City of Madison Landmarks Commission LANDMARKS AND LANDMARK SITES NOMINATION FORM (1)

LANDMARKS AND LANDMARK SITES NUMINATION FURM (1)		
I. Name of Building or Site		
(1) Common Badger State Shoe Company	(2) Historic (if applicable) Badger State Shoe Company	
II. Location		
(1) Street Address 123 N. Blount Street	(2) Ward (available @ City Clerk) Second Aldermanic District	
III. Classification		
(1) Type of Property (building, monument, park, etc.) building		
(2) Zoning District PUD SIP	(3) Present Use	
IV. Current Owner of Property (available at City Assessor's office)		
(1) Name(s) Old Badger State Associates, Ltd.		
(2) Street Address 802 Regent Street Madison, WI 53715	(3) Telephone Number 257-7506	
V. Legal Description (available at City Assessor's office)		
(1) Parcel Number 0709-133-0101-9	(2) Legal Description Lots 1 thru 8 and adjoining half of vacated alley, Mendota Realty Co. replat of NW 1/4 of	
Block 134. VI. Condition of Property		
(1) Physical Condition (excellent, good, fair, deteriorated, ruins)		
fair	T	
(2) Altered or Unaltered? altered	(3) Moved or Original Site? original site	
(4) Wall Construction		
brick		
(5) On a separate sheet of paper, describe the present and original physical construction and appearance (limit 500 words).		

City of Madison Landmarks Commission LANDMARKS AND LANDMARK SITES NOMINATION FORM (2)

VI.(5) Describe Present and Original Physical Construction and Appearance:

The Badger State Shoe Company is a six-story Chicago brick factory building that sits at the intersection of North Blount and East Dayton Streets. The building was built in 1910 on Madison's east side marshlands adjoining the newly completed City Market. (1) Blount Street, at that time, had been built of cinder-fill as were many streets that crossed the marshes northeast of the city's Capitol Hill. The location offered easy access to the freight depots of the Chicago and Northwestern Railroad and the Chicago, Milwaukee and St. Paul railroad, only four blocks to the southeast.

The site adjoins a largely residential neighborhood that still has remnants of the former commercial and industrial activity that intermixed with houses there. Across Blount Street are homes and a former grocery was once owned by leaders of Madison's Black community (listed in the NRHP). On the opposite corner stands the old city barn, recently renovated as an office and apartments. Across Dayton on Blount stands the home and barn of a commercial drayman. Adjoining the shoe factory on Dayton stands a complex of buildings of the former FFF Laundry. On adjoining property on market Place are flats and storefronts, a garage, and a former National Guard Armory.

The shoe factory building sits on the southwestern two-thirds of the lot with a trucking service area and parking lot adjoining the loading dock on the northeastern end of the lot. Originally, materials were handled along the southeastern side of the building where service doors were located at the basement level.

The office entrance was on the front of the building on Blount Street. The door opened to a landing and led half a flight of stairs up to the office. The service doors to the basement level were eliminated but the steel door at the base of the elevator remains. The loading dock doors included a wide round-arched door (perhaps original) alongside other doors but it has been rebuilt as two doors. A recent concrete, steel and fiberglass covered awning shelters the dock. A ground-level employee entrance remains, adjoining the loading dock.

The overall plan of the building measures 50 feet in width by 150 feet in length. The exterior walls are uniformly fenestrated and the building is symmetrically proportioned. Additions to the simple massive block of the building include the present loading dock on the north east side (originally added at an unknown date, rebuilt in 1956 and again in 1979), the iron fire escapes on the southeast and northeast sides (original), an elevator tower (c.1947) and a one-story addition for a boiler room on the southeast side (date unknown). (2)

x See continuation sheet

Landmark Nomination - Badger State Shoe Co. Description, page 2

The Badger State Shoe Company, built in 1910 at a cost of \$40,000, was a model of modernism in a production plant. The six-story building featured an automatic sprinkling system, was well ventilated and lit by more than 225 windows. The Chicago brick building has walls two feet thick at the ground level. It measures 50 feet wide, 150 feet long and rises over 70 feet above the former marshlands east of Capitol Hill. In general, it met current standards for industrial efficiency as described in literature of the period. (3) German-born Madison architect Ferdinand Kronenberg incorporated classical details and proportions into the massive structure by means of a classical metal cornice and corbelled brick piers, arches, and belt courses.

The original windows specified by the architect, were double hung with fifteen-light sashes. The overall dimensions of the segmental-arch brick masonry openings are five feet wide by seven feet high. The piers between window openings measure three feet, three inches wide. Broader spacing between windows and the outside corners is ten feet, seven inches, creating the appearance of massive corner piers. The windows were removed and bricked shut in 1960, over 25 years following the conversion of the building to warehouse use. (4)

Ornamentation of the exterior was restricted to the use of corbelled brick bands demarcating the top sixth-floor window sill line and the third floor window sill line. This feature in combination with a slight easing or recessing of the wall below windows beneath these brick bands, created the appearance of brick piers between windows supporting a three-tiered brick beam superstructure. The slight differentiation in window heights (and ceiling heights) on the top and bottom levels enhances this structural effect. In the sixth floor and the basement, the ceiling heights are 11 feet, whereas the rest are 12' 3". The basement is also several feet below street level.

A denticulated galvanized-iron cornice crowns the building. A cornice which crowned the chimney was removed when the chimney was rebuilt in 1960. The roofline is broken by the top of an old elevator shaft (no longer in use), a chimney, stair tower and present elevator shaft (added 1947). Not visible are skylights (now covered over) which lit the sixth floor.

The inner structure is built of wood: 8×10 and 10×12 inch beams are supported by 10 inch square wood posts, creating an open floor plan. Floors are built of two inch thick pine planks with factory maple finish flooring. The latter has been partially removed, and that which remains is largely damaged and deteriorated.

Landmark Nomination - Badger State Shoe Co. Description, page 3

No historic interior details remain. The offices were remodeled, obliterating original materials and finishes. However, the vast majority of the space was used for manufacturing, and therefore was unfinished.

Of the exterior alterations, the window removal is the most significant in its visible effect on the architectural integrity of the building. Even so, the way in which the window openings were filled in still illustrates the original fenestration on the building. And, current plans for the adaptive reuse of the building by its owner-developer indicate these windows will be restored to their original appearance. The replacement of front and rear doors, the boiler room addition, the elevator tower addition, the chimney reconstruction, and the loading dock replacement are all minor alterations and do not detract significantly from the general appearance of the building.

Notes

- (1) "Shoe Factory Looming Up," Wisconsin State Journal, 15 February 1910.
- (2) Madison Building Inspection Files, Department of Planning and Development, Municipal Building, Madison, Wisconsin.
- (3) Frederick J. Allen, The Shoe Industry, Boston: The Vocational Bureau of Boston, 1916, p. 116.
 - (4) Building Inspection Files.

City of Madison Landmarks Commission LANDMARKS AND LANDMARK SITES NOMINATION FORM (3)

VII. Significance	
(1) Original Owner	(2) Original Use
Badger State Shoe Factory	shoe factory
(3) Architect or Builder	(4) Architectural Style
Ferdinand Kronenberg, architect	classical revival
(5) Date of Construction	(6) Indigenous Materials Used
1910	none
(7) On a separate sheet of paper, d nominated property and its conf of the Landmarks Commission Ord	escribe the significance of the ormance to the designation criteria inance (33.01), limit of 500 words.
VIII. List of Bibliographical Refer	ences Used
City of Madison Building Inspection Files Municipal Building, Madison, Wisconsi Mollenhoff, David V. Madison A History Kendall/Hunt Publishing Company, 1982 "Shoe Factory Looming Up." Wisconsin State Wyatt, Barbara, ed. Cultural Resource made State Historical Society of Wisconsin	of the Formative Years. Dubuque: ate Journal, 15 February 1910. anagement in Wisconsin Vol. 2. Madison:
IX. Form Prepared By:	
(1) Name and Title Carol Lohry Cartwright, Gary Tipler and Katherine Rankin	
(2) Organization Represented (if any)	
for the owner and Madison Landmarks (Commission
(3) Address 802 Regent Street, Madison, WI 53715	(4) Telephone Number 257-7506
(5) Date Nomination Form Was Prepar Oct. 30, 1988 and June 27, 1989	ed

City of Madison Landmarks Commission LANDMARKS AND LANDMARK SITES NOMINATION FORM (4)

VII. (7) Significance of Nominated Property and Conformance to Designation Criteria:

Historical Background

Industrial development in Madison occurred in rapid spurts in the 1880s through World War I due to technological innovations in manufacturing, the increase in regional marketing, the improvement and extension of rail service for the distribution of products, and to an influx of inexpensive immigrant labor. In the late nineteenth century, the growth and expansion of local plants from wagon and smithing shops into large factories employing hundreds of people and serving regional and international markets became a wide-spread phenomenon in developing communities across the nation.

The Badger State Shoe Company was incorporated in Milwaukee in 1893, a reorganization of the former Atkins, West and Company. (1) Albert Atkins and Henry L. Atkins were directors of the corporation. The company plant was in a building at 55-59 4th Street and later on St. Paul Avenue at 12th St. (2) In the winter of 1900-1901, the company relocated to South Madison, in a new brick building at 1335 Gilson (then Maple) Street on a Chicago and Northwestern Railroad spur. (3) The move to Madison may have been to take advantage of lower labor and plant operating costs.

In 1903, the stock of the company was more than doubled and John G. Ogden was made president of the company, William H. Atkins became secretary and Albert Atkins, a director. (4) (Ogden likely bought into the company at this time.) All three had moved to Madison from Milwaukee where they had been in partnership in the 1870s and the 1880s in the Atkins, Ogden & Company, boot and shoe company. (5) Following several years of difficulties in hiring due to the limited accessibility of the plant, an east Madison branch was opened on Wilson Street. In the winter of 1909-1910 plans were announced to consolidate these branches and another in Milwaukee (location unknown) into a new building. Construction commenced soon thereafter on the six-story brick factory on North Blount Street. (6) It was completed and outfitted at a cost of \$60,000 and in operation by spring, employing an estimated 250 people. (7) Production increased to 2,000 pairs per day of "womens', misses' and children's" shoes, a ten-fold increase over the South Madison plant output ten years earlier. (8) The product was sold to the Chicago wholesale firm of Heiz and Schwab which shipped them throughout the world. With the advent of World War I, boot and shoe sales soared. In 1917, during that period of success, the business was sold to industrialist Edward C. Wolfram of Watertown. Wolfram also owned a shoe company which manufactured women's shoes in Watertown, and others in Waterloo and Lake Mills. (9) Wolfram died in 1927 whereupon his family operated the business until 1930 at which time his several businesses were liquidated. (10)

The Badger State Shoe Company rode the economic crests and swales of the period. In the 1920s, following high profits during World War I, the leather tanning and shoe industries lost considerable trade due to the growing use of synthetics over leather and increased leather and shoe imports. Many companies for which business was becoming marginal, were dealt a death knell with the stock market crash and ensuing Great Depression. In 1930 the production at the Badger State Shoe Company was halted and liquidation proceeded.

A few years later, the building was leased then sold to Crescent Electric, a wholesale electrical supply company based in Dubuque, Iowa. The building was converted to warehouse use. Most recently, it was sold to Rowley-Schlimgen, an office supplies company.

AREAS OF SIGNIFICANCE

Architecture

The Badger State Shoe Company building is significant for architecture because it is a largely intact medium sized early twentieth century factory building in Madison, a community that struggled throughout the nineteenth and early twentieth century to create an industrial base. The building is also a good example of an efficient, modern production facility that also possesses some stylistic character. The form and details of the building are classical, yet also streamlined, combining tradition with efficiency.

The architectural factors that make this building stylistically interesting include the illusion of piers, the belt courses, and the cornice, which all combine to suggest classicism. These details make the statement that while the building was designed to be functional, it was also well-made and stylish. And, while the building expresses classicism with its suggestion of piers and its cornice, it also suggests modernism too, because these same piers are executed to give the building a vertical emphasis. In fact, the whole tall, narrow building seems to be reaching upward. This vertical expression is significant and surprising for a building constructed in 1910. The fact that this building is stylish at all is of interest. and speaks to the image the company was trying to project when it was built.

The building is also significant for architecture because it is a largely intact early twentieth century factory building. As stated earlier, Madison struggled to create an industrial base in what was essentially a professional community. While this issue will be discussed more completely in the Industry section, suffice it to say here that there are few medium sized and large pre-World War I factory buildings still extant in the city.

According to survey records kept by the city of Madison's Preservation Planner, there are only 12 pre-World War I manufacturing plants still extant in the city, other than the Badger State Shoe Company. These 12 are listed in Appendix I. The Appendix also shows that most of these extant buildings were constructed around the turn of the century or in the early twentieth century. A reconnaissance survey of these 12 sites was done to assess the architectural context of this plant with other

historic factories in the community. It was determined from this survey that the Badger State Shoe Company, because it lacks major additions and irreversible alterations, was one of the best of its type in the city. A brief review of the context group will discuss this claim. Complete names and addresses are included in the Appendix.

The largest and most successful manufacturers of the late nineteenth and early twentieth century, Madison's booming industrial years, were the Fuller and Johnson Company, the Gisholt Machine Company, and the Northern Electric Company. While their plants are too large to really fall into the same classification as the Badger State Shoe Company, they were used as part of the comparison group. Only the Fuller and Johnson office building is still extant in its historic condition. It is a small building and is more of a nineteenth century building than Badger State. The second Fuller and Johnson plant (the first was demolished), is across the street from the office, but has been altered into an office building and no longer resembles its original character or use. There are three sites still extant that represent the historic Gisholt Company. Again, they do not really compare to Badger State because they were built for a much larger operation. Part of their complex on E. Mifflin St. has good integrity, but these buildings appear to be warehouses, not factory space. The manufacturing facility of Gisholt at 1300 E. Washington St. has good integrity, but its size again does not represent the same type of manufacturing activity that took place at Badger State. The Gisholt building at 1400 E. Washington St. is a better size for comparison purposes, but it is a plain building with none of the stylish attributes of the Badger State factory. The plant for Northern Electric is a compilation of several buildings and additions, and some of the original plant has been demolished. It still represents a turn of the century factory complex, but is neither stylish, nor of the same scale as the Badger State factory. It has also seen significant alterations to its openings.

Other large industries of the turn of the century era included the Scanlan-Morris Company which became Ohio Medical Company. Its Johnson Street factory is relatively intact, but again, it is much larger than Badger State and is also less refined, seemingly more factory-like than Badger State. Probably the most interesting of all the factories built in Madison is the U. S. Sugar Beet Factory. A large and elegant four plus story plant when it was originally built, its top floors have been removed so that only two floors remain. Many of its decorative windows and gothic tower were also removed with the upper stories. It is still large, but has suffered too many significant alterations to be considered as intact as Badger State. The Madison-Kipp company, or Mason-Kipp as it was originally known, is another large industry in Madison. The original factory has had many additions so that it is

difficult to compare its original plant with Badger State. The same can be said for the American Plow Company, where there is only a hint of a historic factory left, and the Steinle Turret Machines company, which has had additions and has been covered over with modern siding materials. Both the Madison Candy Company and the Madison Saddlery company buildings appear to be designed as retail or commercial blocks rather than factories and their placement on commercial streets gives further evidence that they are not typical factory buildings. The only two buildings that have a similar size, purpose, and level of integrity as Badger State are the Teckemeyer Candy Factory and the Wisconsin Wagon Company. The Wisconsin Wagon Company is a smaller and much less refined building than Badger State. Only the Teckemeyer Candy Company comes close to being the same type of building as the Badger State Shoe Company, although it, too, has been remodeled, although overall its integrity is high.

The result of this discussion is that in looking at Madison's extant factory buildings, there are few that represent what the Badger State building does; that is, a modern, early twentieth century factory that was considered, as mentioned in the description section, a model of efficient factory construction. This is even more important when one considers that the early twentieth century was an era when business leaders were trying to implement new ideas such as scientific management in American factories. That this plant was designed for utmost efficiency speaks to the new era in industry in the early twentieth century. It is also very apparent that most of Madison's historic extant factories have been altered, some significantly. The result is that the Badger State Shoe Company building is a relatively intact and good example of an important property type in Madison, the early twentieth century factory building, and that while it is important as a property type it also expresses a stylishness not often seen in functional industrial buildings.

There is one serious integrity question in this building that needs to be addressed; that is, the closure of the windows. While the bricked in windows create a loss of integrity, especially in a building of this type, the size and placement of the window openings have not been changed and the use of a different color of brick makes the former openings stand out so that the pattern of fenestration and type of window opening is still quite evident on the building. In only a few places are modern windows placed in the old window areas, and the modern windows do not change the old window shape. Because the openings have not been changed in size, but only covered up, one can still get a sense of the original facade appearance and how the windows functioned as a part of that appearance. Most significantly though, this bricking up of the windows is not irreversible, and the current owner is planning

restore the glazing of the windows in an adaptive reuse project for the building.

The early twentieth century saw the development of industry in Madison that finally competed with state government, the university, and the service industry as an economic base in the city. Yet, it is apparent, through the survey of extant historic industrial buildings that there were only a few medium-sized industries like the Badger State Shoe Company. Therefore, its factory, a model of efficient factory construction, designed by a noted local architect, and possessing a stylish facade, is almost unique in the city. And, while it temporarily has a lower level of integrity than it did when it was in operation, it still stands as a good example of a medium sized factory where all operations were housed under one roof, a significant property type in Madison.

The architect of this building, Ferdinand Kronenberg, should not go without mention. Kronenberg, a German who was born around 1877, was a prolific and skilled architect in Madison. He apprenticed with Madison architect J. O. Gordon, and for a brief time, partnered with J. T. W. Jennings, the university architect. During his career in Madison he is known to have designed at least 50 houses and small commercial buildings. He also designed some larger structures in Madison including the St. James Catholic Church, the Interurban Barns (demolished), the Gill-Joyce Funeral Home, the Emerson School, the FFF Laundry Company complex, and the Cardinal Hotel. This building is his only known factory design and is therefore of interest in the history of Kronenberg's career in Madison. The fact that this building shows a fine sense of proportion, something seen very well on his Cardinal Hotel building, and a high quality of design speaks well to Kronenberg's ability as an architect. The Badger State Shoe Company is a fine example of Kronenberg's work and has added significance because of it. (11)

Industry

The Badger State Shoe Company is significant for local history under criterion A because it is a relatively intact example of an important historical building type, the early twentieth century factory. It is also important because it was the only shoe manufacturing plant in the city, in a state where the leather and shoe industry was an important part of the industrial base, and because it was a small, but significant part of Madison's industrial boom in the early twentieth century.

According to Wisconsin's <u>Cultural Resource Management Plan</u>, Wisconsin's eastern lakeshore was a center of the tanning industry in the nineteenth and early twentieth century. One of the main industries that used tanned leather was shoemaking.

During the mid to late nineteenth century, most towns had small shoemaking shops meeting the needs of the local populace. Milwaukee, though, because of its access to the tanning mills, was a leader in small shoe factory production in the nineteenth century. By the late nineteenth century, demand fostered the construction of bigger factories that replaced skilled artisans with unskilled laborers working at machines. The proximity to large tanning mills fostered the shoemaking industry in Wisconsin and by the end of World War I, Wisconsin was one of the top 10 shoe producing states in the country. (12)

In Madison, the construction of this plant was not only important because it housed a factory of an important state-wide industry, but because it was part of an industrial boom that had finally took off, a boom that many community leaders had hoped for during the entire nineteenth century. Madison had, of course, been founded on the premise that it would be the state capital. After achieving this status, though, the economic base of the community was involved primarily in maintaining the capital and in providing services to legislators. Leonard J. Farwell, businessman and governor, almost singlehandedly fostered an economic boom in Madison between 1847 and 1856. However, this boom was primarily commercial and service-oriented, although Farwell was responsible for building the Madison Mills between 1850-51, a grist and sawmilling complex. But, during the pioneer era when most other communities were building up around mills, Madison was surprisingly nonindustrial. (13)

After the Civil War, industry in Madison consisted of a few mills and an iron foundry, and some community leaders felt that if Madison was to ever become a significant community, it would have to do something about attracting large industries to the community. But by this time there were two problems. There was a growing group of state government and university workers who did not want the city to become industrial, and little had ever been done to harness the water power of the lakes or develop other power sources. There was some hope, though, in the development of the Mendota Agricultural Works and the Carmin & Billings Plow Works. Community boosters tried to build on these factories to make Madison a center of agricultural implement manufacturing. Unfortunately the depression of 1873 nullified this effort and hurt existing manufacturers. (14)

Again in the 1880s, a call to bring large industries to Madison was sounded by city leaders, but only three large industries developed in the city, and their development was related more to their founders' initiative, rather than what community leaders did. The Fuller and Johnson Manufacturing Company, ironically, an agricultural implement company, was Madison's first big industry by the late 1880s.

An offshoot of Fuller and Johnson was the Gisholt company, a manufacturer of machine tools. Incorporated in 1889, it became largely successful at the turn of the century. The third large industry in the community was Northern Electric Manufacturing Company, established in 1895. (15)

But these successes were still not enough for the industry boosters, who continued to conflict with the government-university people who liked Madison the way it was, not soiled by industrial pollution. And Madison had disadvantages like high freight rates, business conservatism, and a shortage of skilled labor. But, after 1900, all of these problems seemed to lessen as existing industries grew and new industries finally came to the city. Booster clubs like the Forty Thousand Club, the Commercial Club, and the Madison Club helped change attitudes in the community toward industry as well. Between 1910 and 1920 manufacturing finally became the largest sector of Madison's economy as factory output grew by 274% and factory workers increased by 233%. And, new industries like Scanlan and Morris, Mason-Kipp (Madison-Kipp), the French Battery Company (Ray-O-Vac), and the Oscar Mayer Company, showed promise for Madison's industrial future. (16)

The boom was short-lived as industry declined during the Great Depression. And, while the university and state government have grown rapidly since World War II, along with the service industry, manufacturing has not grown as rapidly, at least not enough to overshadow the service sector of the community. And, today, while industry is an important concern of community leaders, most people have accepted the fact that Madison is, was, and probably always will be primarily a center of learning, laws, and commerce.

The Badger State Shoe Company can be placed in the above context because it was one of the industries established in Madison during the early twentieth century boom period of industrial development in the city. Of course, the most significant industries in the city at the time were Fuller and Johnson, Gisholt, and Northern Electric, but medium sized industries like Badger State were important in rounding out the industrial base of the community. And, the 250 jobs the factory provided was a significant amount of work for the community.

The building is also important because, regardless of its size, it is one of only a small number of relatively intact factory buildings representing the boom years of Madison industry in the community. A review of the extant industrial buildings of Madison was done in the Architecture section, and it illustrates that not only in the area of architecture is the Badger State Shoe Company unusual, but that it is, despite its own alterations, one of the most intact pre-World War I industrial

buildings in the city. Industrial buildings are heavily prone to alteration and addition. If a company is successful and expands, original buildings often become altered significantly by additions. Successful companies also have a need to update their facilities, often modernizing their facades significantly. If a company is not successful, often the building falls into ruin through lack of use, or new uses for the building are not compatible with original architecture. Because of these factors, finding a relatively intact industrial building is significant. As stated in the Architecture section, only the Teckemeyer Candy Company and the Wisconsin Wagon Company buildings come close to being equal to or better examples of intact industrial buildings. All the others have had alterations, additions, demolitions, or were not really of the same type as the Badger State building.

Because the Badger State Shoe Company is a good example of a shoe factory, an important industry in Wisconsin, and because it was a modest, but still important part of the industrial boom of the early twentieth century in Madison, and because it is one of the best examples of an historic medium-sized factory building in the city, it is significant for the history of industry in Madison.

Notes

- 1 Corporation documents, on file in the archives of the Secretary of State of Wisconsin, State Capitol, Madison, Wisconsin.
- 2. Milwaukee city directories, on file in the Library of the State Historical Society of Wisconsin, Madison, Wisconsin.
- 3. Corporation documents; Sanborn-Perris Fire Insurance Maps, on file in the Archives of the State Historical Society, Madison, Wisconsin.
 - 4. Corporation documents.
 - Milwaukee city directories.
 - 6. "Shoe Factory Looming Up," Wisconsin State Journal, 15 February 1910.
- 7. Survey of Madison City Directories, on file at the Library of the State Historical Society of Wisconsin, Madison, Wisconsin.
 - 8. Corporation documents; "Shoe Factory Looming Up."
 - 9. Obituary of Edward C. Wolfram, Wisconsin State Journal, 24 October 1927.
- 10. Wolfram Shoe Company corporation papers, on file in the Archives of the State Historical Society of Wisconsin, Madison, Wisconsin.
- 11. Information from the architects' files of the Madison Preservation Planner, Department of Planning and Development, Municipal Building, Madison, Wisconsin.

- 12. Barbara Wyatt, ed., <u>Cultural Resource Management in Wisconsin Vol. 2</u>, Madison: State Historical Society of Wisconsin, Madison, Wisconsin, pp. Industry 12-1--12-8.
- David V. Mollenhoff, Madison A History of the Formative Years, Dubuque: Kendall/Hunt Publishing Company, 1982, pp. 45-49.
 - 14. Ibid., pp. 122-125.
 - 15. Ibid., pp. 180-190.
 - 16. Ibid., pp. 257-269.

Appendix I

Survey of Pre-World War I Manufacturers

- A. Fuller and Johnson, 1356 E. Washington (office extant, excellent condition; plant across Dickinson remodeled.
- B. Gisholt Machine Company, 1400 E. Mifflin, 1899 (altered); southside 1300 and 1400 blocks of E. Washington, 1899-1900 with significant additions in 1911 (largely extant, few alterations).
- C. Northern Electric, 201 South Dickinson, 1895, 1900, 1906, 1912, 1916 (partly demolished) (1410 Williamson, office in early years, extant).
- D. Wisconsin Wagon Company, 602 Railroad, 1883, built 1903 (extant).
- E. Madison Candy Company, 744 Williamson, 1903-04 (extant).
- F. American Plow Company, 131 South Fair Oaks, c. 1907 (altered).
- G. Madison Kipp, 201 Waubesa, 1903 (extant, additions).
- H. Steinle Turret Machines, 149 Waubesa, 1905, 1916 (altered).
- I. U.S. Sugar Beet Factory, 3214 Atwood Avenue, 1905-06 (altered).
- J. Madison Saddlery, 313-317 E. Wilson, 1907 (extant).
- K. Teckemeyer Candy Factory, 1 North Bedford, 1909 (extant, remodeled).
- L. Scanlan-Morris Company, 1915-16 (factory extant, office demolished).