weighing there are four Richardson Automatic Scales in sizes of one bushel, two bushels, three bushels and 10 bushels, respectively. These are supplemented by four hand scales.

In the manufacture of products other than wheat flour, several additional units of machinery are used, among these being five double roll stands and a square sifter. The principal products made, aside from the regular brands of flour, are meal and self-rising flour. For making communication between the different floors of the plant easier, and expediting the handling of products, there are two elevators, one for passengers and one for freight. The personnel of the company is as follows: J.B. McLemore, president; C.A. Hall, secretary and treasurer; A.D. Bryan, sales manager; and W.W. Anderson, superintendent. It is controlled and financed by George L. Carter, of Washington, D.C., formerly president of the Clinchfield Railroad, and a large operator in the Pocahontas coal fields. With its splendid financial resources and efficient management, the company is rapidly taking a prominent place in the southern flour trade."²⁵⁹ See Figure 62.

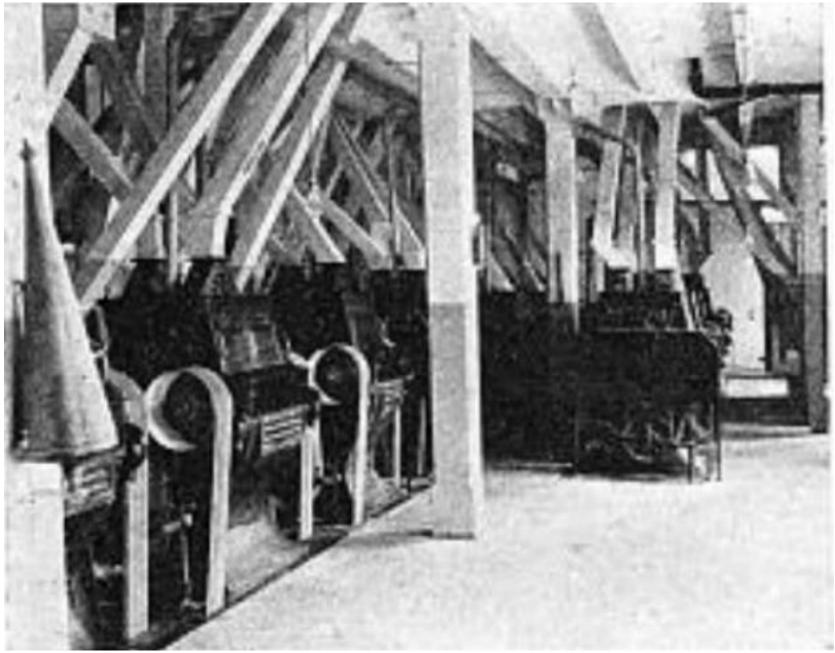


Figure 75. "Part of the Roll Floor of the Model Mill Company".



Figure 76. "View of the Model Mill's Laboratory".



"The Best Biscuit Baker in Town.... that's my wife!"

When you hear a man bragging about his wife's biscuit, you may be sure it's something more than idle boasting!

It means a regular ration of golden brown biscuits-three times a day. For a reputation for biscuit making only comes with consistent day-in-day-out success.

And that, of course, means RED BAND, the "kitchen-tested" flour cannot fail. RED BAND is a pedigreed flour. It's made from the best wheat grown, and even that is analyzed before it is milled, to make sure that it has just the right proportions of glutens and starches to bake perfectly, whether in biscuits, cakes, rolls, or pastry.

Then, to make doubly sure that you will never get a "contrary" sack, a sample of each batch is actually baked in our own model kitchen, just so we may be certain that it will bake successfully in yours.

Try it! If it isn't the best flour you've ever used, your money will be refunded.

Model Mill Company, Inc. JOHNSON CITY, TENNESSEE.

OHNSON CTT ENN PLAIN OR SELF RISING REU BANU Lighest Quality PLAIN FLOUR Kitchen Tested 6135

Figure 77. "Red Band" plain flour, Model Mill Company (undated).²⁶⁰

23 September 1925. The Price Current – Grain Reporter.

"Johnson City, Tenn. – The handling capacity of the Model Mill CO. plant has been increased new machinery installed, and the building remodeled and renovated."²⁶¹

5.2.2. General Mills (at this location 1933 – 2003) Remodeled and Used as an Office Building (2022 – Present)

1933 – Present. "In 1933, General Mills Inc. acquired it [Model Mill] for a million dollars and operated the facility until 2003, when the plant closed. In 2016, R&G Ventures, owned by Grant Summers, the president of Summers – Taylor Inc., bought the property for renovation as Summers – Taylors corporate headquarters as well as for several other tenants, including ETSU."²⁶² The renovated property opened for business in August 2022.²⁶³

Table 44. Extract: "Manufacturing Industries and Firms Inspected and Reported... Johnson City, Washington County", for the Year 1913.²⁶⁴

Firm Name	Nature of Business	1 2	es at Time of ection	Hours La	bor Week		No.
		Male	Female	Male	Female	Cond.	Insp.
Model Mill Co.	Milling	20		72	2 shifts	Fair	1

Table 45. Extract: "Directory of Industries Inspected, with No. Employes, December 1, 1916, to December 31st, 1917... Washington County – Johnson City".²⁶⁵

		No. Employes			
Style of Firm	Business	Over 16		Under 16	
		Male	Female	Male	Female
Model Mill Co.	Flour Mill	35			

Table 46. Extract: "Directory of Industries Inspected, with No. Employes... Washington Co. – Johnson City", for the Year Ending 31 December 1918.²⁶⁶

		No. Employes			
Style of Firm	Business	Over 16		Under 16	
		Male	Female	Male	Female
Model Mill Co.	Flour and Meal Mfrs.	31			

Table 47. Extract: "Directory of Industries Inspected, with No. Employes... Washington County – Johnson City", for the Year Ending 31 December 1919.²⁶⁷

			No. Em	ployes	
Style of Firm	Business	Over 16		Under 16	
		Male	Female	Male	Female
Model Mills	Mfrs. Meal and Flour	36	2		

Table 48. Extract: "Directory of Industries Inspected, with No. Employes... Washington County – Johnson City", for the Year Ending 31 December 1920.²⁶⁸

Style of Firm		No. Employes			
	Business	Over 16		Under 16	
		Male	Female	Male	Female
Model Mill Co.	Flour and Meal	30	2		

 Table 49. Extract: "Directory of Industries Inspected, with No. Employes... Washington County – Johnson City", for the Year Ending

 31 December 1921.²⁶⁹

			No. Em	ployes	
Style of Firm	Business	Over 16		Under 16	
		Male	Female	Male	Female
Model Mill Co.	Flour Mill	37	2		

Table 50. Extract: "Directory of Industries Inspected, with No. Employes... Washington County – Johnson City", for the Year Ending 31 December 1922.²⁷⁰

Style of Firm		No. Employes			
	Business	Over 16		Under 16	
		Male	Female	Male	Female
Model Mill Co.	Flour Mill	23	3		

Table 51. Extract: "Directory of Industries Inspected with Number of Employes... Washington County – Johnson City", for the Year Ending 31 December 1925.²⁷¹

		No. Employes			
Style of Firm	Business	Over 16		Under 16	
		Male	Female	Male	Female
Model Mill Co.	Flour	31	3		

Table 52. Extract: "Directory of Industries Inspected with Number of Employes... Washington County – Johnson City", for the Year Ending 31 December 1926.²⁷²

		No. Employes				
Style of Firm	Business	Over 16		Under 16		
		Male	Female	Male	Female	
Model Mills	Flour Mill	32	3			

Table 53. Extract: "Directory of Industries Inspected with Number of Employes... Washington County – Johnson City", for the Year Ending 31 December 1928.²⁷³

		No. Employes			
Style of Firm	Business	Over 16		Under 16	
		Male	Female	Male	Female
Model Mills	Flour	26	4		

Table 54. Extract: "Directory of Industries Inspected with Number of Employes... Washington County – Johnson City", for the Year Ending 31 December 1929.²⁷⁴

		No. Employes			
Style of Firm	Business	Over 16		Under 16	
		Male	Female	Male	Female
Model Mill	Flour, Meal and Feed	35	4		

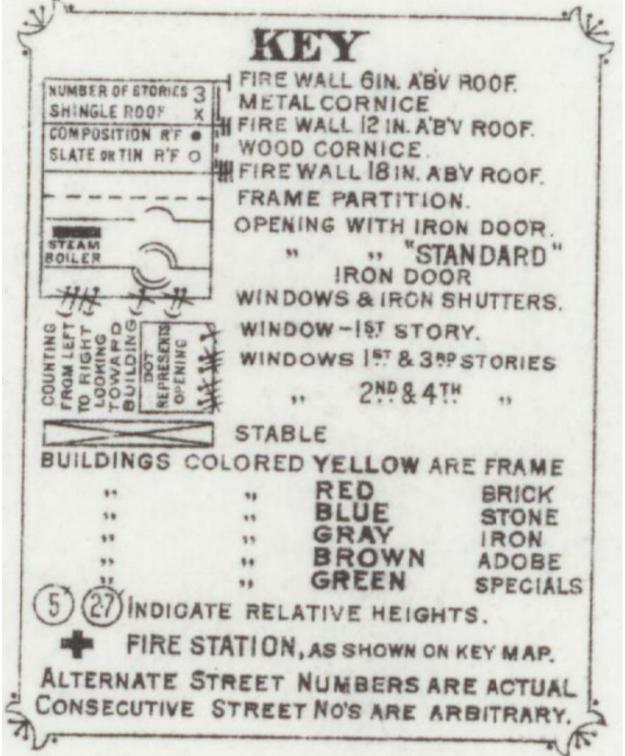
Table 55. Extract: "Directory of Industries Inspected with Number of Employes... Washington County – Johnson City", for the Year Ending 31 December 1930.²⁷⁵

		No. Employes			
Style of Firm	Business	Over 16		Under 16	
		Male	Female	Male	Female
Model Mills	Flour, Meal and Feed	28	6		

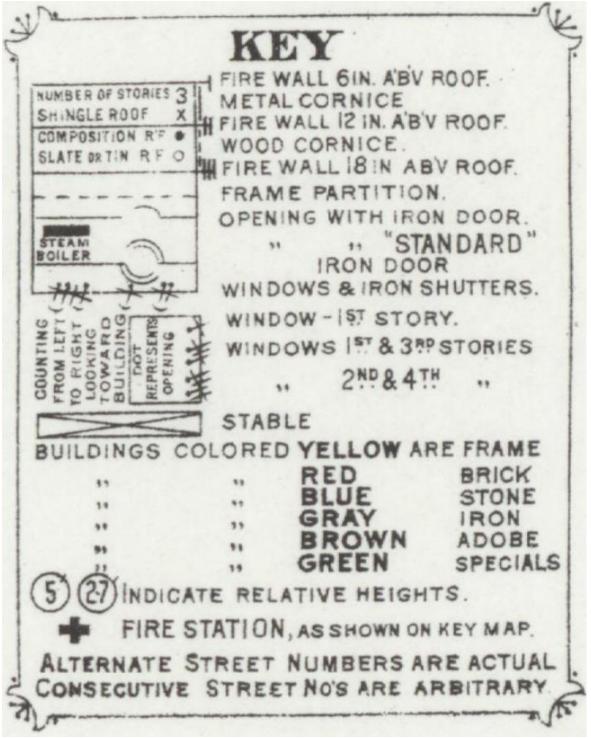
Table 56. Extract: "Location and List of Industries Inspected 1935... Washington County – Johnson City", for the Year Ending 31 December 1935.²⁷⁶

Style of Firm	Business	No. Employes			
		Over 16		Under 16	
		Male	Female	Male	Female
Red Band Co., Inc.	Flour Millers	59	6		

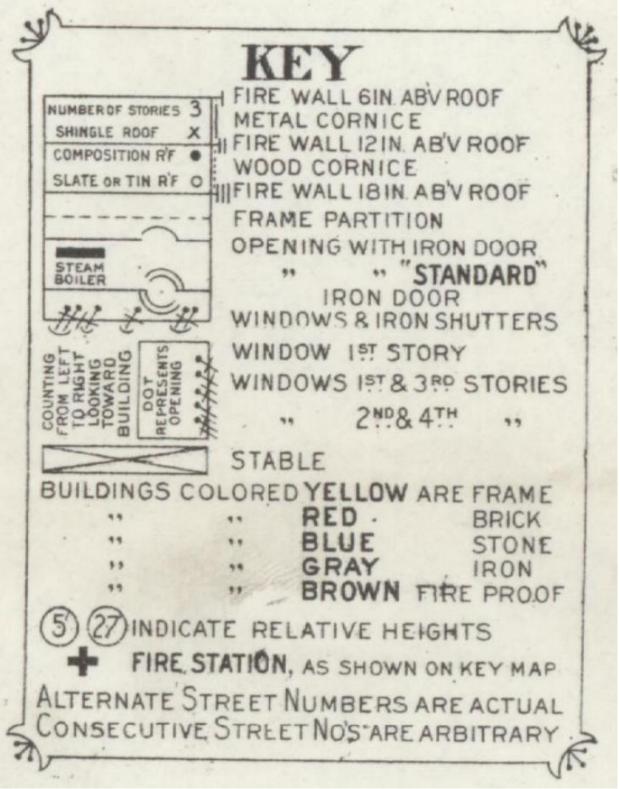
Appendix Map Legends



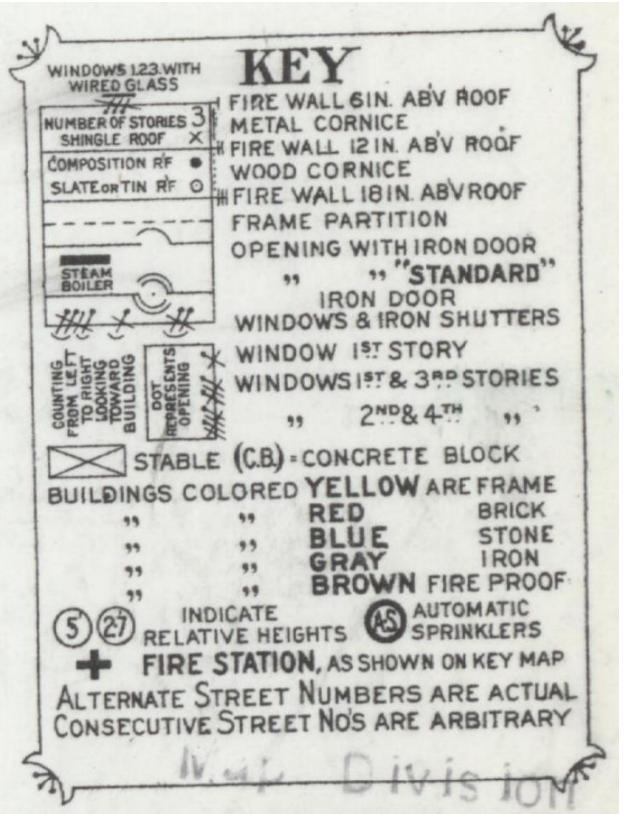
Map Legend for April 1903.²⁷⁷



Map Legend for December 1908.²⁷⁸



Map Legend for July 1913.²⁷⁹



Map Legend for February 1920.²⁸⁰

Endnotes

² "Local Businesses: Clinchfield Products," Mildred S. Kozsuch Papers, 1867 – 2007, Mildred S. Kozsuch Papers, 1867 – 2007, Archives of Appalachia, available online at: <u>https://archivesofappalachia.omeka.net/items/show/6509</u>, postmarked 21 October 1919. Also at "Johnson's Depot," available online at:

http://www.stateoffranklin.net/johnsons/images/postcards/post1/clinchproduct.jpg. A black and white version is at "Manufacturing District, Johnson City," Clifford A. Maxwell Photographs, 1940 – 1986, Archives of Appalachia, available online at: <u>https://archivesofappalachia.omeka.net/items/show/12193</u>. A date of 1916 is based on the fact that this image depicts the plant in an incomplete state and construction began in 1916.

³ "Sanborn Fire Insurance Map from Johnson City, Washington County, Tennessee," U.S. Library of Congress, February 1920, image 31, available online at: <u>http://hdl.loc.gov/loc.gmd/g3964jm.g3964jm_g083261920</u>, included: "Operated Day & Night: Night watchman from 6 P.M. to 6 A.M. Newman's Clock 16 stations hourly rounds. – Heat: Steam. – Light: elec. – Fuel: Coal. Power: Steam & Elec. – Automatic Sprinklers in Buildings as shown. Buildings No. 5, 6 & 8 wet system. Nos. 10 & 19 wet & dry system. Heads spaced 8' x 10'/ Supplied by 50,000 gal. gravity water tank on 100' trestle. Normal pressure 60 lbs. per sq. in. 150,000 gal. cistern supply from city & underwriters force pump capy. 1000 gals. per Min. 8 outside double hydrants with 250' 2¹/₂" standard hose to each. Also inside 2" hyds. With hose att'd. as shown. Total length 2¹/₂" standard hose about 1200 ft. Chemical Fire Extinguishers distributed."

⁴ "Tennessee Lumber and Veneer Company; West Walnut and Tennessee Streets; looking toward Jenny (Reservoir) Hill behind East Tennessee State University," Burr Harrison (1894 – 1978) Collection, Archives of Appalachia, available online at: <u>https://archivesofappalachia.omeka.net/items/show/180</u>, note that this is a photograph of the Clinchfield Products Corporation/Rollin Chemical Corporation/Miller Brothers property, not the "Tennessee Lumber and Veneer Company." See also: "Factories," Clifford A. Maxwell Photographs, 1940 – 1986, Archives of Appalachia, available online at: <u>https://archivesofappalachia.omeka.net/items/show/11691</u>, and "Tennessee Lumber and Veneer, near present site of Harris-Tarkett, Gordon Furniture, and Volunteer Natural Gas Company, near West Walnut and Tennessee Streets, looking south toward Reservoir Hill," Burr Harrison Collection (1894 – 1978), Archives of Appalachia, available online at: <u>https://archivesofappalachia.omeka.net/items/show/154</u>.

⁵ "Miller Brothers Company," "Clifford A. Maxwell Photographs, 1940 – 1986," Archives of Appalachia, available online at: <u>https://archivesofappalachia.omeka.net/items/show/12183</u>. <u>Hardwood Record</u>, 25 August 1911 (Volume XXXII, No. 9), page 43, available online at: <u>https://books.google.com/books?id=3wQ3AQAAMAAJ</u>, included: "The Miller Lumber Company has been incorporated at Johnson City, Tenn., with a capital stock of \$10,000. The incorporators are E.H. Miller, W.H. Miller, Dave Miller, S.E. Miller, J.G. Grant, R.G. Bachmon and W.B. Miller." <u>Greater Johnson City, A Pictorial History</u>, by Ray Stahl, 1983, page 192. Of note, if this is actually a photograph of the former Clinchfield Products Company/Corporation and Rollin Chemical Corporation, then it was not located on Tennessee Street, see Map 1.

⁶ "Miller Brothers Company," "Clifford A. Maxwell Photographs, 1940 – 1986," Archives of Appalachia, available online at: <u>https://archivesofappalachia.omeka.net/items/show/12183</u>.

⁷ "Miller Brothers Company," "Clifford A. Maxwell Photographs, 1940 – 1986," Archives of Appalachia, available online at: <u>https://archivesofappalachia.omeka.net/items/show/12183</u>.

⁸ "Home of 'Miller Brand' Oak Flooring Manufactured from Appalachian Soft Textured Oak by Miller Brothers Company," Ridley Wills East Tennessee Postcard Collection, 1906 – 1996 and undated, Archives of Appalachia, available online at <u>https://archivesofappalachia.omeka.net/items/show/2217</u>. See also: "The Cy Crumley Scrapbook, ET&WNC Railroad Historical Photo Collection," "Johnson's Depot," available online at:

<u>http://www.stateoffranklin.net/johnsons/crumley/tour4a.htm</u>, which dates this postcard to 1918, but that appears to be too early, as the Miller Brothers did not acquire this property until 1924.

¹ <u>The Blue Ridge Stemwinder</u>, by John R. Waite and Chris H. Ford, 2003, pages 92 – 93.

⁹ "An aerial view of the Miller Brothers Lumber Company, Johnson City, Tennessee," 1 March 1947, Paul A. Moore, RG 82: Tennessee Department of Conservation Photograph Collection, 1937 – 1976, Tennessee Virtual Archive, available online at: <u>https://teva.contentdm.oclc.org/digital/collection/p15138coll28/id/6270/rec/118</u>. Apparently the trackage on the left side of this photograph belonged to the Clinchfield Railroad, while that on the right side belonged to the Southern Railway.

¹⁰ <u>Weekly Drug Markets</u>, 18 August 1915 (Volume I, No. 49), page 4, available online at: <u>https://books.google.com/books?id=5zJl7kP7WjoC</u>.

¹¹ <u>The American Fertilizer</u>, 21 August 1915 (Volume XLIII, No. 4), page 44, available online at: <u>https://books.google.com/books?id=aGAUAQAAMAAJ</u>.

¹² Unless otherwise noted, all newspaper articles in this documentary history were accessed from "Chronicling America, Historic American Newspapers," U.S. Library of Congress, available online at: <u>https://chroniclingamerica.loc.gov/</u>.

¹³ <u>Sixth Annual Report – Carolina, Clinchfield and Ohio Railway – For the Fiscal Year Ended June 30, 1916</u>, page 32, available online at: <u>https://books.google.com/books?id=vMk7AQAAMAAJ</u>.

¹⁴ <u>Shoe and Leather Reporter, Annual</u>, 1917, page 71, available online at: <u>https://books.google.com/books?id=oNI-AQAAMAAJ</u>.

¹⁵ <u>Moody's Analyses of Investments, Part II, Public Utilities and Industrials</u>, by John Moody, 1919 (Tenth Year), page 1207, available online at: <u>https://books.google.com/books?id=RhUcAQAAMAAJ</u>, this document proceeds to discuss "Management… Balance Sheet… Capital Stock… Provisional ratings…"

¹⁶ <u>Manufacturers Record</u>, 9 October 1919 (Volume LXXVI, No. 15), page 116, available online at: <u>https://books.google.com/books?id=xXQ-AQAAMAAJ</u>. <u>Marvyn Scudder Manual of Extinct or Obsolete Companies</u>, 1926 (Volume I), page 1055, available online at: <u>https://hdl.handle.net/2027/wu.89017616558</u>, included: "Rollin Chemical Co., Inc. Property sold to Rollin Chemical Corporation, August 1919."

¹⁷ <u>Mineral Resources of the United States, 1919, Part II – Nonmetals</u>, by R.W. Stone, Geologist in Charge, 1922, page 341, 344 – 345, available online at: <u>https://books.google.com/books?id=g5UKAAAAYAAJ</u>.

¹⁸ <u>Oil, Pain and Drug Reporter</u>, 3 January 1921 (Volume XCIX, No. 1), page 66, available online at: <u>https://hdl.handle.net/2027/mdp.39015018025240</u>. This advertisement ran until at least March 1921.

¹⁹ <u>Brick and Clay Record</u>, 10 July 1923 (Volume 63, no. 1), page 57, available online at:

https://hdl.handle.net/2027/mdp.39015086639567. Moodys Manual of Railroads and Corporation Securities, Industrial Section, Volume I (A to J), 1923 (Twenty-Fourth Annual Number), page 1140, available online at: https://books.google.com/books?id=8fc05nAIJisC, included: "Clinchfield Products Corp. – Inc. June 9, 1913, in Va., as the Clinchfield Mineral & Milling Corps.; present name adopted April 1, 1915. Company is engaged in the mining and grinding of the feldspar. Plant located at Erwin, Tenn..." Note, the plant at Johnson City is not mentioned.

²⁰ "Miller Brothers Company," Clifford A. Maxwell Photographs, 1940 – 1986, Archives of Appalachia, available online at: <u>https://archivesofappalachia.omeka.net/items/show/12183</u>. <u>Hardwood Record</u>, 25 August 1911 (Volume XXXII, No. 9), page 43, available online at: <u>https://books.google.com/books?id=3wQ3AQAAMAAJ</u>, included: "The Miller Lumber Company has been incorporated at Johnson City, Tenn., with a capital stock of \$10,000. The incorporators are E.H. Miller, W.H. Miller, Dave Miller, S.E. Miller, J.G. Grant, R.G. Bachmon and W.B. Miller." <u>Greater Johnson City, A Pictorial History</u>, by Ray Stahl, 1983, page 192.

²¹ <u>Manufacturers Record</u>, 8 July 1932 (Volume 69, No. 6), page 7.

²² <u>American Federationist</u>, 1934 (Volume 41, Part 1), page 103.

²³ Fourth Annual Report of the Department of Workshop and Factory Inspection, For the Fiscal Year Beginning December 1, 1915, and Ending December 1, 1916, State of Tennessee, page 45, available online at: https://hdl.handle.net/2027/uc1.b3030564.

²⁴ Department of Workshop and Factory Inspection, Fifth Annual Report, December 1st, 1916 to December 31st, 1917, State of Tennessee, page 39, available online at: https://hdl.handle.net/2027/uc1.b3030565.

²⁵ Department of Workshop and Factory Inspection, Sixth Annual Report, January 1, 1918 to December 31, 1918, State of Tennessee, page 52, available online at: https://hdl.handle.net/2027/uc1.b3030566.

²⁶ Bureau of Workshop and Factory Inspection, Seventh Annual Report, January 1st, 1919 to December 31st, 1919, State of Tennessee, pages 27 and 30, available online at: https://hdl.handle.net/2027/uc1.b3030567.

²⁷ Fourth Annual Report, Department of Labor, State of Tennessee, 25 February 1927, page 73, available online at: https://hdl.handle.net/2027/uc1.b2991541.

²⁸ Sixth Annual Report, Department of Labor, State of Tennessee, 1 April 1929, pages 123 – 124, available online at: https://hdl.handle.net/2027/uc1.b2991542. The author did not find a copy of the 1927 edition of this report online.

²⁹ Seventh Annual Report, Department of Labor, State of Tennessee, 1929, pages 223 – 224, available online at: https://hdl.handle.net/2027/uc1.b2991543.

³⁰ Annual Report of the Department of Labor for the Year 1933, State of Tennessee, page 128, available online at: https://hdl.handle.net/2027/uc1.b2991545. The author did not find copies of the 1931 and 1932 editions of this report online.

³¹ Annual Report of the Department of Labor for the Year 1935, State of Tennessee, pages 130 – 131, available online at: https://hdl.handle.net/2027/mdp.35112104245289. The author did not find a copy of the 1934 edition of this report online, nor of any subsequent reports.

³² "Sanborn Fire Insurance Map from Johnson City, Washington County, Tennessee," U.S. Library of Congress, July 1913, image 24, available online at: http://hdl.loc.gov/loc.gmd/g3964jm.g3964jm_g083261913, which includes on the Johnson City Foundry and Machine Company: "Night Watchman, Watch clock not in use at present. - Power & Lights: elec. - Heat: Stoves. - Fuel: Coal & Coke. - 5 Hyds, 150' 11/2" hose, chemical ext'g'rs. in Pattern Shop." And on the Johnson City Boiler & Tank Shop: "No watchman. - Power & Light: Elec. - No heat. - Hyd. & 50' 1" Hose."

³³ "Sanborn Fire Insurance Map from Johnson City, Washington County, Tennessee," U.S. Library of Congress, February 1920, image 31, available online at: http://hdl.loc.gov/loc.gmd/g3964jm_g083261920, which included on the Johnson City Foundry & Machine Company: "Night watchman watchmans clock not in use. Heat: Stoves & steam in offices. Light & power: Electric. Fuel: Coal & Coke. City water supply with hydrants & 11/2" hose as shown. Chemical fire extinguishers in Pattern Shop." And "Washington County Gas Co.": "Men on duty day & night. - Heat and power: Steam. - Light: Gas. City water & lengths of small hose."

³⁴ "West Walnut Street Johnson City Foundry" at "Johnson's Depot," available online at: http://www.stateoffranklin.net/johnsons/images/photos/photos4/walnut2.jpg. Also at "Walnut Street, looking east," Burr Harrison Photographs, circa 1881 – 1958, Archives of Appalachia, available online at: https://archivesofappalachia.omeka.net/items/show/109.

³⁵ "Johnson City Foundry and Machine Works, Johnson City, Tenn., c. 1910," James Agee Film Project Photographs, 1875 - 1956, Archives of Appalachia, available online at: https://archivesofappalachia.omeka.net/items/show/620. Also at "Johnson City Foundry - 1912", "The Cy Crumley Scrapbook, ET&WNC Railroad Historical Photo Collection," "Johnson's Depot," available online at:

http://www.stateoffranklin.net/johnsons/crumlev/images/tour4/icfoundrv1912.jpg.

³⁶ Johnson City: The Way We Were, by J.O. Lewis, 1909, page 59.

³⁷ "Johnson City Foundry and Machine Shop, 920 West Walnut Street," Burr Harrison Photographs, circa 1881 – 1958, Archives of Appalachia, available online at: <u>https://archivesofappalachia.omeka.net/items/show/99</u>. Also at: "Harris Lumber Company in Johnson City, TN," East Tennessee and Western North Carolina Railroad Historical Society Collection, 1883 – 2005, Archives of Appalachia, available online at:

https://archivesofappalachia.omeka.net/items/show/16646. Of note, this is a photograph of the Johnson City Foundry on West Walnut Street, not the Harris Lumber Company.

³⁸ "Johnson's Depot," available online at:

http://www.stateoffranklin.net/johnsons/images/photos/photos3/jcfoun26.jpg. Note, this building did not appear on Map 4.

³⁹ "Johnson City Foundry and Machine Company, 920 West Walnut Street," Burr Harrison Photographs, circa 1881
 – 1958, Archives of Appalachia, available online at: <u>https://archivesofappalachia.omeka.net/items/show/116</u>.

⁴⁰ Johnson City, by Sonya A. Haskins, 2005, page 98.

⁴¹ "75 Years of Southern Service to: Johnson City Foundry and Machine Works, Inc.," available online at: <u>http://southern.railfan.net/ties/1959/59-5/foundry.html</u>. This article also includes some additional information on the Johnson City Foundry and Machine Company.

⁴² "75 Years of Southern Service to: Johnson City Foundry and Machine Works, Inc.," available online at: <u>http://southern.railfan.net/ties/1959/59-5/foundry.html</u>.

⁴³ "75 Years of Southern Service to: Johnson City Foundry and Machine Works, Inc.," available online at: <u>http://southern.railfan.net/ties/1959/59-5/foundry.html</u>.

⁴⁴ "75 Years of Southern Service to: Johnson City Foundry and Machine Works, Inc.," available online at: <u>http://southern.railfan.net/ties/1959/59-5/foundry.html</u>.

⁴⁵ "Johnson City Foundry and Machine Works, Workers Posing," Clifford A. Maxwell Photographs, 1940 – 1986, Archives of Appalachia, available online at: <u>https://archivesofappalachia.omeka.net/items/show/14710</u>.
 This photograph also appears at: "Johnson City Foundry and Machine Works, Johnson City, Tenn., c. 1910," James Agee Film Project Photographs, 1875 – 1956, Archives of Appalachia, available online at:

<u>https://archivesofappalachia.omeka.net/items/show/682</u>, and <u>Johnson City</u>, by Sonya A. Haskins, 2005, page 97, which captions this photograph: "Thomas E. Matson was co-founder of the Johnson City Foundry and Machine Works, which was originally established as the Miller and Crumley Foundry and is Johnson City's oldest industry. This photograph of workers outside the foundry was probably taken in the late 1700s. (Courtesy of John G. and Etta Love.)". As noted above, the author has not found any evidence to support either of these proposed dates.

⁴⁶ Johnson City, by Sonya A. Haskins, 2005, page 98.

⁴⁷ <u>The Iron Trade Review</u>, 18 July 1912 (Volume LI, Number 3), page 139, available online at: <u>https://books.google.com/books?id=5ZE5AQAAMAAJ</u>.

⁴⁸ Available online at: <u>https://www.shaylocomotives.com/data/dataframe.htm</u>.

⁴⁹ Available online at: <u>https://www.shaylocomotives.com/data/dataframe.htm</u>.

⁵⁰ <u>The South's Development: A Glimpse of the Past, The Facts of the Present, A Forecast of the Future</u>, 11 December 1924, page 90, available online at: <u>https://books.google.com/books?id=mLYgAQAAMAAJ</u>.

⁵¹ <u>Manufacturers Record</u>, 11 February 1926 (Volume LXXXIX, No. 6), page 95, available online at: <u>https://books.google.com/books?id=kpQ2gKVLSnEC</u>.

⁵² <u>Machinist'' Monthly Journal</u>, 1929, page 312.

⁵³ <u>The Iron Trade Review</u>, 22 January 1920 (Volume LXVI, No. 4), page 314, available online at: <u>https://books.google.com/books?id=dzUfAQAAMAAJ</u>.

⁵⁴ "Johnson's Depot," available online at: http://www.stateoffranklin.net/johnsons/images/photos/photos4/foundry-ad1930.gif.

⁵⁵ The Tennessee-Virginia Tri-Cities: Urbanization in Appalachia, 1900 – 1950, by Tom Lee, 2005, page 189.

⁵⁶ "Johnson City, Tenn. Foundry Records Deeded to Archives," in <u>Newsletter – Tennessee Anthropological</u> <u>Association</u>, 1985, page 6.

⁵⁷ The First Annual Report of the Department of Workshop and Inspection, For the Nine Months Ending the Fiscal Year January 1^{st} 1914. State of Tennessee, pages 70 – 71, available online at: https://hdl.handle.net/2027/mdp.39015069384603. The author did not find any predecessors to this report online.

⁵⁸ <u>Third Annual Report of the Department of Workshop and Factory Inspection, For the Fiscal Year Beginning</u> <u>December 1, 1914, and Ending December 1, 1915</u>, State of Tennessee, pages 37 – 38, available online at: <u>https://hdl.handle.net/2027/uc1.b3030563</u>.

⁵⁹ Fourth Annual Report of the Department of Workshop and Factory Inspection, For the Fiscal Year Beginning December 1, 1915, and Ending December 1, 1916, State of Tennessee, page 45, available online at: https://hdl.handle.net/2027/uc1.b3030564.

⁶⁰ Department of Workshop and Factory Inspection, Fifth Annual Report, December 1st, 1916 to December 31st, 1917, State of Tennessee, page 39, available online at: <u>https://hdl.handle.net/2027/uc1.b3030565</u>.

⁶¹ Department of Workshop and Factory Inspection, Sixth Annual Report, January 1, 1918 to December 31, 1918, State of Tennessee, page 52, available online at: <u>https://hdl.handle.net/2027/uc1.b3030566</u>.

⁶² <u>Bureau of Workshop and Factory Inspection, Seventh Annual Report, January 1st, 1919 to December 31st, 1919, State of Tennessee, pages 27 and 30, available online at: <u>https://hdl.handle.net/2027/uc1.b3030567</u>.</u>

⁶³ <u>Bureau of Workshop and Factory Inspection, Eighth Annual Report, January 1st, 1920 to December 31st, 1920, State of Tennessee, pages 38 – 39, available online at: <u>https://hdl.handle.net/2027/uc1.b3030568</u>.</u>

⁶⁴ Bureau of Workshop and Factory Inspection, Ninth Annual Report, January 1st, 1921 to December 31st, 1921, State of Tennessee, page 47, available online at: <u>https://hdl.handle.net/2027/uc1.b3030570</u>.

⁶⁵ Bureau of Workshop and Factory Inspection, Tenth Annual Report, January 1st, 1922 to December 31st, 1922, State of Tennessee, page 46, available online at: <u>https://hdl.handle.net/2027/uc1.b3030569</u>.

⁶⁶ <u>Third Annual Report, Department of Labor, State of Tennessee</u>, 25 February 1926, page 68, available online at: <u>https://hdl.handle.net/2027/umn.31951d03021441k</u>. The 1923 edition of this report is available online, but only contains a summary of the data at the county level. The author did not find a copy of the 1924 edition of this report online.

⁶⁷ <u>Sixth Annual Report, Department of Labor, State of Tennessee</u>, 1 April 1929, pages 123 – 124, available online at: <u>https://hdl.handle.net/2027/uc1.b2991542</u>. The author did not find a copy of the 1927 edition of this report online.

⁶⁸ <u>Seventh Annual Report, Department of Labor, State of Tennessee</u>, 1929, pages 223 – 224, available online at: <u>https://hdl.handle.net/2027/uc1.b2991543</u>.

⁶⁹ <u>Annual Report of the Department of Labor for the Year 1933</u>, State of Tennessee, page 128, available online at: <u>https://hdl.handle.net/2027/uc1.b2991545</u>. The author did not find copies of the 1931 and 1932 editions of this report online.

 70 <u>Annual Report of the Department of Labor for the Year 1935</u>, State of Tennessee, pages 130 – 131, available online at: <u>https://hdl.handle.net/2027/mdp.35112104245289</u>. The author did not find a copy of the 1934 edition of this report online, nor of any subsequent reports.

⁷¹ <u>Manufacturers Record</u>, 18 September 1913 (Volume LXIV, No. 11), page 60, available online at: <u>https://books.google.com/books?id=rE72zhMxGPQC</u>.

⁷² The Iron Age, 27 September 1917 (Volume 100, No. 13), page 788, available online at:

https://books.google.com/books?id=Gc4cAQAAMAAJ. The Iron Age, 17 March 1921 (Volume 107, No. 11), page 759, available online at: https://books.google.com/books?id=UydKAQAAMAAJ, included: "The Johnson City Boiler & Tank Co., Johnson City, Tenn., has been incorporated with a capital of \$20,000 by B.A. Coleman, J.W. Williams and Henry Ehret, Johnson City, to manufacture boilers, tanks and other products." Similar in: <u>Mill Supplies</u>, April 1921 (Volume XI, No. 4), page 79, available online at: <u>https://books.google.com/books?id=fOU_AQAAMAAJ</u>. It was still in business in 1927. Regrettably, the author was not able to determine the location at which the Johnson City Boiler and Tank Company was re-established.

⁷³ Fourth Annual Report of the Department of Workshop and Factory Inspection, For the Fiscal Year Beginning December 1, 1915, and Ending December 1, 1916, State of Tennessee, page 45, available online at: <u>https://hdl.handle.net/2027/uc1.b3030564</u>.

⁷⁴ "Washington County Gas Company Introduced Gas to City in 1914," Bob Cox's Yesteryear, 31 January 2011, available online at: <u>https://bcyesteryear.com/washington-county-gas-company-introduced-gas-to-city-in-1914/</u>.

⁷⁵ <u>Engineering and Contracting</u>, 13 January 1915 (Volume XLIII, No. 2), page 34, available online at: <u>https://books.google.com/books?id=dwE-AQAAMAAJ</u>.

⁷⁶ <u>The Gas Record</u>, 10 February 1915 (Volume 7, No. 3), page 109, available online at: <u>https://books.google.com/books?id= KNDAQAAMAAJ</u>.

77 Moody's Manual of Investments, 1939, page 566.

⁷⁸ <u>The Gas Record</u>, 12 May 1915 (Volume 7, No. 9), pages 367 and 372, available online at: <u>https://books.google.com/books?id=_KNDAQAAMAAJ</u>.

⁷⁹ <u>The Iron Trade Review</u>, 20 May 1915 (Volume LVI, No. 20), page 1037, available online at: <u>https://books.google.com/books?id=8sE6AQAAMAAJ</u>.

⁸⁰ <u>The American Gas Light Journal</u>, 24 May 1915 (Volume CII, No. 21), page 334, available online at: <u>https://books.google.com/books?id=BvY9AQAAMAAJ</u>.

⁸¹ <u>The Gas Record</u>, 23 June 1915 (Volume 7, No. 12), page 474, available online at: <u>https://books.google.com/books?id=_KNDAQAAMAAJ</u>.

⁸² <u>The Gas Age</u>, 15 September 1915 (Volume XXXVI, No. 6), page 140, available online at: <u>https://books.google.com/books?id=yac6AQAAMAAJ</u>.

⁸³ <u>The Gas Age</u>, 2 August 1915 (Volume XXXVI, No. 3), page 287, available online at: <u>https://books.google.com/books?id=yac6AQAAMAAJ</u>.

⁸⁴ <u>The Gas Record</u>, 22 September 1915 (Volume 8, No. 6), page 198, available online at: <u>https://books.google.com/books?id=_KNDAQAAMAAJ</u>.

⁸⁵ <u>The Gas Record</u>, 10 November 1915 (Volume 8, No. 9), page 286, available online at: <u>https://books.google.com/books?id=_KNDAQAAMAAJ</u>.

⁸⁶ <u>The Gas Record</u>, 10 November 1915 (Volume 8, No. 9), page 286, available online at:

https://books.google.com/books?id= KNDAQAAMAAJ. "Washington County Gas Company Introduced Gas to City in 1914," Bob Cox's Yesteryear, 31 January 2011, available online at:

https://bcyesteryear.com/washington-county-gas-company-introduced-gas-to-city-in-1914/,

included: "A 1917 Johnson City directory shows the business office located at 240 E. Main (future site of the Nettie Lee Ladies Shop)... By 1923, the office was relocated just up the street to 329 E. Main where it shared the location with the National Life and Accident Insurance Co., Metropolitan Life Insurance Co. and National Mortgage Co. It was sandwiched between the Wofford Building on the west and the businesses of Security Investment Co. and G.W. Toncray and R.P. Eaton (notary publics) on the east. The location would later become the site of the Home Federal Savings and Loan Association." A photograph of their office at 329 E. Main Street is included with this article.

⁸⁷ <u>The Gas Record</u>, 10 November 1915 (Volume 8, No. 9), page 286, available online at: <u>https://books.google.com/books?id=_KNDAQAAMAAJ</u>.

⁸⁸ <u>The Gas Industry</u>, May 1916 (Volume 16, No. 5), unpaginated, available online at: <u>https://books.google.com/books?id=Kqk6AQAAMAAJ</u>.

⁸⁹ <u>Michigan Manufacturer and Financial Record</u>, 2 February 1918 (Volume 21, No. 5), page 30, available online at: <u>https://books.google.com/books?id=0ZYfAQAAMAAJ</u>.

⁹⁰ <u>Gas Age – Record</u>, 6 October 1923 (Volume 52, No. 14), page 417, available online at: <u>https://books.google.com/books?id=kbAfAQAAMAAJ</u>.

⁹¹ <u>Manufacturers Record</u>, 24 June 1926 (Volume LXXXIX, No. 25), page 97, available online at: <u>https://books.google.com/books?id=kpQ2gKVLSnEC</u>.

⁹² <u>American Gas Journal</u>, 13 November 1926 (Volume 125, No. 24), page 597, available online at: <u>https://books.google.com/books?id=veD3ePESGNMC</u>.

⁹³ "Johnson City," by Dessie Little Simmons, Watauga Association of Genealogists, Northeast Tennessee, available online at: <u>https://wagsnetn.org/member-log-in-2/members-only-2/johnson-city/</u>.

⁹⁴ "Washington County Gas Company Introduced Gas to City in 1914," Bob Cox's Yesteryear, 31 January 2011, available online at: <u>https://bcyesteryear.com/washington-county-gas-company-introduced-gas-to-city-in-1914/</u>.

⁹⁵ Bureau of Workshop and Factory Inspection, Ninth Annual Report, January 1st, 1921 to December 31st, 1921, State of Tennessee, page 47, available online at: <u>https://hdl.handle.net/2027/uc1.b3030570</u>.

⁹⁶ Bureau of Workshop and Factory Inspection, Tenth Annual Report, January 1st, 1922 to December 31st, 1922, State of Tennessee, page 46, available online at: <u>https://hdl.handle.net/2027/uc1.b3030569</u>.

⁹⁷ <u>Annual Report of the Department of Labor for the Year 1935</u>, State of Tennessee, pages 130 – 131, available online at: <u>https://hdl.handle.net/2027/mdp.35112104245289</u>. The author did not find a copy of the 1934 edition of this report online, nor of any subsequent reports.

⁹⁸ "Sanborn Fire Insurance Map from Johnson City, Washington County, Tennessee," U.S. Library of Congress, February 1920, image 30, available online at: <u>http://hdl.loc.gov/loc.gmd/g3964jm.g3964jm_g083261920</u>.

⁹⁹ "C.B. von Canon Company, West Walnut Street," Burr Harrison Photographs, circa 1881 – 1958, Archives of Appalachia, available online at: <u>https://archivesofappalachia.omeka.net/items/show/135</u>.

¹⁰⁰ "C.B. Von Canon Company, West Walnut Street," Burr Harrison Photographs, circa 1881 – 1958, Archives of Appalachia, available online at: <u>https://archivesofappalachia.omeka.net/items/show/85</u>.

¹⁰¹ "C.F. Starliper v. S.H. Gray et al.," Knoxville, September Term, 1916, in <u>Reports of Cases Argued and Determined</u> in the Supreme Court of Tennessee, Volume IX (1917), by Frank M. Thompson, Attorney-General and Reporter, page 563, available online at: https://books.google.com/books?id=Q-IzAQAAMAAJ, the author found very little information on the facilities of the Holston Corporation on this particular parcel of land.

¹⁰² The Iron Trade Review, 6 May 1915 (Volume LVI, No. 18), page 944, available online at: https://books.google.com/books?id=cIY-AQAAMAAJ.

¹⁰³ The Iron Age, 6 May 1915 (Volume 95, No. 18), page 1047, available online at: https://books.google.com/books?id=ngU-AQAAMAAJ.

¹⁰⁴ Hardwood Record, 10 May 1915 (Volume XL, No. 2), page 31, available online at: https://books.google.com/books?id=3009AQAAMAAJ.

¹⁰⁵ The Iron Age, 13 May 1915 (Volume 95, No. 19), page 1100, available online at: https://books.google.com/books?id=1hpKAQAAMAAJ.

¹⁰⁶ The Iron Trade Review, 20 May 1915 (Volume LVI, No. 20), page 1037, available online at: https://books.google.com/books?id=8sE6AQAAMAAJ.

¹⁰⁷ Packages, May 1915 (Volume XVIII, No. 5), page 66, available online at: https://books.google.com/books?id=10tZAAAAYAAJ.

¹⁰⁸ Lumber World Review, 10 June 1915 (Volume XXVIII, Number 11), page 43, available online at: https://books.google.com/books?id=LEkhAQAAMAAJ.

¹⁰⁹ The Wood-Worker, June 1915 (Volume XXXIV, No. 4), page 52, available online at: https://books.google.com/books?id=DpwiAQAAMAAJ.

¹¹⁰ Packages, June 1915 (Volume XVIII, No. 6), page 74, available online at: https://books.google.com/books?id=10tZAAAAYAAJ.

¹¹¹ The St. Louis Lumberman, 15 December 1915 (Volume LVI, No. 12), page 32, available online at: https://books.google.com/books?id= -AwAQAAMAAJ,

¹¹² Marvyn Scudder Manual of Extinct Or Obsolete Companies, 1926 (Volume I,) page 626, available online at: https://books.google.com/books?id=TGjZAAAAMAAJ.

¹¹³ "Appeal of Keystone Table Company," Docket No. 533, in Reports of the United States Board of Tax Appeals, Volume I (July 16, 1924, to May 31, 1925), 1926, page 382, available online at: https://books.google.com/books?id=DFAmBJpzCs4C.

¹¹⁴ The Southern Lumberman, 27 October 1917 (Volume 86, No. 1153), page 27, available online at: https://books.google.com/books?id=8ChHAQAAMAAJ.

¹¹⁵ The Furniture Worker, November 1917 (Volume 34, No. 11), page 477, available online at: https://books.google.com/books?id=9WgoAAAAYAAJ.

¹¹⁶ Hardwood Record, 10 October 1919 (Volume XLVII, No. 12), page 29, available online at: https://books.google.com/books?id=o_A9AQAAMAAJ.

¹¹⁷ Wood Construction, The Lumber Forum of the Central States, 15 July 1922 (Volume VIII, Number 14), page 20, available online at: https://books.google.com/books?id=onKj-JOhw0UC.

¹¹⁸ The South's Development: A Glimpse of the Past, The Facts of the Present, A Forecast of the Future, 11 December 1924, page 649, available online at: https://books.google.com/books?id=mLYgAQAAMAAJ.

¹¹⁹ <u>The Packages</u>, February 1928 (Volume XXXI, No. 2), page 24, available online at: 205

https://books.google.com/books?id=VAAdAQAAMAAJ.

¹²⁰ <u>The Packages</u>, February 1928 (Volume XXXI, No. 2), page 24, available online at: <u>https://books.google.com/books?id=VAAdAQAAMAAJ</u>.

¹²¹ <u>American Lumberman</u>, 18 February 1928 (Whole Number 2753), page 98, available online at: <u>https://books.google.com/books?id=wbwcAQAAMAAJ</u>.

¹²² The Packages, March 1928 (Volume 31), page 18.

¹²³ <u>Southern Lumberman</u>, 15 July 1931 (Volume 144, No. 1807), page 34, available online at: <u>https://hdl.handle.net/2027/mdp.39015082994420</u>.

¹²⁴ Third Annual Report of the Department of Workshop and Factory Inspection, For the Fiscal Year Beginning December 1, 1914, and Ending December 1, 1915, State of Tennessee, pages 37 – 38, available online at: https://hdl.handle.net/2027/uc1.b3030563.

¹²⁵ Fourth Annual Report of the Department of Workshop and Factory Inspection, For the Fiscal Year Beginning December 1, 1915, and Ending December 1, 1916, State of Tennessee, page 45, available online at: https://hdl.handle.net/2027/uc1.b3030564.

¹²⁶ Department of Workshop and Factory Inspection, Fifth Annual Report, December 1st, 1916 to December 31st, 1917, State of Tennessee, page 39, available online at: <u>https://hdl.handle.net/2027/uc1.b3030565</u>.

¹²⁷ Department of Workshop and Factory Inspection, Sixth Annual Report, January 1, 1918 to December 31, 1918, State of Tennessee, page 52, available online at: <u>https://hdl.handle.net/2027/uc1.b3030566</u>.

¹²⁸ <u>Bureau of Workshop and Factory Inspection, Tenth Annual Report, January 1st, 1922 to December 31st, 1922, State of Tennessee, page 46, available online at: <u>https://hdl.handle.net/2027/uc1.b3030569</u>.</u>

¹²⁹ <u>Third Annual Report, Department of Labor, State of Tennessee</u>, 25 February 1926, page 68, available online at: <u>https://hdl.handle.net/2027/umn.31951d03021441k</u>. The 1923 edition of this report is available online, but only contains a summary of the data at the county level. The author did not find a copy of the 1924 edition of this report online.

¹³⁰ Fourth Annual Report, Department of Labor, State of Tennessee, 25 February 1927, page 73, available online at: <u>https://hdl.handle.net/2027/uc1.b2991541</u>.

¹³¹ Note the text pertaining to the Standard Oak Veneer Company, and its successors, will also include the information on the Allen Panel Company and the Interior Hardwoods Company, which were adjacent to the Standard Oak Veneer Company (on the east side of Summer Street), as these three companies were operated as a single plant.

¹³² <u>The Blue Ridge Stemwinder</u>, by John R. Waite and Chris H. Ford, 2003, page 93, indicates that around 1915 the dual gauge trackage of the E.T. & W.N.C. Railroad reached as far west as the old Standard Oak Veneer Company plant (owned by the Tennessee Lumber and Veneer Company in 1915). The April 1903 and December 1908 Sanborn fire Insurance maps show the dual gauge coming only as far west as the Galloway – Pease lumber Yard, land later occupied by the Interior Hardwood Company plant. The later maps do not show any dual gauge trackage in this area. However, it should be pointed out that railroad trackage does not appear to have been a priority for the Sanborn Fire Insurance Company. See maps 1, 6, and 7.

¹³³ "Sanborn Fire Insurance Map from Johnson City, Washington County, Tennessee," U.S. Library of Congress, April 1903, image 5, available online at: <u>http://hdl.loc.gov/loc.gmd/g3964jm_g3964jm_g083261903</u>, which included: "Standard Oak Veneer Co Oak Veneer Wks 2 night & one Sunday watchmen to have elec: clock, 9 stations 2 hourly rounds. Lights elec. Heat steam. Fuel: coal & refuse. 2 F.P's cap'y 40 & 80 gals per minute supply W.T. Elev. 40' Cap'y 4000 gals. These pumps are also connected direct to Hyds. With 100' 1½' hose atto as shown, water from creek. 5 water bbls & 15 iron fire buckets distributed. 2 -3 gal. fire extrs." ¹³⁴ "Sanborn Fire Insurance Map from Johnson City, Washington County, Tennessee," U.S. Library of Congress, April 1903, image 5, available online at: <u>http://hdl.loc.gov/loc.gmd/g3964jm.g3964jm_g083261903</u>.

¹³⁵ "Sanborn Fire Insurance Map from Johnson City, Washington County, Tennessee," U.S. Library of Congress, December 1908, image 18, available online at: <u>http://hdl.loc.gov/loc.gmd/g3964jm.g3964jm_g083261908</u>. For map legend, see the Appendix. For map scale, please refer to the link above.

¹³⁶ "Sanborn Fire Insurance Map from Johnson City, Washington County, Tennessee," U.S. Library of Congress, December 1908, image 18, available online at: <u>http://hdl.loc.gov/loc.gmd/g3964jm.g3964jm_g083261908</u>. By July 1913, this property was known as the "Tennessee Lumber & Veneer Corporation," see "Sanborn Fire Insurance Map from Johnson City, Washington County, Tennessee," U.S. Library of Congress, July 1913, image 19, available online at: <u>http://hdl.loc.gov/loc.gmd/g3964jm.g3964jm_g</u>

¹³⁷ "Sanborn Fire Insurance Map from Johnson City, Washington County, Tennessee," U.S. Library of Congress, July 1913, image 19, available online at: <u>http://hdl.loc.gov/loc.gmd/g3964jm_g083261913</u>., which included: "Night watchman, Waggoner Clock, 4 stations, hourly rounds. – Power: steam. – Fuel Coal & waster. – 2 D. Hyds. & 5 1½" hyd's. in yard. – 450' 2½" hose on cart, 400' 1½" hose att'd. to Hyds. – Casks & pails distributed, boiler room & shavings vault is all brick & iron." For map legend, see the Appendix. For map scale, please refer to the link above.

¹³⁸ "Sanborn Fire Insurance Map from Johnson City, Washington County, Tennessee," U.S. Library of Congress, July 1913, image 19, available online at: <u>http://hdl.loc.gov/loc.gmd/g3964jm_g083261913</u>. For map legend, see the Appendix. For map scale, please refer to the link above.

¹³⁹ "Sanborn Fire Insurance Map from Johnson City, Washington County, Tennessee," U.S. Library of Congress, February 1920, image 29, available online at: <u>http://hdl.loc.gov/loc.gmd/g3964jm_g3964jm_g083261920</u>. Sanborn published another set of maps covering Johnson City in 1927; however, the Library of Congress has not made these available at the time this document was drafted. For map legend, see the Appendix. For map scale, please refer to the link above.

¹⁴⁰ Similar in <u>Manufacturers Record</u>, 23 January 1902 (Volume XLI, No. 1), page 12, available online at: <u>https://books.google.com/books?id=YEJWyfXFvsQC</u>.

¹⁴¹ <u>Marvyn Scudder Manual of Extinct or Obsolete Companies</u>, 1926 (Volume I), page 1161, available online at: <u>https://books.google.com/books?id=TGjZAAAAMAAJ</u>.

¹⁴² <u>The St. Louis Lumberman</u>, November 1902 (Volume XXX, No. 5), page 76, available online at: <u>https://hdl.handle.net/2027/mdp.39015084559346</u>.

¹⁴³ <u>The Wood-Worker</u>, June 1903 (Volume XXII, No. 4), page 41, available online at: <u>https://books.google.com/books?id=ZR9aAAAAYAAJ</u>.

¹⁴⁴ <u>The New York Lumber Trade Journal</u>, 15 November 1904 (Volume XXXVII, Whole No. 442), page 25, available online at: <u>https://books.google.com/books?id=DL9PAQAAIAAJ</u>.

¹⁴⁵ <u>American Lumberman</u>, 26 November 1904 (Whole Number 1540), page 45, available online at: <u>https://books.google.com/books?id=epcz0GmWLwYC</u>.

¹⁴⁶ <u>Acts of the State of Tennessee Passed by the Fifty-Fourth General Assembly</u>, 1905, page 1331, available online at: <u>https://books.google.com/books?id=SC9AAQAAMAAJ</u>, which includes: "Organized under Chapter 142, Acts 1875, and acts amendatory, published herein by direction of Section 30 of said Act, covering the period from April 1, 1903, to March 31, 1905, inclusive."

¹⁴⁷ <u>The Packages</u>, December 1904 (Volume VII, No. 12), page 71, available online at: <u>https://books.google.com/books?id=7QNZAAAAYAAJ</u>.

¹⁴⁸ <u>The National Coopers' Journal</u>, April 1905 (Volume XX, No. 12), page 17, available online at: <u>https://books.google.com/books?id=0u1YAAAAYAAJ</u>.

¹⁴⁹ "120 K.W. Dynamo – Allen Panel Co. Johnson City, Tenn.," Clifford A. Maxwell Photographs, 1940 – 1986, Archives of Appalachia, available online at: <u>https://archivesofappalachia.omeka.net/items/show/12276</u>.

¹⁵⁰ <u>Packages</u>, April 1905 (Volume VIII, No. 4), pages 74 – 75, available online at: <u>https://books.google.com/books?id=dARZAAAAYAAJ</u>.

¹⁵¹ <u>Packages</u>, April 1905 (Volume VIII, No. 4), page 74, available online at: <u>https://books.google.com/books?id=dARZAAAAYAAJ</u>.

¹⁵² "Advance in Veneer Drying," in <u>The Packages</u>, October 1906 (Volume IX, No. 10), page 77, available online at: <u>https://books.google.com/books?id=NQVZAAAAYAAJ</u>.

¹⁵³ "Advance in Veneer Drying," in <u>The Packages</u>, October 1906 (Volume IX, No. 10), page 77, available online at: <u>https://books.google.com/books?id=NQVZAAAAYAAJ</u>.

¹⁵⁴ "Advance in Veneer Drying," in <u>The Packages</u>, October 1906 (Volume IX, No. 10), page 77, available online at: <u>https://books.google.com/books?id=NQVZAAAAYAAJ</u>.

¹⁵⁵ <u>Packages</u>, June 1905 (Volume VIII, No. 6), page 84, available online at: <u>https://books.google.com/books?id=dARZAAAAYAAJ</u>.

¹⁵⁶ <u>The Craftsman</u>, August 1905 (Volume VIII, No. 5?), page 698, available online at: <u>https://books.google.com/books?id=JAU8AQAAMAAJ</u>.

¹⁵⁷ <u>Box and Barrel</u>, August 1905 (Volume X, No. 6), page 68, available online at: <u>https://books.google.com/books?id=9h1aAAAAYAAJ</u>.

¹⁵⁸ Box and Barrel, December 1905 (Volume X, No. 10), page, available online at:

<u>https://books.google.com/books?id=9h1aAAAAYAAJ</u>, which read: "The COE Manufacturing Company, Painesville, Ohio. Gentlemen: We want to add our testimonial in behalf of your Automatic Roller Dryer. We have been operating one of these machines for the past year and are very much pleased with the results obtained from it. The stock comes from the machine perfectly dry and flat, and we can heartily recommend the dryer as being all that you claim for it. Yours very truly, Allen Panel Company, C.B. Allen President."

¹⁵⁹ <u>American Lumberman</u>, 30 June 1906 (Whole Number 1623), page 87, available online at: <u>https://books.google.com/books?id=jhIiAQAAMAAJ</u>.

¹⁶⁰ <u>The Iron Age</u>, 14 June 1906 (Volume LXXVII), page 1937, available online at: <u>https://books.google.com/books?id=ZOwcAQAAMAAJ</u>.

¹⁶¹ <u>Wood Craft</u>, July 1906 (Volume V, No. 4), page 127, available online at: <u>https://books.google.com/books?id=m1I7AAAAMAAJ</u>.

¹⁶² <u>The St. Louis Lumberman</u>, 1902 (Volume XXX), page 74, available online at: <u>https://hdl.handle.net/2027/mdp.39015084559346</u>.

¹⁶³ <u>Manufacturers Record</u>, 9 August 1906 (Volume L, No. 4), page 92, available online at: <u>https://books.google.com/books?id=TWg9AQAAMAAJ</u>.

¹⁶⁴ <u>Packages</u>, December 1906 (Volume IX, No. 12), page 76, available online at:

https://books.google.com/books?id=NQVZAAAAYAAJ.

¹⁶⁵ <u>American Lumberman</u>, 23 February 1907 (Whole Number 1657), page 77, available online at: <u>https://books.google.com/books?id=XbGGQ38WXIQC</u>.

¹⁶⁶ <u>American Lumberman</u>, 2 March 1907 (Whole Number 1658), page 75, available online at: <u>https://books.google.com/books?id=XbGGQ38WXIQC</u>.

¹⁶⁷ "Autobiography of William E. Uptegrove," available online at:

<u>https://uptegrove.tripod.com/webiopgs/webio1.htm</u>. Also available at "Uptegrove Family Collection, 1999 and undated," Archives of Appalachia, available online at: <u>https://archivesofappalachia.omeka.net/items/show/12446</u>. Between 1905 and 1908, Edwin F. Smith acquired four more patents relating to manufacturing veneers:

"Veneer Machine," filed 30 January 1905, issued U.S. Patent Number 801, 925 on 17 October 1905, available online at: <u>https://patents.google.com/patent/US801925A</u>.

"Veneer Machine," filed 3 February 1905, issued U.S. Patent Number 801,926 on 17 October 1905, available online at: <u>https://patents.google.com/patent/US801926A</u>.

"Veneer Dryer," filed 9 February 1905, issued U.S. Patent Number 822,997 on 12 June 1906, available online at: https://patents.google.com/patent/US822997A.

"Veneer Machine," filed 20 March 1906, issued U.S. Patent Number 839,661 on 25 December 1906, available online at: <u>https://patents.google.com/patent/US839661A</u>. All but U.S. Patent 839,661 included the statement: "Edwin F. Smith, of Philadelphia, Pennsylvania, Assignor to Edwin F. Smith Company, a Corporation of New Jersey."

¹⁶⁸ "A Draft Documentary History of William E. Uptegrove & Brother and Their Operations in East Tennessee, 1897 – 1933, Including White Rock Mountain, 1900 – 1904?, and Johnson City, 1897 – 1933, as well as the Johnson City, Bakersville & Southern Railway, 1899 – 1909," By William C. Schneck, Jr., for the years 1907 to 1909, available online at: <u>http://www.etwncrrhs.org/art/historiesart/UptegroveandAmericanCigarBoxCompany.pdf</u>.

¹⁶⁹ <u>The Lumber World</u>, 1 December 1907 (Volume 5, No. 11), page 23, available online at: <u>https://books.google.com/books?id=Q_EwAQAAMAAJ</u>.

¹⁷⁰ <u>Hardwood Record</u>, 10 February 1908, page 56, available online at: <u>https://books.google.com/books?id=9wI3AQAAMAAJ</u>.

¹⁷¹ <u>The Lumber World</u>, 15 June 1908 (Volume 6, No. 12), page 35, available online at: <u>https://books.google.com/books?id=cPEwAQAAMAAJ</u>.

¹⁷² The Saturday Evening Post, 27 June 1908 (Volume 180, No. 52), page 26, available online at:

https://books.google.com/books?id=Oz41XQxsH80C. Kimball's Dairy Farmer, 1 June 1908 (Volume 6, Number 10), page 14, available online at: https://books.google.com/books?id=zEL7NFHQ92IC, included: "Congo Roofing is handsome in appearance, being a uniform slate-grey color. Congo Roofing is put up in rolls 36 inches wide. Each roll contains 108 square feet [36 foot long], sufficient to cover 100 square feet and allow for a two-inch lap." By 1910, multiple sources note that each roll contained 216 square feet [72 foot long], sufficient to cover 200 square feet and allow for a two inch lap. Various other sources note that it was available in one, two or three plies of felt, made from rags, impregnated with a bituminous compound." "Congo is made of an extra heavy and tough felt, saturated with an antiseptic waterproofing compound to prevent wet rot and dry rot." The two and three ply versions came with a ten year warrantee, but "should be painted every three or four years."

¹⁷³ <u>The Southern Planter</u>, August 1909 (Volume 70, No. 8), page 828, available online at: <u>https://books.google.com/books?id=bEFDBYRSGdEC</u>. This figure was included because the line drawing captured some detail that was not visible in the reproduced photograph.

¹⁷⁴ <u>The Lumber World</u>, 1 July 1908 (Volume 7, No. 1), page 32, available online at: <u>https://books.google.com/books?id=fPQwAQAAMAAJ</u>.

¹⁷⁵ <u>A History of Tennessee and Tennesseans: The Leaders and Representative Men in Commerce, Industry and Modern</u> <u>Activities, Volume VI</u>, by Will Thomas Hale and Dixon L. Merritt, 1913, pages 1617 – 1618, available online at: https://books.google.com/books?id=CDkVAAAAYAAJ, includes: "On the basis of demonstrated fitness and capability, seldom has an appointment by a Tennessee governor been received with more general approbation than Governor Hooper's selection of Samuel Cole Williams for the vacancy on the state supreme bench caused by the resignation of former Chief Justice John K. Shields, who now represents Tennessee in the United States senate. The choice of Mr. Williams was not a political appointment in the ordinary sense, and for that reason it has been considered an event of unusual significance in its augury of good government and wisdom in the administration of law. Samuel Cole Williams, who has long been a member of the Johnson City bar, is a native of Gibson county, Tennessee, where his birth occurred January 15, 1864, one of a family of six children, whose parents were Thomas J. and Martha R. (Cole) Williams. Judge Williams is of Welsh and Irish descent. His father before him was a public official in his section of Tennessee. The paternal grandparents were Eli and Chloe (Collins) Williams. The maternal grandparents were Samuel and Olive (Walker) Cole. Judge Williams was reared in this state, had the advantage of the public schools and is a graduate of the law department of Vanderbilt University in the class of 1884, with the degree of LL. B. Admitted to the bar soon afterwards, he located at Johnson City and for many years has occupied a leading place in the bar of that city and is recognized as one of the ablest attorneys in upper east Tennessee. Judge Williams is a business man as well as a lawyer, and has been identified with a number of the larger enterprises of his home city. Chief of these is the Unaka National Bank, of which he is president. This is one of the strongest banks of eastern Tennessee, having a capital of \$100,000, a surplus of \$60,000 and deposits of \$1,100,000. Mr. Williams is also president of the Johnson City Traction Company, of the Watauga Electric Company and of the Carnegie Realty Company, all of Johnson City. For a number of years Judge Williams has been a factor in the independent Democratic movement in Tennessee. In 1912 he was appointed by Governor Hooper as special chancellor to serve in the first chancery division. When the choice of former Chief Justice Shields was made known for the new term of United States senator, Mr. Williams was announced as Governor Hooper's selection for the vacancy, and his appointment was formally made on February 12, 1913. Judge Williams is recognized in the state as of the highest honor, integrity and of broad information on both business and social affairs, and his thorough qualifications on the technical points of the law are considered a promise of exceptional services while a member of the supreme bench. Judge Williams is a member of the bar of the supreme court of the United States, belongs to the American Bar Association, and has membership in the American Historical Association. He has been a contributor to the 'Central Law Journal' of St. Louis and also to the 'Green Bag' of Boston, legal monographs and more general articles having appeared in both these well-known law journals under his name. On July 20, 1892, Judge Williams married Miss Mary Mayne, of Ohio, who was born at Basil, in Fairfield county, Ohio, and is a graduate of the Ohio Weslevan University at Delaware, Mrs. Williams is a woman of unusual culture and literary attainments, a leader in club and social activities, and has been president of one of the leading women's clubs of Johnson City and regent of the local chapter of the Daughters of the American Revolution and closely identified with church. and benevolent work. Judge and Mrs. Williams have one child, Gertrude, who is now attending school. Mrs. Williams and her husband have both taken much interest in institutions of the Methodist conference in and about Johnson City. They contributed generously to the support of the hospital and orphanage located at Greeneville, having endowed the hospital in memory of their son, Mayne Williams, whose sudden death occurred at the age of four years. Judge Williams and wife have also through their liberality made possible the erection of a beautiful public library for Johnson City. Judge Williams is well known in Masonic circles, having taken the degrees in both the York and Scottish Rites, being a Knight Templar and a thirty-second degree Scottish Rite Mason."

¹⁷⁶ <u>The Craftsman</u>, September 1908 (Volume XIV, Number 6), page xiv, available online at:

https://books.google.com/books?id=7QEaAAAAMAAJ, which includes: "Oak Wainscoting – Something entirely new at half the usual cost – This wainscoting may be purchased by the running foot or yard, just as you would buy carpet or wall-covering. It is made of paneled sections and in heights running from two to six feet. It is of quartered white oak of choice quality grain, and is so made as to adapt itself to any sort of room, and can be put up by your own carpenter. It is shipped 'knocked down' and is easily put together and in place. The baseboard is in two parts, the lower conforming to inequalities in floor and the upper forming the base proper. Base and cap rails are grooved to engage edges of panels and styles, so that any size panel, as well as adjustments to any variation of wall space, is possible. Interior Hardwood Company, Johnson City, Tennessee – send for Illustrated Catalogue of Wainscoting and Doors, giving sizes, prices, full instructions for putting in place, and a number of illustrations showing uses of wainscoting in different schemes of interior design."

¹⁷⁷ <u>The Lumber Trade Journal</u>, 1 October 1908 (Volume 54, No.7), page 31, available online at: <u>https://books.google.com/books?id=oOoxAQAAMAAJ</u>.

¹⁷⁸ <u>The Lumber World</u>, 1 October 1908 (Volume 7, No. 7), page 22, available online at: <u>https://books.google.com/books?id=fPQwAQAAMAAJ</u>.

¹⁷⁹ <u>The St. Louis Lumberman</u>, 15 October 1908 (Volume XLII, No. 8), page 41, available online at: <u>https://books.google.com/books?id=-fEwAQAAMAAJ</u>.

¹⁸⁰ <u>The Lumber World</u>, 1 November 1908 (Volume 7, No. 9), pages 16 and 21, available online at: <u>https://books.google.com/books?id=fPQwAQAAMAAJ</u>.

¹⁸¹ "It is a mistake to think that we sell only yellow pine finish. We handle quartered oak base, mouldings, window and door trim made by our home industry, the Allen Panel Co., and in patronizing us you are patronizing another home institution giving employment to home people. This material is carried stock and there is no waiting for what you want. Brading and Marshall".

¹⁸² <u>Veneers</u>, July 1909, page 18, available online at: <u>https://books.google.com/books?id=0bM4AQAAMAAJ</u>.

¹⁸³ <u>St. Louis Lumberman</u>, 1 August 1909 (Volume XLIV, No. 3), page 49, available online at: <u>https://books.google.com/books?id=9ScyAQAAMAAJ</u>.

¹⁸⁴ <u>American Lumberman</u>, 9 October 1909 (Whole Number 1794), page 52, available online at: <u>https://books.google.com/books?id=EDAiAQAAMAAJ</u>.

¹⁸⁵ <u>Barrel and Box</u>, October 1909 (Volume XIV, No. 8), page 55, available online at: <u>https://books.google.com/books?id=xGhqUgJwf0oC</u>.

¹⁸⁶ <u>The St. Louis Lumberman</u>, 15 November 1909 (Volume XLIV, No. 10), pages 53 – 54, available online at: <u>https://books.google.com/books?id=gycyAQAAMAAJ</u>.

¹⁸⁷ <u>The Lumber Trade Journal</u>, 15 September 1910 (Volume 58, No. 6), page 39, available online at: <u>https://books.google.com/books?id=IuUxAQAAMAAJ</u>.

¹⁸⁸ <u>Veneers</u>, November 1910 (Volume IV, No. 11), page 17, available online at: <u>https://books.google.com/books?id=ZKk4AQAAMAAJ</u>.

¹⁸⁹ <u>The Lumber World</u>, 1 January 1911 (Volume XII, No. 1), pages 18 – 19, available online at: <u>https://books.google.com/books?id=r_UwAQAAMAAJ</u>.

¹⁹⁰ <u>The Lumber World</u>, 15 January 1911 (Volume XII, No. 2), page 32, available online at: <u>https://books.google.com/books?id=r_UwAQAAMAAJ</u>.

¹⁹¹ <u>Veneers</u>, April 1911 (Volume V, No. 4), page 21, available online at: <u>https://books.google.com/books?id=ZKk4AQAAMAAJ</u>.

¹⁹² Johnson City, by L. Thomas Roberts, page 70, included: "Love – Thomas Company. Located at the corner of Ashe and Earnest Streets, the Love – Thomas Company was a successful wholesale dry goods and notions business established in January 1907. It employed six traveling salesmen who covered a five-state area. By 1914, the building was being used by the Carolina, Clinchfield & Ohio Railway (CC&O) for its offices." For additional information on the Love – Thomas building, see "Carolina, Clinchfield & Ohio Railway Operations in and around Johnson City, 1907 – 1954," by William C. Schneck, Jr., available online at:

http://www.etwncrrhs.org/art/historiesart/ClinchfieldAtJohnsonCity.pdf.

¹⁹³ <u>Manufacturers Record</u>, 18 September 1913 (Volume LIV, No. 11), page 60, available online at: <u>https://books.google.com/books?id=rE72zhMxGPQC</u>.

¹⁹⁴ <u>Public Acts of the State of Tennessee, Passed by the Sixty-First General Assembly</u>, 1919, page 937, available online at: <u>https://books.google.com/books?id=lilAAQAAMAAJ</u>.

¹⁹⁵ <u>The St. Louis Lumberman</u>, 15 October 1916 (Volume LVIII, No. 8), page "58 – 70", available online at: <u>https://books.google.com/books?id=h-EwAQAAMAAJ</u>.

¹⁹⁶ <u>Manufacturers Record</u>, 4 January 1917 (Volume LXXI, No. 1), pages 75 and 82, available online at: <u>https://books.google.com/books?id=d3U9AQAAMAAJ</u>.

¹⁹⁷ <u>Rough Notes</u>, 4 January 1917 (Volume LIX, No. 10), page 222, available online at: <u>https://books.google.com/books?id=GRWj0da_rS8C</u>.

¹⁹⁸ <u>The Iron Age</u>, 4 January 1917 (Volume 99, No. 1), page 131, available online at: <u>https://books.google.com/books?id=nO0cAQAAMAAJ</u>.

¹⁹⁹ <u>Lumber World Review</u>, 10 January 1917 (Volume XXXII, Number 1), page 39, available online at: <u>https://books.google.com/books?id=B-MoAQAAMAAJ</u>.

²⁰⁰ <u>The Iron Age</u>, 11 January 1917 (Volume 99, No. 2), page 182, available online at: <u>https://books.google.com/books?id=nO0cAQAAMAAJ</u>.

²⁰¹ <u>Southern Lumberman</u>, 27 January 1917 (Volume 83, No. 1114), page 40, available online at: <u>https://books.google.com/books?id=ZyZHAQAAMAAJ</u>.

²⁰² <u>Barrel and Box</u>, January 1917 (Volume XXI, No. 11), page 38, available online at: <u>https://books.google.com/books?id=nhtaAAAAYAAJ</u>.

²⁰³ <u>Manufacturers Record</u>, 10 October 1918 (Volume LXXIV, No. 15), page 97, available online at: <u>https://books.google.com/books?id=oDPgu1hu9XMC</u>.

²⁰⁴ <u>The Southern Lumberman</u>, 17 April 1920 (Volume 95, No. 1282), page 38, available online at: <u>https://books.google.com/books?id=_BRHAQAAMAAJ</u>.

²⁰⁵ <u>Safety Engineering</u>, September 1921 (Volume 42, No. 3), page 150, available online at: https://books.google.com/books?id=hzw6AQAAMAAJ.

²⁰⁶ <u>American Lumberman</u>, 22 May 1920 (Whole Number 2349), page 81, available online at: <u>https://books.google.com/books?id=L1pAAQAAMAAJ</u>.

²⁰⁷ <u>Lumber World Review</u>, 10 June 1920 (Volume XXXIX, Number 11), page 47, available online at: <u>https://books.google.com/books?id=Y-8wAQAAMAAJ</u>.

²⁰⁸ <u>Fire and Water Engineering</u>, 7 July 1920 (Volume LXVIII, Number 1), page 21, available online at: <u>https://books.google.com/books?id=sOw9AQAAMAAJ</u>.

²⁰⁹ The First Annual Report of the Department of Workshop and Inspection, For the Nine Months Ending the Fiscal Year January 1st 1914. State of Tennessee, pages 70 – 71, available online at: https://hdl.handle.net/2027/mdp.39015069384603. The author did not find any predecessors to this report online.

²¹⁰ Second Annual Report of the Department of Workshop and Factory Inspection, For the Fiscal Year Beginning January 1, 1914, and Ending December 1, 1914, State of Tennessee, page 94, available online at: https://hdl.handle.net/2027/uc1.b3030562.

²¹¹ <u>Third Annual Report of the Department of Workshop and Factory Inspection, For the Fiscal Year Beginning</u> <u>December 1, 1914, and Ending December 1, 1915</u>, State of Tennessee, pages 37 – 38, available online at: <u>https://hdl.handle.net/2027/uc1.b3030563</u>. ²¹² Fourth Annual Report of the Department of Workshop and Factory Inspection, For the Fiscal Year Beginning December 1, 1915, and Ending December 1, 1916, State of Tennessee, page 45, available online at: https://hdl.handle.net/2027/uc1.b3030564.

²¹³ Department of Workshop and Factory Inspection, Fifth Annual Report, December 1st, 1916 to December 31st, 1917, State of Tennessee, page 39, available online at: <u>https://hdl.handle.net/2027/uc1.b3030565</u>.

²¹⁴ <u>Bureau of Workshop and Factory Inspection, Seventh Annual Report, January 1st, 1919 to December 31st, 1919, State of Tennessee, pages 27 and 30, available online at: <u>https://hdl.handle.net/2027/uc1.b3030567</u>.</u>

²¹⁵ <u>The Blue Ridge Stemwinder</u>, by John R. Waite and Chris H. Ford, 2003, page 93, indicates that around 1915 the dual gauge trackage of the E.T. & W.N.C. Railroad reached as far west as the old Standard Oak Veneer Company plant (owned by the Tennessee Lumber and Veneer Company in 1915). The April 1903 and December 1908 Sanborn fire Insurance maps show the dual gauge coming only as far west as the Galloway – Pease lumber Yard, land later occupied by the Interior Hardwood Company plant. The later maps do not show any dual gauge trackage in this area. However, it should be pointed out that railroad trackage does not appear to have been a priority for the Sanborn Fire Insurance Company. See maps 1, 6, and 7.

²¹⁶ <u>American Lumberman</u>, 2 January 1904 (Whole Number 1493), page 55, available online at: <u>https://books.google.com/books?id=s2019aj6qNoC</u>.

²¹⁷ <u>American Lumberman</u>, 16 January 1904 (Whole Number 1495), page 49, available online at: <u>https://books.google.com/books?id=s2019aj6qNoC</u>.

²¹⁸ <u>Hardwood Record</u>, 10 March 1909 (Volume XXVII, No. 10), page 40, available online at: <u>https://books.google.com/books?id=CgM3AQAAMAAJ</u>.

²¹⁹ The New York Lumber Trade Journal, 15 December 1936, page 22.

²²⁰ <u>The Blue Ridge Stemwinder</u>, by John R. Waite and Chris H. Ford, 2003, page 93, indicates that around 1915 the dual gauge trackage of the E.T. & W.N.C. Railroad reached as far west as the old Standard Oak Veneer Company plant (owned by the Tennessee Lumber and Veneer Company in 1915). The April 1903 and December 1908 Sanborn fire Insurance maps show the dual gauge coming only as far west as the Galloway – Pease lumber Yard, land later occupied by the Interior Hardwood Company plant. The later maps do not show any dual gauge trackage in this area. However, it should be pointed out that railroad trackage does not appear to have been a priority for the Sanborn Fire Insurance Company. See maps 1, 6, and 7.

²²¹ "Sanborn Fire Insurance Map from Johnson City, Washington County, Tennessee," U.S. Library of Congress, December 1908, image 18, available online at: <u>http://hdl.loc.gov/loc.gmd/g3964jm.g3964jm_g083261908</u>. By July 1913, this property was known as the "Tennessee Lumber & Veneer Corporation," see "Sanborn Fire Insurance Map from Johnson City, Washington County, Tennessee," U.S. Library of Congress, July 1913, image 19, available online at: <u>http://hdl.loc.gov/loc.gmd/g3964jm_g083261913</u>. For map legend, see the Appendix. For map scale, please refer to the link above. This plant was located across Summer Street from the Standard Oak Veneer Company and the Allen Panel Company.

²²² Johnson City: The Way We Were, by J.O. Lewis, 1909 (1989 reprint), page 6. <u>The Blue Ridge Stemwinder</u>, by John R. Waite, 2003, page 60, shows that dual-gauge trackage reached beyond where the Allen Panel Company was to the Tennessee Lumber & Veneer Corporation in 1915. The Allen Panel Company had become the Allen Panel Corporation by October 1909. Map 7, dated December 1908, indicates that the lumber storage building in front of the office had not yet been built, while the photograph in Figure 51A, taken sometime in 1909, includes the completed lumber storage building.

²²³ "Sanborn Fire Insurance Map from Johnson City, Washington County, Tennessee," U.S. Library of Congress, July 1913, image 19, available online at: <u>http://hdl.loc.gov/loc.gmd/g3964jm_g3964jm_g083261913</u>, which includes: "Night watchman, waggoner Clock, 6 stations, hourly rounds. – Power: steam & elec.-lights: Elec. I.E.P. – Heat: steam. – Fuel: coal & waste. – 1 D. hyd. In yard, cart with 450' 2½ hose on premises south of Summer Street. – Casks

& pails & chemical ext'g'rs. Distrib'd. – Boiler Rem. Is all steel & concrete. – Blowers to machines." For map legend, see the Appendix. For map scale, please refer to the link above.

²²⁴ "Sanborn Fire Insurance Map from Johnson City, Washington County, Tennessee," U.S. Library of Congress, July 1913, image 19, available online at: <u>http://hdl.loc.gov/loc.gmd/g3964jm_g083261913</u>. For map legend, see the Appendix. For map scale, please refer to the link above.

²²⁵ "Sanborn Fire Insurance Map from Johnson City, Washington County, Tennessee," U.S. Library of Congress, February 1920, image 29, available online at: <u>http://hdl.loc.gov/loc.gmd/g3964jm.g3964jm_g083261920</u>. Sanborn published another set of maps covering Johnson City in 1927; however, the Library of Congress has not made these available at the time this document was drafted. For map legend, see the Appendix. For map scale, please refer to the link above.

²²⁶ "Sanborn Fire Insurance Map from Johnson City, Washington County, Tennessee," U.S. Library of Congress, February 1920, image 29, available online at: <u>http://hdl.loc.gov/loc.gmd/g3964jm.g3964jm_g083261920</u>.

²²⁷ "Sanborn Fire Insurance Map from Johnson City, Washington County, Tennessee," U.S. Library of Congress, July 1913, image 19, available online at: <u>http://hdl.loc.gov/loc.gmd/g3964jm_g083261913</u>, which includes: "Model Mill Co. Night watchman, Eco magneto Clock, 10 stations, hourly rounds. – Heat: Steam. – Fuel: Coal. Lights: Elec. – I.E.P. – V.P. in mill with 50'2" hose att'd. Each floor. – Casks & pails & chemical ext'g'rs. Distributed. – Machinery in elev. & Cleaning Ho. – 1st Fl. – One receiving separator. – 2nd Fl. – One scourer, 10 Bu. Aut. Scale. – 3rd Fl. – One perfection dust collectors. – Machinery in mill. – 1st Fl. – 7 packers. – 2nd Fl. – 14 double stand of rolls. – 3rd Fl. – 4 purifiers, 8 aspirators, meal dryers, flour mixer, 2 bran dusters, 1 reel, 1 exhaust fan. – 4th Fl. – 5 square sifters, 5 bolting reels, 5 dust collectors, 3 scourers."

²²⁸ Johnson City: The Way We Were, by J.O. Lewis, 1989 reprint of 1909 edition, page 44.

²²⁹ <u>Grain Dealers Journal</u>, 10 March 1910 (Volume XXIV, No. 5), page 347, available online at: <u>https://books.google.com/books?id=J0cyAQAAMAAJ</u>.

²³⁰ <u>Rock Products</u>, 22 October 1910 (Volume X, Number 4), page 43, available online at: <u>https://books.google.com/books?id=8R9KAQAAMAAJ</u>.

²³¹ "New 150,000-Bushel Elevator at Johnson City, Tenn.," in <u>The American Elevator and Grain Trade</u>, 15 September
 1919 (Volume XXXVIII, No. 3) pages 203 – 204, available online at: https://books.google.com/books?id=hcPcc8 GCc8C.

²³² "Sanborn Fire Insurance Map from Johnson City, Washington County, Tennessee," U.S. Library of Congress, February 1920, image 29, available online at: <u>http://hdl.loc.gov/loc.gmd/g3964jm.g3964jm_g083261920</u>, which included: "Night watchman, Hardinge clock, 8 stations, hourly rounds – Heat: steam – Fuel: coal – Lights: Elec. I.E.P. – V.P. in mill with 50' 2" hose att'd ea. Flr casks, pails & chem. Ext'g'rs distributed – Mach'y in Elevator & Cleaning House: 1st Fl.: one receiving separator – 2d. Fl.: one scourer – 10 bu. Auto. Scale – 3d. Fl.: one perfection dust collector – one scourer, Buffalo fan – one corn cleaner – 4th Fl.: milling separator – corn scourer – perfection dust collector – two cyclone dust collectors – Mach'y in mill: 1st Fl.: 7 packers- 2d. Fl.: 24 double stand of rolls, one sewing mach. – One No. 1 Buckley Mach. – 3d. Fl.: 8 purifiers, 8 aspirators, meal dryer, flour mixer, two bran dusters – one reel – one elec. Bleacher – 1 exhaust fan – 1 self rising mach. – 4 Buckley mach's – 4th Fl.: Five sq. sifters – Five bolting reels – five dust collectors, three scourers."

²³³ Johnson City, by L. Thomas Roberts, 2018, page 69. Image from: "Model Mill," Mildred S. Kozsuch Papers, 1867 – 2007, Archives of Appalachia, available online at: <u>https://archivesofappalachia.omeka.net/items/show/6588</u>. Similar at "Model Mill," Mildred S. Kozsuch Papers, 1867 – 2007, Archives of Appalachia, available online at: <u>https://archivesofappalachia.omeka.net/items/show/6598</u>.

²³⁴ <u>Rock Products</u>, 22 April 1910 (Volume IX, Number 10), page 43, available online at: <u>https://books.google.com/books?id=8R9KAQAAMAAJ</u>.

²³⁵ "Johnson's Depot," available online at: <u>http://www.stateoffranklin.net/johnsons/images/modelmill4.jpg</u>.

²³⁶ "Model Mills (Red Band Flour, also known as General Mills), corner of West Walnut and Sevier Streets," Burr Harrison Photographs, circa 1881 – 1958, Archives of Appalachia, available online at: https://archivesofappalachia.omeka.net/items/show/191. Image from "General Mills, Inc. (Red Band Co.)," Clifford A. Maxwell Photographs, 1940 – 1986, Archives of Appalachia, available online at: https://archivesofappalachia.omeka.net/items/show/191. Image from "General Mills, Inc. (Red Band Co.)," Clifford A. Maxwell Photographs, 1940 – 1986, Archives of Appalachia, available online at: https://archivesofappalachia.omeka.net/items/show/191. Image from "General Mills, Inc. (Red Band Co.)," Clifford A. Maxwell Photographs, 1940 – 1986, Archives of Appalachia, available online at: https://archivesofappalachia.omeka.net/items/show/11674, captioned: "Old Model Mills Building now known as General Mills Inc. (Another old name was Red Band Co.)". Also at "Johnson's Depot," available online at: http://www.stateoffranklin.net/johnsons/images/photos2/modelmilla.jpg.

²³⁷ "Model Mill," Ridley Wills East Tennessee Postcard Collection, 1906 – 1996 and undated, Archives of Appalachia, available online at: <u>https://archivesofappalachia.omeka.net/items/show/2216</u>. Also at "Model Mill," Mildred S. Kozsuch Papers, 1867 – 2007, Archives of Appalachia, available online at: <u>https://archivesofappalachia.omeka.net/items/show/6589</u>. Similar at "Johnson's Depot," available online at: <u>http://www.stateoffranklin.net/johnsons/images/postcards/post2/modelmill.jpg</u>.

²³⁸ "The Model Mill Is Remodeled – New Management Makes Improvements, Installs New Machinery and Completely Rebuilds Plant of the Model Mill Company, Johnson City, Tenn.", in <u>The American Miller</u>, 1 October 1925 (Volume LIII, No. 10), pages 1071 – 1072, available online at: https://books.google.com/books?id=5McQyIdTiwIC.

²³⁹ Johnson City, by L. Thomas Roberts, 2018, page 69, which included a black and white version of this image. Image from "Model Flour Mill," Ridley Wills East Tennessee Postcard Collection, 1906 – 1996 and undated, Archives of Appalachia, available online at: <u>https://archivesofappalachia.omeka.net/items/show/2214</u>. Postmarked 28 July 1913. Also at "Model Flour Mill," Mildred S. Kozsuch Papers, 1867 – 2007, Archives of Appalachia, available online at: <u>https://archivesofappalachia.omeka.net/items/show/6587</u>. "Johnson's Depot," available online at: <u>http://www.stateoffranklin.net/johnsons/images/photos/photos2/modelmill.jpg</u>, also black and white version of this image.

²⁴⁰ "The John Robinson Circus on Walnut Street, Johnson City, Tenn., 1921," James Agee Film Project Photographs, 1875 – 1956, Archives of Appalachia, available online at: <u>https://archivesofappalachia.omeka.net/items/show/743</u>. In 1921, the plant in the right background belonged to the Tennessee Lumber & Veneer Corporation. This plant was previously owned by the Interior Harwood Company.

²⁴¹ "ET&WNC Photos," by Chris Ford, available online at:

<u>http://www.cfordart.com/photoalbum/photopages/fullsizepages/1995octfullsize/2fullsize.html</u>, which continued: "I don't know when the name was changed to General Mills or what the old Model Mills logo looked like. I wish I did, though, because I'd like to include this on my ET layout."

²⁴² Available online at: <u>https://wctnarchives.org/places-in-johnson-city/#jp-carousel-2377</u>.

²⁴³ <u>Manufacturers Record</u>, 13 February 1908 (Volume LIII, No. 5), page 55, available online at: <u>https://books.google.com/books?id=mGQ9AQAAMAAJ</u>.

²⁴⁴ "Joshua W. Ring," in <u>Tennessee</u>, <u>The Volunteer State</u>, <u>1769 – 1923</u>, <u>Volume III</u>, 1923, pages 344 – 348, available online at: <u>https://books.google.com/books?id=MOhef9NXWZ8C</u>, which included: "Tennessee is proud to number among her representative citizens Joshua Wright Ring of Johnson City. The success he has achieved is well merited and the high regard and esteem in which he is held by his fellowmen is expressive of his real character and clearly indicates the value of his citizenship. Joshua Wright Ring was born in Carsonville, Virginia, on the 20th of September, 1873, a son of Henry Martin and Nancy (Phillips) Ring. On both paternal and maternal sides he is descended from old and honored ancestry. His father, Henry Ring, was a son of Paxton Ring and Cynthia Hanks (Carrico) Ring. Mr. Ring has in his possession a complete record of the Ring family. They originally resided in Germany and the name was spelled Rinck or Rynck. He traces the ancestry of the Ring family back to the year 1400. On the maternal side he is of English descent. They originally resided in England. The Phillips family is traced as far back as Rev. George Phillips, who was born at Rainham, St. Martins, Norfolk, England. He was a son of Christopher Phillips. Mr. Ring</u>

has one brother, M. F. Ring, of Roanoke, Virginia, who is vice president of the Twin City Mill Company, the Sparger Mill Company, of Bristol, Virginia, and the Roanoke City Mill of Roanoke, Virginia; and one sister, who is the wife of Dr. W.H. Gore of Fort Worth, Texas. In the acquirement of his education Joshua Wright Ring attended the common schools of Carsonville and subsequently enrolled in the Elk Creek Academy. After leaving college he engaged in the milling business, in which he has evinced special aptitude, and making steady and wonderful progress, he now stands preeminent in this line of business. He was one of the incorporators of the Pulaski Milling Company of Pulaski, Virginia, and he filled practically every position in that company. He was manager of that concern from 1892 to 1904, discharging the duties devolving upon him with great efficiency, but in the latter year he disposed of his interests in the business and bought the Twin City Milling Company at Bristol, Tennessee. He is still president of that company and also of the Sparger Mill Company of Bristol, Virginia. For several years Mr. Ring was assistant purchasing agent for the Virginia Iron, Coal & Coke Company. About 1909 he determined to go into business on his own account and established the Model Mill Company at Johnson City, of which he is president. He planned and directed the construction of this mill, which was completed in 1910. It is one of the largest and most prosperous mills in the entire south and is the most up-to-date mill in the country. This mill does an average business of three million dollars per year. From 1905 to 1909 Mr. Ring was president of the Virginia & Southwestern Railroad and one of the directors of the Dominion National Bank at Bristol. He is now president of the Tennessee Lumber & Veneer Corporation and the Tennessee Electrical Supply Company, both located at Johnson City, and is chairman of the board of directors of the Unaka & City National Bank. He was a prime factor in the consolidation of the Unaka Bank and the City National Bank. They were consolidated on the 11th of September, 1920, as the Unaka & City National Bank, with a capital of four hundred thousand dollars; surplus of two hundred and twenty thousand dollars; and average deposits of two million, five hundred thousand dollars. The undivided profits are fifty thousand dollars. The Unaka National Bank was established in 1901 and the City National Bank in 1902. Their combined resources are now over four million dollars. In 1921 this bank built a new home. It is one of the most modern bank and office buildings in this section of the country, and is seven stories high. Mr. Ring is the largest stockholder in this institution and he is not only interested in this bank but is also chairman of the board of directors and the largest stockholder in the City Savings & Trust Company of Johnson City. He is a director in the Johnson City Development Company; chairman of the board of directors of the Morristown Milling Company; director of Marshall Brothers Lumber Company of Johnson City and the Johnson City Shale Brick Corporation; is a member of the board of governors of the State Manufacturers Association; member of the advisory committee of the Tennessee Reciprocal Insurance Company of Memphis and of the board of trustees of Martha Washington College at Abingdon, Virginia; and president of the Roanoke City Mills of Roanoke, Virginia, of which his son, James Kirk Ring, is secretary and treasurer. The Roanoke Mill is patterned after the Model Mill of Johnson City, but is larger. The output of the mill with which he is connected is thirty-six hundred barrels daily and the business extends over the east, southeast, North and South Carolina, Georgia, Alabama and Florida. Mr. Ring also exports much flour to European countries. He is a practical man in every sense of the word. His energy and unusual business ability have been prime factors in his remarkable success. On the 7th of November, 1894, was celebrated the marriage of Mr. Ring to Miss Virginia Eliza McNew of Saltville, Virginia. To their union three children have been born: James Kirk, twenty-three years of age, who is secretary-treasurer of the Roanoke City Mills at Roanoke, Virginia, and is a graduate of the Virginia Military Institute at Lexington, Virginia; Gladys Gaynell, twenty years of age, who is a graduate of Martha Washington College at Abingdon, Virginia, and National Park Seminary, Forest Glen, Maryland; and Hencil Wright, eighteen years of age, who is a student at the University of Virginia. The political allegiance of Mr. Ring is given to the democratic party and the principles for which it stands. He is essentially public-spirited and his influence is ever on the side of advancement and improvement. His religious faith is that of the Methodist church, South, and he is a zealous worker in the church and Sunday school. For several years he has been president of a Bible class, which numbered but eighteen members when he was elected to take charge of it. As the result of his efficient management and personal popularity he has brought the membership to a total of three hundred and fourteen. This is the largest Bible class in the state. He is president of the board of stewards of the Munsey Memorial church. Fraternally Mr. Ring is a thirty-second degree Mason, a Knight Templar and a Shriner. Socially he is identified with the Johnson City Golf & Country Club and he is a charter member of the Johnson City Rotary Club. During the World war Mr. Ring was a member of Secretary Hoover's advisory committee and represented the department of foodstuffs of the United States. He conferred frequently with Secretary Hoover at Washington, D.C. A prominent citizen of Tennessee has said of Mr. Ring: 'I should say that the two outstanding qualities of Mr. Ring's life have been: First, his affection and devotion to his family and his lavish expenditure of any amount of money necessary to give them absolutely the best that is to be had in the way of educational and social advantages, and the comfort and elegance with which he has surrounded them in their beautiful home; second, the energy and business acumen by which he has been able, out of his own strength, to provide the funds necessary with which to do it.' The Ring home is one of the most beautiful in the state. It is situated in a lovely spot overlooking the

entire city and is surrounded by twenty-six acres of well improved land. There are thirty-two rooms in the house, all finished in mahogany."

²⁴⁵ <u>The American Miller</u>, 1 June 1909 (Volume XXXVII, No. 6), page 488d, available online at: <u>https://books.google.com/books?id=6S2_744FDbwC</u>.

²⁴⁶ <u>The American Miller</u>, 1 October 1909 (Volume XXXVII, No. 10), page 825, available online at: <u>https://books.google.com/books?id=6S2_744FDbwC</u>.

²⁴⁷ <u>Grain Dealers Journal</u>, 10 March 1910 (Volume XXIV, No. 5), page 347, available online at: <u>https://books.google.com/books?id=J0cyAQAAMAAJ</u>.

²⁴⁸ <u>Rock Products</u>, 22 April 1910 (Volume IX, Number 10), page 43, available online at: <u>https://books.google.com/books?id=8R9KAQAAMAAJ</u>.

²⁴⁹ <u>Rock Products</u>, 22 October 1910 (Volume X, Number 4), page 43, available online at: <u>https://books.google.com/books?id=8R9KAQAAMAAJ</u>.

²⁵⁰ Note that the author has not included a number of advertisements for the Model Mill that appeared in the Johnson <u>City Comet</u>.

²⁵¹ <u>Manufacturers Record</u>, 4 September 1913 (Volume LXIV, No. 9), pages 74 and 92, available online at: <u>https://books.google.com/books?id=rE72zhMxGPQC</u>.

²⁵² <u>Manufacturers Record</u>, 18 September 1913 (Volume LXIV, No. 11), page 60, available online at: <u>https://books.google.com/books?id=rE72zhMxGPQC</u>.

²⁵³ <u>The Literary Digest</u>, 17 May 1919 (Volume LXI, No. 7), page 136, available online at: <u>https://books.google.com/books?id=0Jc4AQAAMAAJ</u>.

²⁵⁴ <u>The American Elevator and Grain Trade</u>, 15 August 1919 (Volume XXXVIII, No. 2) page 148, available online at: <u>https://books.google.com/books?id=hcPcc8_GCc8C</u>.

²⁵⁵ "New 150,000-Bushel Elevator at Johnson City, Tenn.," in <u>The American Elevator and Grain Trade</u>, 15 September 1919 (Volume XXXVIII, No. 3) pages 203 – 204, available online at: https://books.google.com/books?id=hcPcc8_GCc8C.

²⁵⁶ <u>National Miller</u>, May 1922 (Volume XXVII, No. 5), page 55, available online at: <u>https://books.google.com/books?id=NT0xAQAAMAAJ</u>.

²⁵⁷ <u>National Miller</u>, May 1922 (Volume XXVII, No. 5), page 55, available online at: <u>https://books.google.com/books?id=NT0xAQAAMAAJ</u>.

²⁵⁸ <u>National Miller</u>, October 1922 (Volume XXVII, No. 10), page 66, available online at: <u>https://books.google.com/books?id=NT0xAQAAMAAJ</u>.

²⁵⁹ "The Model Mill Is Remodeled – New Management Makes Improvements, Installs New Machinery and Completely Rebuilds Plant of the Model Mill Company, Johnson City, Tenn.", in <u>The American Miller</u>, 1 October 1925 (Volume LIII, No. 10), pages 1071 – 1072, available online at: https://books.google.com/books?id=5McQyIdTiwIC.

²⁶⁰ "Johnson's Depot," available online at: <u>http://www.stateoffranklin.net/johnsons/images/photos/photos2/modelmillad.jpg</u>.

²⁶¹ <u>The Price Current – Grain Reporter</u>, 23 September 1925 (Volume 94, No. 13), page 19, available online at: <u>https://books.google.com/books?id=uf0oKwmKmigC</u>.

²⁶² Johnson City, by L. Thomas Roberts, 2018, page 69.

²⁶³ "Model Mill officially opens its doors in Johnson City," by Emily Hibbitts and Chad Bricks, 19 August 2022, available online at: <u>https://www.wjhl.com/news/local/model-mill-officially-opens-its-doors-in-johnson-city/</u>.

 264 The First Annual Report of the Department of Workshop and Inspection, For the Nine Months Ending the Fiscal Year January 1st 1914. State of Tennessee, pages 70 – 71, available online at: <u>https://hdl.handle.net/2027/mdp.39015069384603</u>. The author did not find any predecessors to this report online.

²⁶⁵ Department of Workshop and Factory Inspection, Fifth Annual Report, December 1st, 1916 to December 31st, 1917, State of Tennessee, page 39, available online at: <u>https://hdl.handle.net/2027/uc1.b3030565</u>.

²⁶⁶ <u>Department of Workshop and Factory Inspection, Sixth Annual Report, January 1, 1918 to December 31, 1918</u>, State of Tennessee, page 52, available online at: <u>https://hdl.handle.net/2027/uc1.b3030566</u>.

²⁶⁷ <u>Bureau of Workshop and Factory Inspection, Seventh Annual Report, January 1st, 1919 to December 31st, 1919, State of Tennessee, pages 27 and 30, available online at: <u>https://hdl.handle.net/2027/uc1.b3030567</u>.</u>

²⁶⁸ <u>Bureau of Workshop and Factory Inspection, Eighth Annual Report, January 1st, 1920 to December 31st, 1920, State of Tennessee, pages 38 – 39, available online at: <u>https://hdl.handle.net/2027/uc1.b3030568</u>.</u>

²⁶⁹ <u>Bureau of Workshop and Factory Inspection, Ninth Annual Report, January 1st, 1921 to December 31st, 1921, State of Tennessee, page 47, available online at: <u>https://hdl.handle.net/2027/uc1.b3030570</u>.</u>

²⁷⁰ Bureau of Workshop and Factory Inspection, Tenth Annual Report, January 1st, 1922 to December 31st, 1922, State of Tennessee, page 46, available online at: <u>https://hdl.handle.net/2027/uc1.b3030569</u>.

²⁷¹ <u>Third Annual Report, Department of Labor, State of Tennessee</u>, 25 February 1926, page 68, available online at: <u>https://hdl.handle.net/2027/umn.31951d03021441k</u>. The 1923 edition of this report is available online, but only contains a summary of the data at the county level. The author did not find a copy of the 1924 edition of this report online.

²⁷² <u>Fourth Annual Report, Department of Labor, State of Tennessee</u>, 25 February 1927, page 73, available online at: <u>https://hdl.handle.net/2027/uc1.b2991541</u>.

²⁷³ <u>Sixth Annual Report, Department of Labor, State of Tennessee</u>, 1 April 1929, pages 123 – 124, available online at: <u>https://hdl.handle.net/2027/uc1.b2991542</u>. The author did not find a copy of the 1927 edition of this report online.

²⁷⁴ <u>Seventh Annual Report, Department of Labor, State of Tennessee</u>, 1929, pages 223 – 224, available online at: <u>https://hdl.handle.net/2027/uc1.b2991543</u>.

²⁷⁵ <u>Eighth Annual Report, Department of Labor, State of Tennessee</u>, 1930, pages 194 – 195, available online at: <u>https://hdl.handle.net/2027/uc1.b2991544</u>.

 276 <u>Annual Report of the Department of Labor for the Year 1935</u>, State of Tennessee, pages 130 – 131, available online at: <u>https://hdl.handle.net/2027/mdp.35112104245289</u>. The author did not find a copy of the 1934 edition of this report online, nor of any subsequent reports.

²⁷⁷ "Sanborn Fire Insurance Map from Johnson City, Washington County, Tennessee," U.S. Library of Congress, April 1903, image 1, available online at: <u>http://hdl.loc.gov/loc.gmd/g3964jm_g3964jm_g083261903</u>.

²⁷⁸ "Sanborn Fire Insurance Map from Johnson City, Washington County, Tennessee," U.S. Library of Congress, December 1908, image 1, available online at: <u>http://hdl.loc.gov/loc.gmd/g3964jm.g3964jm_g083261908</u>.

²⁷⁹ "Sanborn Fire Insurance Map from Johnson City, Washington County, Tennessee," U.S. Library of Congress, July 1913, image 1, available online at: <u>http://hdl.loc.gov/loc.gmd/g3964jm.g3964jm_g083261913</u>.

²⁸⁰ "Sanborn Fire Insurance Map from Johnson City, Washington County, Tennessee," U.S. Library of Congress, February 1920, image 1, available online at: <u>http://hdl.loc.gov/loc.gmd/g3964jm.g3964jm_g083261920</u>.