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**United States Department of Interior
National Park Service**

**National Register of Historic Places
Registration Form**

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900A). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name MITCHELL LEWIS BUILDING
other names/site number MITCHELL LEWIS MOTOR COMPANY

2. Location

street & number 815 EIGHTH STREET N/A not for publication
city or town RACINE N/A vicinity
state Wisconsin code WI county RACINE code 101 zip code 53403

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property meets does not meet the National Register criteria. I recommend that this property be considered significant nationally statewide locally. (See continuation sheet for additional comments.)

Signature of certifying official/Title _____ Date 2/21/05
State Historic Preservation Officer-WI

State or Federal agency and bureau

In my opinion, the property meets does not meet the National Register criteria.
(See continuation sheet for additional comments.)

Signature of commenting official/Title _____ Date

State or Federal agency and bureau

MITCHELL LEWIS BUILDING

RACINE

Wisconsin

Name of Property

County and State

4. National Park Service Certification

I hereby certify that the property is:
 entered in the National Register.
 See continuation sheet.
 determined eligible for the National Register.
 See continuation sheet.
 determined not eligible for the National Register.
 See continuation sheet.
 removed from the National Register.
 other, (explain:)

Edson H. Beall

4/20/05

for

Signature of the Keeper

Date of Action

5. Classification

Ownership of Property (check as many boxes as as apply)	Category of Property (Check only one box)	Number of Resources within Property (Do not include previously listed resources in the count)	
		contributing	noncontributing
<input checked="" type="checkbox"/> private	<input checked="" type="checkbox"/> building(s)	1	0
<input type="checkbox"/> public-local	<input type="checkbox"/> district		buildings
<input type="checkbox"/> public-State	<input type="checkbox"/> structure		sites
<input type="checkbox"/> public-Federal	<input type="checkbox"/> site		structures
	<input type="checkbox"/> object		objects
		1	0 total

Name of related multiple property listing:
(Enter "N/A" if property not part of a multiple property
listing.
N/A

Number of contributing resources
is previously listed in the National Register
0

6. Function or Use

Historic Functions

(Enter categories from instructions)
Industry/Manufacturing/Extraction - Manufacturing Facility

Current Functions

(Enter categories from instructions)
DOMESTIC/Multiple Dwellings

7. Description

Architectural Classification

(Enter categories from instructions)
Late 19th and Early 20th Century American Movements

Materials

(Enter categories from instructions)

Foundation Concrete

walls brick

roof synthetics

other wood

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets.)

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Continuation Sheet**

Section 7 Page 1

Mitchell Lewis Building
Racine, Racine County, Wisconsin

BUILDING DESCRIPTION

The Mitchell Lewis Building is an utilitarian industrial loft building type, which served both production and warehousing of wagon and automobile bodies. Typical of that kind of construction, the building has structural bearing exterior and division walls, with wood post and beam construction. The building was built in a ravine, rising three stories on the Eighth Street or north and east sides, with a grade difference of more than a story and a half, between the Eighth Street front and the lower level open on the west and south elevations. The building has two interior brick bearing walls--serving as fire walls--that divide its length into three sections. It has a low pitched roof with a slightly stepped parapet wall on the Eighth Street façade. The building was built in 1910, designed by the locally prominent Racine architectural firm of Guilbert and Funston, and was claimed by the architects to be one of the largest of its kind at the time.¹ In 2004 the building was converted to apartments using the federal income tax credit program.

The Mitchell Lewis Building was built west of downtown Racine, fronting on the south side of Eighth Street and was once adjacent to the many buildings of the Mitchell Lewis wagon and auto body plant, which occupied the two blocks to the north and northwest. The building is located on the block bordered by Eighth, Washington, Center and Ninth streets. The massive five-story brick building was built with access to rail service by the Chicago & North Western Railway on the Eighth Street level, and the Racine & Mississippi R.R, later the Chicago, Milwaukee & St. Paul Railway on the lower level, in the ravine that formerly was the course of the Blue River.² The river was placed underground when the rail line was constructed following its course. A railroad siding remains between Eighth Street and the building. Today, an asphalt parking lot occupies much of the property on the west and south sides of the building.

The building has a rectilinear plan which is oriented north to south; it measures 168 feet on Eighth Street, 321 feet in depth extending south, and has a total of roughly 230,000 square feet. It has structural load-bearing, brick exterior walls, with a wood post and beam interior structure, with wood posts at 16 feet on center. The plan is divided into three sections along its length, each with brick bearing wall serving as fire separation walls with fire-resistant doors.³

The building is three stories high above Eighth Street, and on the south and west sides is below the

¹ Racine Daily Times, "New Factory Near Finished," Oct. 8, 1910 and "Million Dollars In New Buildings, interview with A. Guilbert, Dec. 31, 1910. Building plans.

² Sanborn maps.

³ Sanborn maps.

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Mitchell Lewis Building
Racine, Racine County, Wisconsin

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street level by over one and one half stories. The floor to floor heights are approximately 14 feet on the first through the third floor.

A brief description of the building floor plan here will help explain the fenestration pattern. The floor plan suggests an efficiency that allowed for such a massive structure to be built adjacent to a former creek bed. A mezzanine floor is located between the Eighth Street level and the lower loading level. The mezzanine level does not extend to the exterior walls except along much of its east side, thus this plan permitted greater structural lower level bearing separation from the exterior walls. A freight loading level is roughly four feet above grade and runs along the Eighth Street and the west wall. A basement is located below the mezzanine and a half level below the loading level. A concrete ramp once connected the loading level and the basement along the south wall. The other levels were linked by two freight elevators. The original 8,000 pound freight elevator, built by the F. Rosenberg Elevator Co. of Milwaukee, was said to have been the largest industrial elevator in Racine when it was installed.⁴ The elevator cab remains and is located in the northern end of the building, not far from the center loading door, now the main entrance to the apartments. A second freight elevator was located near the west wall in the middle section until the recent renovation to apartments. Full stairs were originally located in the northeastern and southwestern corners. An additional stair that ran only between the first and second floor was located nearest the east wall in the north section. The freight loading doors at the center of the north and on the north end of the east sides of the first floor doors were retained in place.

The Eighth Street façade of the building is symmetrically paneled into three wall areas defined by piers of ornamental brick. The brick walls are of a common, irregularly colored pinkish construction-grade brick, and the ornamental detailing is a dark brown brick. The dark brown brick defines the panels with an Arts and Crafts-style cornice and double vertical bands that project slightly to establish the appearance of piers and on the façade and flanking a single window bay return on the north end of the west wall. The fenestration of the façade is generally defined on the Eighth Street level by a few individual small four-light windows set high in the walls for minimal warehouse lighting, except for the one at the eastern corner. Also on this level are three large wood freight-loading doors, one in each of the panels, though all asymmetrically placed. The openings of the second floor of the Eighth Street façade are very tall windows with only two exceptions, the two windows nearest the side walls, though each are a different size. As is the case elsewhere in the second and third floors (above Eighth Street), the tall windows appear to be an alteration from original smaller windows, as they appear on the drawings of Guilbert & Funston. The third floor windows are symmetrical within each of the wall panels, with paired and single windows though the paired windows are separated by structural brick

⁴ Tipler, interview notes, Gerald Karwowski.

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Mitchell Lewis Building
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wall. The majority of original and early additional masonry window openings in the building have segmental arch masonry lintels and limestone sills. Those that were added soon after the building was built also have segmental arch masonry lintel sills of limestone. A cornice frieze of a repeating pattern of dark brick and common brick adds an element of formality to this façade. The Arts and Crafts-style pattern has a capital ornament found only at the top of the brown brick piers. The original loading dock doors remain, though two are slightly altered. The narrow loading dock has been removed though the tracks remain adjoining this façade. According to a 1980s-vintage photo, an original Mitchell sign was painted between the second and third story windows, though it was removed, perhaps around 1988 when the building was cleaned.⁵

The majority of original and early additional windows in the building had flat topped industrial steel windows with filler panels filling the segmental arch masonry lintels. The steel windows were typically two or three-part awning-type steel sashes with clear or obscured glass, some of which had safety wire glass. The glazing was simply divided into four or six lights with narrow vertical muntins. The replacement metal windows presently on the building were added in 2004 and were designed to proportionately match the original windows.

On the west elevation, other than the five supplementary structural brick buttresses added to the middle of the building, the brick wall is a continuous flat surface. A few years after the building was completed, the buttresses of cream brick with cast concrete caps and bases were added and tied with large iron rods to large interior concrete walls, installed perpendicular to the exterior walls, to stay the racking of the building.⁶ The only exterior evidence of building division are firewalls as parapets at the roof line. The west side has fenestration similar to the other sides with widely spaced small windows suitable for warehousing on the first level and the mezzanine and loading dock levels below. On the second and third floors above street level, it appears that perhaps two thirds of the many windows may have been original to the building and that new windows were added within short order after the building's construction, as is evidenced by the use of brick arched lintels, and sashes that closely match the originals, according to the building elevations by Guilbert and Funston, architects. In the middle part of the building, however, even taller triple window ganged units with steel lintels are found on the second level. These windows are similar steel windows and may have been installed in alterations by Nash Motors in 1928.⁷ Five loading dock doors are found at the lower loading level. All retain their original masonry openings with segmental arch masonry lintels, and many have original steel transom windows and wood doors. The wood loading docks no longer remain.

⁵ Ibid.; photo provided by owner Al Ress.

⁶ Pencil sketch alterations to prints of original building plans.

⁷ Racine Review, "Produce Auto In 90 Minutes At Nash Plant," Nov. 1, 1918.

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Mitchell Lewis Building
Racine, Racine County, Wisconsin

The rear or south elevation has a similar general appearance to the west elevation, except that paired windows near the side walls are smaller and set lower to the floor on the first through the third levels. The windows of the second and third floor are similar to those of the west and north sides. They are grouped in sets of three, though they do not align with the windows of the first floor. The masonry openings on this side appear to be original with the exception of those on the mezzanine level, which have ganged three part steel factory windows, though with visible steel beams. An unadorned sloped parapet matches the roof pitch.

The east elevation of the building has fenestration similar to the west elevation. Single small windows are found spaced apart on the first floor and a few are on the second floor center part of the building. Tall windows with separate segmental masonry arches and brick piers are found on the second floor south part of the building, part of the center and the third floor north part of the building. Triple ganged steel windows with steel lintels are found on the north part of the second floor and the third floor of the southernmost two parts of the building. A window well was cut along the southern two-thirds of this side to permit the installation of windows in the lower level. Two loading docks and doors on this side were added, one had a sliding exterior wood door which remains in place, and another at grade nearest the north end of the wall has a segmental arch and a steel covered wood. Three concrete stairs to passage doors adjoining this side were removed in the recent renovation, and two doors installed at grade. An original brick stairwell rises above the roof on this side.

The roof has a number of roof monitors on the north end and the south end of the roof. There have never been any chimneys because the building was heated and operated with steam produced at the company's heating plant nearby.

The building's interior has a largely unfinished and exposed timber and wood beam structure. Many sections of the building were painted while others were not. Pine and maple floors were found in the mezzanine and the first through third floors, though badly damaged from the use of loading vehicles. Steel plates had been laid over the worst of the damaged areas. On the west side of the second floor center section and the east wall of the third floor, structural ties embedded in concrete were laid on top of the wood floors. Settling in the building had resulted in the notable sloping of some floors. There was no evidence of historic lighting.

2004 Renovation

The building was completely renovated in 2004 in a conversion to apartments. This included the installation of new metal windows throughout. On the Eighth Street façade a new main entrance was created within one of the double freight doors, which are retained in place with an inset contemporary metal frame window and door set. Other freight doors of the Eighth Street loading bays, which had

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been deteriorated or altered, were replaced to receive windows, excepting one on the east side. Within the street right-of-way, a concrete ramp and simple metal rail were installed to serve the entrance. The original railroad siding was retained and moved a few feet closer to the street. On the west side of the building, the metal freight loading bay was removed and an inset masonry entrance was built in an existing loading bay. Another loading bay further south was cut to grade to receive a drive entrance to parking in the lower level. On the east side, the later concrete loading platform and stairs were removed, a window well was cut and new windows installed at the lower level. The site was regraded and asphalt parking paving installed along with contemporary standard parking lighting.

The interior of the building was renovated as apartments, in which most framing and structural elements remain visible. A sound-deadening and floor-leveling cast material system was laid over the original floors. Standard modern frame and drywall partition walls were installed, along with modern plumbing, mechanicals, HVAC and lighting. Carpet, tile and linoleum cover the floors. Bathrooms have dropped ceilings. Modern lighting was installed throughout.

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Racine, Racine County, Wisconsin

Insert

ARCHITECTURAL SIGNIFICANCE

The Mitchell Lewis Building is locally significant under Criterion C as a good intact example of the multi-story industrial loft building type, one of three basic factory types in America throughout the nineteenth and early twentieth centuries. The building reflects the character of the industrial loft building type in the use of methods of fire resistant construction and materials, evident in the use of brick bearing exterior walls, wood timber construction, brick firewalls to partition the building, brick enclosed staircases, steel windows with wire-glass, rolling metal-clad fire doors, a water sprinkling system, and fire alarm system.

It is one among a relatively few industrial loft type buildings that remain in Racine and is certainly the largest and the most highly visible of the remaining buildings of this type in Racine. It retains its appearance from its period of manufacturing by Mitchell Lewis companies and the Nash Motors Company. The period of significance coincides to the date of construction in 1910.

The Mitchell Lewis Building possesses most of the characteristic features of the multi-story industrial loft type. The massive building is five stories high, rectilinear in form, with a 168 foot front on Eighth Street and 321 feet of depth, and encloses roughly 230,000 square feet under a low pitched roof. Architectural detailing was limited to segmental arched windows and doors and a composition of low relief pilasters and Arts & Crafts details created with colored brick on the front. Its massive post-and-beam construction with exterior brick load bearing walls and interior brick bearing walls gave it strength and high load capacity. With the posts on 16 foot centers, rational layout was maximized. The building had fire resistant construction with a slow-burning heavy wood frame. The structure was divided into three sections with two firewalls that ran up through the roof, fire doors that protected all the horizontal openings in the firewalls, and minimal vertical openings between the floors, with only two elevators and two stairwells. The building relied on optimizing natural light with roof monitors, skylights and larger and larger windows.

THE INDUSTRIAL LOFT TYPE

According to Betsy Hunter Bradley, a leading scholar of industrial buildings, the multi-story industrial loft type was one of three basic factory types in America throughout the Nineteenth Century and the first half of the Twentieth Century. The other types were the one-story production sheds and power houses. These three basic factory types were used in a wide range of industries from textiles to heavy machine production.

MITCHELL LEWIS BUILDING
Name of Property

RACINE
County and State

Wisconsin

8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for the National Register listing.)

- A Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B Property is associated with the lives of persons significant in our past.
- C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "x" in all the boxes that apply.)

Property is:

- A owned by a religious institution or used for religious purposes.
- B removed from its original location.
- C a birthplace or grave.
- D a cemetery.
- E a reconstructed building, object, or structure.
- F a commemorative property.
- G less than 50 years of age or achieved significance within the past 50 years.

Areas of Significance

(Enter categories from instructions)

ARCHITECTURE

Period of Significance

1910

Significant Dates

N/A

Significant Person

(Complete if Criterion B is marked)

N/A

Cultural Affiliation

N/A

Architect/Builder

GUILBERT & FUNSTON

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets.)

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Mitchell Lewis Building
Racine, Racine County, Wisconsin

This nomination relies on the classification system provided by Betsy Hunter Bradley in *The Works: The Industrial Architecture of the United States*. Bradley provides a precise outline of the development of the American industrial plant and its principal building types of the Nineteenth Century through the first half of the Twentieth Century.

The distinctive characteristics that define the industrial loft type include multiple stories, a boxy rectilinear form and a single gable roof, often low pitched, generally enclosing a large space, with simple architectural detailing. The structural system was designed for strength, generally constructed of a heavy timber post-and-beam frame, with exterior masonry load bearing walls and interior masonry load bearing partitions. It incorporated features to resist vibration and oscillation; was designed to minimize obstructing columns, permitting a rational layout for efficient production; and was designed for ease of expansion. It was built to be fire resistant, often including slow-burning construction. It relied on natural light, which it attempted to maximize with larger windows and skylights. The later curtain wall phase of the early Twentieth Century permitted larger windows than the earlier exterior bearing wall phase. Thus it was designed to optimize natural conditions in contrast to its principal successor. Shortly before World War II, the industrial loft type began to be superseded with the enclosed, air-conditioned, artificially-lit controlled conditions plant.

Many industrial structures fit into the building types noted in Bradley's classification system largely because there was widespread copying. Engineering students toured highly-regarded examples; those about to construct a new industrial plant often visited others and made notes; the press reported on new industrial plants; and the Americans copied British examples.

Economic and technological factors drove the design of these buildings and entire plants. Those who planned industrial buildings and works sought to employ the most modern production methods, house appropriate machinery and equipment, have enough space, and have it laid out in a rational manner that could easily be expanded. The chief factors in building design were strength, span, light, ventilation, fire resistance, and power source.⁸

The basic form and construction of the industrial loft type was derived from the New England textile mills, among the nation's first large factory buildings. The basic form was adapted to a wide variety of industries, including vehicle manufacturing. A key aspect of the design was strength, including considerations of floor load and floor structure, column spacing, and resistance to vibration and oscillation (the rhythmic movement and wracking of the entire building).

⁸ Bradley, 1999: ix-x,4.

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Mitchell Lewis Building
Racine, Racine County, Wisconsin

Textile industrial loft buildings typically could bear a live load of 150 pounds per square foot, though it rarely exceeded 50 pounds. Originally the difficulty in moving heavy materials to upper floors prevented overloading of industrial loft buildings. However, with the invention of the elevator, heavy materials could readily be moved to upper floors and dangerously overload them. This development, combined with the adaptation of the form to heavy industries, demanded floors with a live load capacity of 250 to 400 pounds. In textile industrial lofts, to increase fire resistance by providing a smooth surface, floor boards spanned from major beam to major beam without joists. Industrial lofts built to carry higher load capacities laid the floor boards on closely-spaced substantial joists which in turn rested on the large wooden beams.

Although the textile mills could have used lighter members on the upper floors, they did not, in order to stiffen the building.⁹ As a further measure to reduce oscillation by stiffening the building, the textile mill loft buildings employed very low pitched gable roofs with framing as heavy as that of the floors below, though the roof carried far less weight. Additionally, the low pitched roofs were less likely to push out the masonry walls than high pitched roofs. The use of gabled roofs running parallel to the length, often with low pitches, is so common on the American industrial loft buildings that we are likely to forget that there was an alternative. In England, industrial buildings often employed "ridge and furrow" roofs with multiple gables. This roof type was less expensive and less likely to spread the walls of the building, although in northern climates ice and snow could accumulate in the valleys.

Builders of industrial loft type buildings had to balance the demand for floor space that was as unobstructed as possible, with columns arranged to fit the machinery and activities, against initial cost of construction. Longer beams, whether wood, iron, steel or concrete cost more, and had to have greater depth to have the necessary strength, requiring increased height between floors, further adding to construction costs.¹⁰ All these construction techniques, developed in the textile industrial loft buildings, were carried over into industrial loft buildings of other industries.

American factory owners focused on reducing losses from fire, a hazard they regarded as unavoidable. American industrial loft buildings were designed for fire resistance and fire containment, in contrast to British textile mills which were nearly fireproof, with brick-arched floors supported by iron framing, an approach Americans considered too expensive. Americans generally relied on fire insurance, the reduction of combustible material, fire-resistant construction, and the containment of fire.

⁹ Ibid., 110-111

¹⁰ Ibid., 112-113, 125-126, 178

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Racine, Racine County, Wisconsin

One aspect of fire-resistant construction was slow-burning construction, developed in the textile mills of the Northeast and carried by engineers to other parts of the country. Heavy wooden post and beams charred in a fire but retained their strength while unprotected iron and steel members quickly lost their strength and sagged. All pockets and attics where hidden fires could smolder and spread were eliminated. In industrial lofts used in the textile industry, even the floor joists were eliminated with thick wooden floor boards spanning from beam to beam, providing a smooth, highly fire-resistant surface. In industrial loft buildings where loads were very high, fire-resistant heavy wood posts could still be used with the addition of metal caps to accommodate shrinkage of the beams and spread the load.¹¹

One of the most important fire protection strategies was containment of fire. Fires were contained horizontally by brick firewalls, rising through the roof, and thick enough to resist a prolonged fire. Openings through the firewalls often were fitted on each side with metal clad wooden doors rolling on sloped tracks, to be self-closing. Fires were contained vertically by keeping openings in the thick wooden floors to a minimum. Those that were necessary for hoists, elevators and stairs were enclosed or fitted with trap doors. Despite building codes and standards set by the insurance industry, application of these methods was often inconsistent-- even irrational--within a single structure.

The industrial loft building was designed to optimize natural conditions, particularly light. Methods included larger and larger windows, which culminated in the glass curtain wall, and admitting light from above with skylights and monitors. Artificial lighting was minimal.

Power systems also shaped the factories. The adoption of the steam engine freed factories from water-powered sites. However, since small steam engines were not practical, one large engine powered an entire factory, the power transmitted by millwork of shafts and belts. This power transmission technology initially required that loft buildings be narrow, with spaces stacked. The development of wire rope permitted power to be transmitted with greater flexibility, even over long distances, with a single engine powering multiple buildings. The electric drive, however, revolutionized production, permitting greater flexibility in layout and greater efficiency. Factories either produced or purchased electricity to run electric motors, which initially powered small groups of machines. With buildings freed from overhead millwork, roofs became even more important as sources of natural light.¹²

No single "industrial style" developed for the appearance of industrial loft buildings in America but there was a prevailing aesthetic that emphasized simplicity, strength and monumentality with minimal

¹¹ Ibid., 113-114, 127-130

¹² Ibid., 89-98.

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superfluous ornament. Designers and brick manufacturers recognized and made use of the aesthetic possibilities of brick. For a pleasing exterior effect, as well as strength, the structures often were accented with pilasters. Segmental arched window openings predominated for practical purposes. To provide a pleasing effect, windows usually were arranged in a symmetrical pattern, regardless of particular interior needs, though this standardization had a practical purpose in permitting ready adaptation of a building for a sequence of varying uses.

THE MITCHELL LEWIS BUILDING AS AN INDUSTRIAL LOFT TYPE

The Mitchell Lewis Building as an early Twentieth Century industrial loft building type meets the qualifying descriptors as outlined by Bradley. The building has a boxy, rectilinear form, measuring 168 x 321 feet, five stories high, enclosing a large amount of space—roughly 230,000 square feet, under a low-pitched gable roof.

The building had a rational layout, designed for efficient production. It was served by two railroads, one with a loading dock on the south side and the other with a loading dock on the west side. The Chicago & NorthWestern Railway used the loading dock on the east side at the second floor, close to the largest freight elevator, which connected down to storage levels and up to manufacturing levels. Work requiring maximum light, took place in the best lit parts of the building. Persons sewing upholstery worked in the south section of the fourth floor, lit by numerous windows, probably seated close to these windows. Those painting vehicle bodies worked in the south section of the fifth floor, which had large windows and ten roof monitors. The adjacent center section of the fifth floor had a drying room and storage area, close to the second freight elevator that could carry the products down to the bottom of the building. Here a large shipping area with a ramp, lit by expansive windows, led to loading doors and a loading dock running the length of the west side of the building, served by the Racine & Mississippi R.R., later the Chicago, Milwaukee & St. Paul Railway.

This industrial loft building was constructed for strength with high floor load capacity. Posts were fastened to steel bases, which in turn were fastened to concrete footings, 6 feet deep with a base measuring 7½ x 7½ feet. The pine posts measured 16 x 16 inches in the basement and first floor levels, being reduced to 14 x 14 on the second, 12 x 12 on the third and 10 x 10 on the fourth and 8 x 8 on the fifth. The pine beams or girders measured 12 x 18 inches on the basement and first floor levels, being gradually reduced in thickness on the upper floors, until measuring 8 x 12 in the roof. Throughout most of the floors these beams are given additional load capacity with I-beam post caps, permitting shrinkage of the beams while spreading the load on the posts. For further strengthen the building, the

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thick wood floors are supported by joists resting on the beams, measuring 5 x 16 inches on the lowest levels, gradually being reduced by size on the upper floors until measuring 4 x 10 in the roof. The sturdily constructed nearly flat gabled roof provided additional structural stiffness to reduce oscillation. The posts, placed 16 feet on center, provided the optimal combination of flexibility in use, strength, and construction cost.

Early in the period of significance and early in the building's life, while used as a Mitchell or Nash plant, the building suffered a major structural failure, which demonstrates the engineering skill in making a successful lasting repair. The cause may have been excess load, vibration or oscillation, or, more likely, an insufficient foundation set on unsuitable material in the former creek bed. The west wall in the center section bowed out, threatening to pull down the rest of the section with it. Five brick buttresses were erected along the outside of the west wall. These were tied by large cables, at the second floor level, to massive interior concrete buttress walls near the middle of the building, set perpendicular to the west wall, two bays wide, from the basement to the second floor. A second similar group of massive concrete buttress walls were set against perpendicular to the east wall, also running from basement to the second floor. The concrete walls served as anchors for the cables and provided a very high level of additional support for the section that began to move. This engineered solution to increase the building's strength was entirely successful, and it still supports the structure. Today, there is no easily discernable evidence of the west wall bowing out. On the interior, the concrete walls remain. The wooden posts, however, now located in a hallway, remain noticeably leaning toward the west wall.

One of the defining features of an industrial loft building was design to optimize natural conditions. Between 1910 and 1929, when the building was used as an automobile manufacturing facility, repeated efforts were made to optimize natural lighting in the building. On what is believed to be Guilbert and Funston's first draft of original drawings for the building, are small widely-spaced segmental arched windows in most of the building, except the Eighth Street front and the top floors of the south end, which had taller arched windows, and only two roof monitors. (It is possible that these elevation drawings survive because they were rejected, set aside and not used in construction). In any case, before initial construction was complete, taller and more closely spaced segmental arched windows were employed in work areas of the top floors. These windows proved to be inadequate and were soon supplanted by additional tall arched windows inserted between existing ones to light work areas on the top floors. Within a few years, many of the segmental arched windows on the fourth and fifth floors, as well as those lighting the basement ramp and mezzanine were replaced with yet larger rectilinear metal industrial sash.

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Either during original construction or shortly thereafter, monitors and skylights were added as well. The Sanborn map, circa 1917, shows 10 monitors on the roof of the south section and refers to the north section as having a "roof full of skylights." The ten monitors held sloped glass facing north, to obtain the very best even light, although sloped glass was notorious for leaking.

The building was fire resistant. It had slow-burning construction with massive wood posts and beams, with no iron or steel members, which would quickly lose their strength in a fire. The building was designed to contain any fire, being divided horizontally by two brick firewalls, running up through the roof, thick enough to resist a long fire. Doorways between the sections were protected on each side of the firewall with metal covered wood doors, rolling on sloped track to be self closing. There were minimal vertical openings in the thick wood floors with only two elevators, and two sets of stairs, intended to contain the fire vertically. There was no attic or ceilings with pockets that could permit fires to spread undetected in inaccessible areas. All or nearly all these metal-framed windows held fire-resistant wire glass, as did the monitors.

The entire Mitchell plant relied on a central powerhouse, located across Washington Avenue, which provided steam heat and electricity for electric drive machinery in the building at 815 Eighth Street.

The Mitchell Lewis industrial loft employed the prevailing aesthetic for such industrial buildings. It was simple with no superfluous ornament, impressing the viewer with its size and strength. The only exterior ornament was on the Eighth Street facade where bold eye-catching pilasters with Arts and Crafts detailing, give this principal facade symmetry and visual interest. On the rest of the building, the fenestration was highly irregular, windows placed and sized according to need. Here form followed function, in contrast to the tradition of regular placement of windows to create a harmonious exterior design without regard to the activities inside.

INTEGRITY

The Mitchell Lewis Building possesses a high degree of integrity of design, materials and workmanship. Little has been added or removed from the exterior to change its appearance, since the time it was occupied by the Mitchell Lewis and Nash companies, with the exception of the loading docks. The window openings have not been altered and window replacements were selected to match the originals. Considering the large scale of the building these are minor alterations.

There have been no alterations to the masonry door and fenestration patterns since those made during construction or between 1910 and 1929 by the Mitchell Lewis companies and the Nash Motors

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Company. Some of the loading dock doors remain as they were historically. The contemporary windows installed in the 2004 renovation are fitted to the historic openings in all cases, vary in dimension, lights, detail of window components and proportions, based on the individual types of windows they replaced. Although they are hard to see from the ground, all of the 10 roof monitors in the southern section are still in place and in use. Elsewhere on the roof, there are still "many" monitors as recorded on the Sanborn maps of 1917 and 1933, uncovered, providing light to the interior.

On the interior the evidence of high load capacity and fire resistance and fire containment are preserved and clearly visible. The heavy post and beam construction, with the metal post caps, deep joists and thick wood floors are largely visible, and still support the structure, with few additions. The heavy timber low pitched roof is still in place. The story of the early structural failure and successful correction is clearly evident with the outside buttresses, inside concrete walls, cables, and tilted wood posts in place and largely visible. Most of the wooden posts and beams and the underside of the thick wood flooring remain exposed as they were historically, showing the slow-burning fire resistant construction. The fire containment features are retained. There are few ceilings and no attic. The thick brick firewalls are still in place as are many of the metal clad rolling fire doors. Despite the great depth of the building there is no atrium or open staircase, maintaining the fire containment strategy of few vertical openings.

The evidence of the movement of materials and goods is retained with all loading dock doors in place, the large freight elevator remaining near the front loading dock doors, as well as the basement ramp close to lower loading dock doors. On the exterior the simple eye-catching pilasters on the Eighth Street side and the sign remain the only embellishment, maintaining the simple functional factory esthetic.

RACINE'S INDUSTRIAL LOFT BUILDINGS

Several of the once numerous loft type industrial buildings can yet be found in Racine, though the numbers are a fraction of those that stood twenty years ago, and even that number is quickly dwindling. In October 2004, four major industrial complexes in the city were being demolished. The remaining large industrial complexes noted for their early 20th Century mill buildings, present and past, are noted below.

The wagon manufacturing industry, long the largest industry in Racine, "The Wagon City," had three large manufacturers: the Racine Wagon Company--later the Racine-Sattley Wagon Company, the

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Mitchell Lewis Company and the Fish Brothers Wagon Company.¹³ The remaining industrial loft type brick buildings of the Racine-Sattley Wagon Company complex south of 16th Street, built in the 1890s through 1910, are largely intact. Of the Fish Bros. Co., only the turn of the century Romanesque main building survives on West State Street. The rest of the plant has long been demolished.¹⁴

The Gold Medal Camp Furniture Company plant, built in the textile mill style of the industrial loft type of mill construction, on S. Memorial at 17th Street, built in the early 1900s, remain nearly intact.

The J. I. Case Threshing Machine Company was built on a site largely bordered by W. State Street, Ontario Street to the west and the Root River to the east and south. Of the sprawling former plant only the former Administration building stands. The myriad of textile mill and industrial loft type of brick and frame manufacturing buildings have been demolished in the past few years to create a contemporary "office park" setting for the Case IH corporate offices. None of the industrial buildings remain on this site.

J. I. Case Plow Works, a separate company, was first built south of the Root River and flanking Water Street. Of this plant there are two large buildings adjoining the river--both are wood, utilitarian factory buildings largely sheathed with modern materials. One is an industrial loft type front building of brick facing Water Street that has a corbelled brick cornice and a typical window layout. Across Water Street stand two other buildings, one built by 1908, and bearing some similarity to the Mitchell building, resembling it in roof pitch and brick color, an industrial loft type building with ganged steel windows on the south and west sides, likely added in later modifications. Adjoining it is a reinforced concrete frame and panel astylistic factory building. Other mill buildings of this complex have been demolished.

The J. I. Case South Works plant on Lake Michigan at the south end of Racine Street at Lake Michigan was built in 1913 and housed an industrial exposition.¹⁵ At that time, it was the largest industrial loft type factory building in Racine.¹⁶ Many of the buildings of this plant have been demolished in recent years, and, as of October 2004, demolition of this building was begun.

Belle City Malleable Iron Co., later Racine Steel Castings, grew into one of the largest industries in Racine, occupying two main locations, a block on Clark Street at 22nd Street, long demolished, and a

¹³ Christianson, Charles M., Racine - The Wagon City, unpublished, June, 1942.

¹⁴ Sanborn maps; Racine Journal-Times, "Souvenir Tells Story of Racine's Past," Fish Brothers Wagon Company, June 23, 1953.

¹⁵ Rintz, Don, "The Great Exposition of 1913," Preservation Racine Newsletter, summer 1988.

¹⁶ Sanborn maps.

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three-block long plant on N. Memorial Drive, between Albert and High Streets, since 1918. The extensive plant on Memorial Drive featured a saw-tooth roof foundry and assembly facility, was one of the largest remaining early 20th century manufacturing plants until its demolition began in late summer of 2004.¹⁷

The Horlick Malted Milk Company complex on Northwestern Avenue, largely from the 1890s through the 1920s, retains most of its core buildings, of a variety of types, though none are similar to the Mitchell Lewis Building.¹⁸

Hamilton Beach Company plant, a flat-roofed early 20th century manufacturing facility, built in the late 1910s and 1920s, and designed by Edmund B. Funston Company Architects, was occupied by Hamilton Beach through the 1960s, is now one of the largest remaining industrial complexes in Racine. None of its buildings compare stylistically to the Mitchell Lewis building.¹⁹

Mitchell Lewis Motor Company plant on S. Memorial Drive, though the administrative home to the Mitchell Lewis Companies after 1910, and the location of its motor works, the complex was largely of the production shed type of building, and was for the most part demolished in August through October 2004.²⁰

The vast majority of other industrial buildings remaining of the early loft type of building have been demolished.

HISTORICAL BACKGROUND - RACINE'S EARLY WAGON MANUFACTURERS

The Mitchell Lewis Building is associated with a leading company of the wagon industry and the early development of the auto industry.²¹ Wisconsin was a national leader in wagon production at the turn of the century, an industry in which Racine played a significant role perhaps disproportionate to its size. Racine was a city densely packed with large industrial plants—a testament to its extraordinary role in American industry—now being rapidly erased as these plants are demolished.

¹⁷ Belle City Malleable Iron Company and Racine Steel Castings Company, *Casting A Future*, 1967.

¹⁸ Sanborn maps, photos.

¹⁹ Stone, 1916: 344; Sanborn maps.

²⁰ Sanborn maps; Racine Daily Times, "Many Factories to Branch Out," April 28, 1910.

²¹ Doolittle, James Rood, *The Romance of the Automobile Industry*, (Klebold Press, New York) 1916: 37.

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Cultural Resource Management in Wisconsin: Vol 2 edited by Barbara Wyatt, describes the development of these industries in Wisconsin from their mid Nineteenth Century origins as hand-craft industries, employing typically four to six craftsmen. In the final decades of the century, this began to change dramatically with the development of heavily capitalized firms, employing large numbers of workers, mass producing agricultural implements and wagons.

By 1890 Wisconsin ranked only behind the populous industrial states of New York, Ohio and Illinois in the production of farm equipment, moving up to second place during World War I. The industry was centered initially in the mid-sized cities of southeastern Wisconsin including Racine, Beloit, Janesville, Whitewater and Madison as well as La Crosse. In the early twentieth century the industry became consolidated in a few large firms including J.I. Case, Milwaukee Harvester and Allis-Chalmers centered in Racine and Milwaukee.

Wisconsin was a major center of wagon production that evolved from small craft shops to large companies engaged in mass production, with stamped metal parts replacing much of the work of the blacksmith. In 1880 Wisconsin ranked fifth in wagon production behind Pennsylvania, Ohio, New York, and Illinois. At the turn of the century, despite its relatively small size, Racine was one nation's principal cities for the production of wagons and farm machinery, industries capitalized and situated to initiate the mass production of automobiles. When automobiles began to be developed, many of these wagon companies began auto production, which, in its early phases, was not dramatically dissimilar from wagon production. The industry was centered in the mid-sized cities of southeastern Wisconsin. The hardwoods of this region provided much of the raw material as a basis for the wagon industry.

More significantly, Wisconsin played a central role in these industries because the small cities on the western shore of Lake Michigan were the western tip of the great American manufacturing belt that stretched from southern New England along the southern shores of the Great Lakes to Wisconsin. Thus Wisconsin had advantageous proximity to the American west from Minnesota and the Dakotas to California and even Mexico. Furthermore, Racine was in remarkably advantageous proximity to Chicago, which William Cronon identified in *Nature's Metropolis* as playing the central role in the economy of the American west.

The factory buildings of Racine are the legacy of the extraordinary role the small city of Racine played in these industries. In 1900 the city ranked third in the nation in the production of farm machinery and fourth in the production of wagons, carriages and foundry products.²² In 1900 by number of

²² Keehn, 288.

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employees, J.I. Case Threshing Machine Co. ranked first with 914, followed by Racine Wagon and Carriage Co., later known as Racine-Sattley Co., (625), then Mitchell and Lewis Co. (430) and J.I. Case Plow Works (400). Although Wyatt credits the Bain Wagon Works of Kenosha as the state's largest wagon company of the time, producing 18,000 wagon annually, Keehan gives Racine Wagon & Carriage Co. as having the capacity for 50,000 units annually.²³

The 1919 Census of Manufacturers shows that agricultural implements was by far the biggest employer in Racine, followed by foundry and machine shops, and then the new industries of autos, bodies and parts and electrical machinery. In this the Mitchell-Lewis Motor Co. played a leading role. Statistics from 1916 show the change in scale as well as the importance of the Mitchell Lewis Co. In that year, J.I. Case Threshing Machine Co. (which also produced Case autos) employed 3-4,000 workers, followed next by Mitchell Lewis Motor Co. with 2,000 workers, and then Racine Rubber, also owned by the Lewis family, with 800-900 workers.

MITCHELL LEWIS COMPANIES

The Mitchell and Lewis names are important in Racine's industrial history. While the company evolved from the oldest wagon company in the nation to an automobile manufacturer, it had a number of names of both parent and subsidiary companies, sometimes used interchangeably by company representatives. Founded in 1834, the Mitchell & Lewis Company maintained that it was the oldest wagon company in the country. It is certainly the oldest in Racine, where it operated from 1855 through 1922.

The Mitchell Lewis Wagon Company had its beginnings in 1834 in Chicago when Henry Mitchell opened a wagon shop. He soon moved his business first to Kenosha, then in 1855 to Racine where the business climate was better. In 1868, his son-in-law, William Turnor Lewis, joined as a partner in the business and the company developed in the vicinity of the 800 block of Washington Avenue and Center Street. The company produced farm and spring wagons, carriages, buggies, buck boards, and road carts.²⁴ The company was among the first group of companies nation-wide to venture into automobile manufacture and achieved an early reputation for producing standardized cars in numbers, and for its luxury touring cars.

In 1896 William Turnor Lewis' son, William Mitchell Lewis, acquired a bicycle company, began producing bicycles under the subsidiary name Wisconsin Wheel Works and soon thereafter produced "motor bicycles." In 1902 the company began developing and producing its first automobiles, and in

²³ Ibid., 290.

²⁴ Stone, Frank Mitchell biography, 14.

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1903, Lewis and his father, William Turnor Lewis founded the Mitchell Lewis Motor Car Company. The company's first large production was in 1904.²⁵ By 1907 the company was well on its way to becoming known throughout the country for its low-priced touring cars.²⁶ The company developed a considerable sales organization throughout the United States and even had an office in Paris. During that time, it acquired the Packard Avenue site (later S. Hamilton Avenue address) and developed the factory for the motor works, while expanding auto body work at the burgeoning wagon works plant centered around Washington Avenue. In 1910, buildings were rebuilt and added to the old plant, and a new facility was built at 815 Eighth Street to produce automobile and wagon bodies.²⁷ Over the following years the plants expanded to cover over twenty-five acres²⁸ and employ over three thousand people, among the largest employers in southeastern Wisconsin at the time.

In 1910, the company officially reorganized as the Mitchell Lewis Motor Company. At about that time, the administrative offices were moved to the new building at the plant between Packard Avenue and S. Hamilton, now Memorial Drive, plant for the motor works. The Washington Avenue plant continued to house the production of wooden bodies and trims, painting, upholstery, assembly and some of the shipping of the automobiles while continuing to produce farm and other wagons until 1917 under the marketing name of the Mitchell Wagon Company.

William Mitchell Lewis was very active in 1910. Aside from undertaking a major the expansion of the body plant on Eighth Street and Washington Avenue, he and his father William Turnor Lewis, who had founded the Racine Rubber Company²⁹ (later the Ajax Rubber Company), were overseeing the construction of a large building for that company as well. Also in that year, Lewis ran on the G.O.P. ticket in the gubernatorial race.³⁰

In 1917, over a year following the death the motor works founder, William Turnor Lewis, company reorganization took place. It coincided with the increase of automobile sales and a decline of trade for horse-drawn vehicles. The reorganization of the Mitchell Lewis Motor Car Company involved selling the real estate and buildings of the Mitchell Wagon Company to the Mitchell Motors Company, Inc., a new company no longer controlled by the Lewis family. The Mitchell Wagon Company was then dissolved in 1917 and sold the material stock, patterns, forms, completed wagons and other assets to

²⁵ Kuester, Ivan, "The Mitchell," *The Horseless Carriage Gazette*, July-August 1966, 10.

²⁶ Hegge, Robert, *Mitchell, Car Classics*, February, 1974.

²⁷ Stone, William Turnor Lewis biography, 10.

²⁸ Stone, *Mitchell-Lewis Motor Company*, 7.

²⁹ Stone, 10.

³⁰ Stone, *William Mitchell Lewis biography*, 44.

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Deere & Company of Moline, Illinois.³¹ The Eighth Street facility was then fully given over to the production of automobile bodies.

In spite of producing good quality motor vehicles, the company suffered slower sales during the war and lost some of its market to the less expensive products of Ford and other companies during the post-war recovery. By late 1923 the company, whose liabilities only slightly outweighed its assets, sold all of its operations to Nash Motors Company.

NASH MOTORS

In February of 1924, Nash Motors Company, headquartered in Kenosha, finalized the purchase of the facilities of the Mitchell Motor Company for \$405,000 and operated in these facilities through the 1920s. Nash, via a subsidiary, H & M Body Corporation, operated in the body plant that included the Eighth Street building, separately from the Nash plant at the former Mitchell plant at Racine Junction. H & M produced auto bodies for the Hupmobile of the Hupp Motor Car Corporation, and for the Hudson Motorcar Company. The economic conditions following the stock market crash in 1929 forced the consolidation of the Nash plant and the H & M Body works into the Racine Junction facility. The Eighth Street building was then used for warehousing J. I. Case products. Following the formation of the Nash-Kelvinator Corporation in 1936, labor unrest arose and auto production ceased in Racine in October 1938 and 1300 men shifted to the Kenosha plant.³² The cars that Nash produced in Racine included the Ajax, Nash Light Six and in 1938--the last of its cars produced in Racine -- the LaFayette. Nash-Kelvinator had survived as a somewhat larger independent automobile manufacturer, when it merged with Hudson in 1954, to form the American Motors Corporation, thereby becoming the fourth largest automobile conglomerate, to strengthen its competitiveness.³³ With a facility in Kenosha, American Motors eventually attained the distinction of being the largest single employer in the state. In 1987, Chrysler Corporation, the third largest American auto manufacturer, absorbed American Motors, still the fourth largest. In turn, Daimler-Benz of Germany acquired Chrysler, forming Daimler-Chrysler.

MASSEY HARRIS & JACOBSEN

Massey-Harris, owner of the S. Memorial Drive complex during World War II, produced army tanks at the Racine Junction facility and occupied the Eighth Street building as well. Subsequent owners of the Eighth Street building included Massey Ferguson, a tractor and agricultural implements manufacturer,

³¹ Motor Age? clipping, July 26, 1917, Racine County Heritage Museum Archives

³² Notes from Racine Journal Times 1956 Centennial Edition, p. 64, Racine County Heritage Museum Archives.

³³ "President of Nash Tacitly Admits Truth in Rumors of Merger," clipping, Nov. 4, 1953, Racine County Heritage Museum Archives.

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and, until 2001, Jacobsen, a lawnmower manufacturer.³⁴

815 EIGHTH STREET BUILDING

The building is the principal remaining building of the complex of the Mitchell Lewis Motor Car Company body plant and the Mitchell Lewis Wagon Company, once centered around Washington Avenue at Center Street. The buildings were located primarily on the blocks on which the City Hall (1931) and the Public Safety buildings are presently situated. With the exception of the 815 Eighth Street Building, a chimney, and a building located behind 552 Center Street (built as a livery in 1887³⁵), most of the buildings in the complex were demolished as early as 1931, and the balance around 1970.

Between 1904 and 1907 the Mitchell Lewis Motor Car Company constructed its other facility, the motor works, located a mile and a half south in the Racine Junction area, centered around Packard Avenue, bounded by the Chicago, Milwaukee & St. Paul Railway, S. Memorial (then Hamilton) and DeKoven. This newer plant was the main facility for the production of automobile motors and machine assembly. It had extensive one-story production shed type buildings, housing an assembly line, and a test track. In 1909, the company added an administration office building. The company built a few larger frame and panel type factory buildings a few years later.³⁶

The Mitchell Lewis building at 815 Eighth Street was built in 1910 to accommodate the enormous volume of production for the Mitchell Lewis Motor Company and the Mitchell Lewis Wagon Company, an affiliated company.³⁷ This plant served as the body plant for automobiles and for the production of the wooden farm wagons. Products for both companies were produced and assembled in the building, including the upholstering, painting, drying and warehousing of auto bodies. Unlike the motor works of the Packard Avenue plant, the products of this plant were comprised largely of wood, including the wood framed and trimmed Mitchell automobiles. At that time, the older of the two company plants was comprised the complex of buildings on the blocks now occupied by the Public Safety Building and City Hall. The main plant of the automobile facility was the complex of buildings. The Eighth Street building housed the largest of the body assembly facilities and paint shops of the

³⁴ Racine Journal-Times, "Jacobsen Office Building," undated clipping, Racine Co. Heritage Museum Archives; Racine Journal-Times, unnamed article, Feb. 25, 1960, Racine Co. Heritage Museum Archives.

³⁵ Mitchell Motor Company Bird's Eye Rendition, c. 1917, Sanborn maps.

³⁶ Sanborn maps.

³⁷ Racine Daily Times, "Many Factories to Branch Out," April 28, 1910, and "Three Million Output of Mitchell Wagons," Nov. 3, 1910.

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plant.³⁸

The wagon and auto body plant of the company attracted a work force that was known for its Danish immigrant labor, highly skilled in wood trades. The company promoted itself abroad, so that immigrants upon arrival would be directed to the company to inquire about employment. The company also employed a large number of African-American workers, from whose numbers were drawn the first all-Negro baseball team in Wisconsin for the Mitchell Lewis companies.³⁹

The Mitchell Lewis companies also helped spur the development of local related businesses over the years, from a farming technology publication to a host of automotive parts suppliers and manufacturers.

Following the demolition in 2004 of the Mitchell Lewis Packard Avenue plant, the Mitchell Lewis Building on Eighth Street is among the most significant buildings extant associated with the Mitchell Lewis Co. and the Lewis family enterprises.

THE ARCHITECTS

The Mitchell Lewis Building is important as an example of an industrial building by the prominent Racine architectural firm of Guilbert and Funston, and the architects, A. Arthur Guilbert and Edmund B. Funston. The partnership is credited with many of the more important of Racine's buildings, from 1905 through 1915 as well as those produced by them individually, both prior to and following their partnership. The firm was responsible for the design and construction supervision for banks, churches, private clubs, fraternal organizations, office buildings, factories and residences in Racine and elsewhere in Wisconsin.⁴⁰

Architect A. Arthur Guilbert

A. Arthur Guilbert was born in Racine in 1869. A product of Racine public schools, and trained at the universities of Pennsylvania and Michigan, he graduated from the Chicago School of Architecture in 1901. He entered practice in Racine in 1903 in a short-lived partnership with Herbert B. Rugh, a contemporary, in the firm of Guilbert and Rugh. In 1905, Guilbert entered into a partnership with Edmund B. Funston, also a contemporary, who had considerable experience by that time. The

³⁸ Sanborn map, c.1917.

³⁹ Chirstl, Cliff, "Small town charm still graces the game," Milwaukee Journal Sentinel, June 20, 1998

⁴⁰ Wisconsin Architecture & History Inventory, Wisconsin Historical Society.

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partnership of Guilbert and Funston was maintained until 1915 when both partners sought separate practices.⁴¹

A. Arthur Guilbert's start in his career was enhanced by his association with Stephen Bull, brother-in-law of J. I. Case, and president of the J. I. Case Threshing Machine Company of Racine, president of the Manufacturers National Bank and president of the Milwaukee Harvester Company. In 1895, Guilbert married Bull's daughter Bessie. Guilbert's connection with Bull helped launch his career in architecture. Guilbert was the architect of the neo-Classical J. I. Case administrative building on State Street, a building patterned after the Boston Public Library at the direction of E. C. Wilson, the plant manager for J. I. Case.⁴² In addition, some of the Case factory buildings are credited to Guilbert and Funston. Guilbert was also the architect of the First National Bank (Bank of Burlington) at N. Pine and E. Chestnut in Burlington, for which Stephen Bull had served as Vice-President. Finally, Guilbert was buried in the Bull family plot.

Guilbert benefited from another association, that of William Mitchell Lewis, general manager of the Mitchell Lewis Motor Car Company. In 1909 Guilbert's firm was commissioned to design the administrative offices for the company-- to be sited amid the one-story saw-tooth-roofed blocks of cast-concrete buildings of the Packard Avenue plant, facing the C. M. & St. P. Railway tracks at the Racine Junction facility. A year later, the firm designed the Eighth Street building for the body plant of Mitchell Lewis. The commissions may have been due to the association between Lewis and Guilbert who were classmates in Racine High School and members of the baseball team.⁴³ Both Lewis and Guilbert were members of the Masons, the Elks, and the Country Club, organizations for which Guilbert designed buildings.

Guilbert was prominent in Racine's society, and maintained positions in the Mason's Lodge, the Elks, the Somerset Club, the Country Club, the Wisconsin State Golf Association, The Racine Commercial Club and the University Club of Milwaukee. He belonged to the Episcopal Church. Guilbert and Funston designed buildings for several of these organizations.

Architect Edmund B. Funston

Edmund B. Funston was born in Champaign County, Illinois in 1868. He attended public schools of Mahomet, Illinois and graduated from the University of Illinois in 1892. He taught manual training in

⁴¹ Stone, Edmund B. Funston biography, 1916: 344.

⁴² Karr, 1980: 13.

⁴³ Racine Journal-Times, clipping, Racine County Heritage Museum archives, "Baseball History of Racine Related," by Peter Herman, undated.

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Colorado for two years followed by a year of work in New Orleans and Atlanta. He was then employed in the Chicago office of architect Joseph C. Llewellyn, whose firm was known for designing sophisticated industrial buildings. From about 1898 to 1903, Funston was a superintendent of construction and had charge of much of the firm's work in Illinois, Indiana and Michigan, including five buildings for the University of Illinois and the rebuilding of the plant for the Advance Threshing Machine Company plant in Battle Creek, Michigan.⁴⁴

In his own right, Edmund Funston was an accomplished architect by the time of the formation of the partnership with Guilbert in 1905. He already had two years of teaching and six years of practical experience, including four as a construction superintendent for Llewellyn's firm.⁴⁵

In 1915, following the dissolution of the Guilbert and Funston partnership, he organized the Edmund B. Funston Company, architects. Funston designed the M. Tidyman Office Building or Badger Block, an important Prairie School office building, the Hamilton Beach Manufacturing Co. plant, the office building of the David B. James Company, and remodeled the Masonic Temple, all in Racine. In addition to his architectural practice, Funston, along with his brother, owned and operated telephone systems in Missouri and South Dakota. In 1905, Funston married Ella M. Kephart of Ravenswood, Illinois.⁴⁶

Guilbert and Funston

Among their works are many buildings in Racine, including the Welsh Methodist Episcopal Church, First Methodist Church, Grange Avenue Methodist Church, N. D. Fratt School, McMynn School, additions to Garfield School and Lincoln Schools, the Danish Brotherhood, Racine Country Club House, Racine Elks Club, Junction Branch Racine Public Library, First National Bank, Commercial Savings Bank, Palmeto "Old Ladies' Home," and the Warren J. Davis House. The firm also designed many other schools, factory buildings, office buildings, banks, firehouses, park structures, and residences in Racine, and elsewhere in the state.⁴⁷

The firm's stylish detailing on its industrial buildings included Arts and Crafts polychromatic brick vertical elements on some facades and medallions of three dimensional ornamental limestone features as capitals at the head of doorways and the ends of walls on outside façade corners and piers. This type of stylistic detailing is evidenced in the Mitchell Lewis factory building's Eighth Street facade, which

⁴⁴ Stone, 1916: 242.

⁴⁵ Funston, 1925.

⁴⁶ Stone, 243-243; Funston.

⁴⁷ Racine Journal-Times, April 3, 1922, A. Arthur Guilbert obituary.

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is embellished with polychromatic, two-tone Arts and Crafts style decorative brickwork across its cornice and in stylistic vertical elements on the end piers. The patterning of this building stands alone from the other factories in Racine in the extent and particular detail of ornamentation.

The building is one of the few remaining of the industrial manufacturing buildings known to have been designed by Guilbert and Funston. The original J. I. Case complex of manufacturing buildings is all but gone, and only the fine Administration building remains. The Collier Hatchery plant remains though is a small building in comparison.

While Guilbert's hand was evident in the more classically styled buildings designed by the firm, it appears that Funston's influence was in the form of Arts and Crafts ornamentation, as evidenced by buildings designed by his firm, including the Tidyman Office Building or Badger Block, and the Hamilton Beach Manufacturing Co. plant. With his background in industrial construction, it is likely Funston had greater responsibility in the structure and any architectural embellishment of the factory buildings. Their contemporaries credited the architects with being studied and scientific, yet artistic, in their works. While Guilbert was credited with abilities reminiscent of European buildings, Funston was attributed the work of "practical buildings," an acknowledgment of his early training and work with Joseph Llewellyn.

SIGNIFICANCE SUMMARY

The Mitchell Lewis Building is locally significant in the industrial city of Racine under Criterion C as a good and intact example of the multi-story industrial loft building type near the end of the masonry exterior load-bearing wall phase. It is an important survivor in Racine of a once common industrial building type, growing increasingly scarce as the city's major industrial complexes are demolished.

The Mitchell Lewis Building possesses the distinctive characteristics that define the industrial loft type, including multiple stories, a boxy rectilinear form and a single low-pitched gable roof, enclosing a large space, with simple architectural detailing. The heavy timber post-and-beam frame, with exterior masonry load bearing walls was designed for high load capacity, while permitting an efficient layout. It was built to be fire resistant, employing slow-burning heavy timber construction and a fire containment strategy of firewalls and self-closing fire doors. The building was designed to optimize natural conditions, maximizing natural light, with larger windows and roof monitors, particularly in areas where workers engaged in fine-detail work.

The building was designed and initially used for the production of wagons and wooden automobile bodies. The building served from its construction in 1910 until 1923 in the production of Mitchell

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Mitchell Lewis Building
Racine, Racine County, Wisconsin

Lewis automobiles and from 1924 until 1929 for the production of auto bodies for Nash, Hupp and Hudson car companies.⁴⁸

The building possess considerable integrity of design, materials and workmanship. Little has been added or removed from the exterior since early in the period of significance, when it was occupied by the Mitchell Lewis and Nash companies, with the exception of the loading docks. The Mitchell Lewis Company improved lighting in the plant, by creating the asymmetrical window arrangement—which held metal sash, almost no different from the appearance of the building today.

___ End of Statement of Significance

⁴⁸ City directories; Hupp Motor Car Corporation, "The New Hupmobile Series R-12" brochure, c. 1923.

MITCHELL LEWIS BUILDING
Name of Property

RACINE
County and State

Wisconsin

9. Major Bibliographic References

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous Documentation on File (National Park Service):

- preliminary determination of individual listing (36 CFR 67) has been requested
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic landmark
- recorded by Historic American Buildings Survey #
- recorded by Historic American Engineering Record #

Primary location of additional data:

- State Historic Preservation Office
- Other State Agency
- Federal Agency
- Local government
- University
- Other

Name of repository:

10. Geographical Data

Acreage of Property 3.2 acres

UTM References (Place additional UTM references on a continuation sheet.)

1 1/6 4/3/5/3/0/0 4/7/3/0/2/5/0
Zone Easting Northing

3 _____
Zone Easting Northing

2 _____
Zone Easting Northing

4 _____
Zone Easting Northing

See Continuation Sheet

Verbal Boundary Description (Describe the boundaries of the property on a continuation sheet)

Boundary Justification (Explain why the boundaries were selected on a continuation sheet)

11. Form Prepared By

name/title	Gary Tipler	date	12/14/04
organization	Consultant for Gorman & Company	telephone	608-286-1844
street & number	807 Jenifer Street	zip code	53703-3532
city or town	Madison	state	WI

United States Department of the Interior
National Park Service

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Continuation Sheet

Section 9 Page 1

Mitchell Lewis Building
Racine, Racine County, Wisconsin

REFERENCES

Bradley, Betsy Hunter, *The Works, The Industrial Architecture of the United States*, Oxford University Press, New York, 1999.

Christianson, Charles M., *Racine - The Wagon City*, unpublished, June, 1942.

Keehn, Richard H., "Industry and Business," pp. 279-343, in Nicholas Burckel, editor, *Racine: Growth and Change in a Wisconsin County*, Racine County Board of Supervisors, 1977.

Christenson, Charles M., "Racine, The Wagon City," manuscript, June, 1942.

Doolittle, James Rood, *The Romance of the Automobile Industry*, Klebold Press, New York, 1916.

Funston, Edmund Bailey, *Record of the Funston Family, Seven Generations 1776-1925*, 1925.

Hegge, Robert, Mitchell, *Car Classics*, February 1974.

Hupp Motor Car Corporation, "The New Hupmobile Series R-12" brochure, c. 1923.

Karr, Susan E., *Architectural and historical survey of the city of Racine*, Racine, Wis. : Racine Landmarks Preservation Commission, 1980.

Kimes, Veberly Rae, *Standard Catalog of American Cars 1805-1942*, 3rd ed., p. 979.

Kuester, Ivan, "The Mitchell," *The Horseless Carriage Gazette*, July-August 1966.

Miller, Louis, Lewis family information.

Mitchell Lewis building elevations, details and structural drawings by Guilbert & Funston, collection of Gary Tipler.

Mitchell Lewis collections, Racine County Heritage Museum archives.

Mitchell Lewis collections, private sources.

Mitchell News Letter, Mitchell Lewis Motor Car Company, Racine 1917-22.

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Mitchell Lewis Building
Racine, Racine County, Wisconsin

Preservation Racine, Inc., building plan archives, Racine.

Preservation Racine, Inc., newsletter, Racine, various dates.

Racine City directories.

Racine County Tax Rolls.

Racine Daily Times

Racine Journal-Times, April 3, 1922, A. Arthur Guilbert obituary.

Sanborn-Perris Fire Insurance Maps of Racine, 1887, 1894, 1906, 1908, c.1917, 1933.

Stone, Fanny S., supervising editor, Racine, Belle City of the Lakes and Racine County

Tipler, Gary, Interview notes: Gerald Karwowski, Willy Woods, Jim Mercier, and Don Rintz.

Wisconsin, a Record of Settlement, Organization, Progress and Achievement, Chicago: S. J. Clarke Publishing Company, 1916.

Wisconsin Architecture & History Inventory, Wisconsin Historical Society.

Wyatt, Barbara, project director. Cultural resource management in Wisconsin: a manual for historic properties, resource protection planning project. Madison, Wis.: Historic Preservation Division, State Historical Society of Wisconsin, 1986, Vol. 2, 7-1, 7-4 through 6.

End of References

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Section 10 Page 1

Mitchell Lewis Building
Racine, Racine County, Wisconsin

Insert Boundary Descriptions
BOUNDARY DESCRIPTIONS

CITY OF RACINE, BLK 55 SCHOOL SECTION PT DESC VOL 936 RECS PG 10 + PT FORMER
C M ST P + P RR CO ROW DESC VOL 1762 RECS PG 311 + EXC PT DESC VOL 3071 RECS
PGS 671-672 + PT DESC DOC NO 1930553 + EXC PT DESC DOC NO 190552, N OF NINTH ST,
S OF EIGHTH ST + E OF WASHINGTON AVE 3.1924 AC MOL

BOUNDARY JUSTIFICATION

The boundaries include the land parcel historically associated with the building since the 1940s.

____ End of Boundary Descriptions

MITCHELL LEWIS BUILDING

RACINE

Wisconsin

Name of Property

County and State

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps A USGS map (7.5 or 15 minute series) indicating the property's location.
A sketch map for historic districts and properties having large acreage or numerous resources.

Photographs Representative black and white photographs of the property.

Additional Items (Check with the SHPO or FPO for any additional items)

Property Owner

Complete this item at the request of SHPO or FPO.)

name/title	Tom Capp, Vice President of Development	date	11/14/04
organization	Gorman & Company	telephone	(608) 257-4410
street&number	1244 S. Park Street	zip code	53715
city or town	Madison	state	WI

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Projects, (1024-0018), Washington, DC 20503.

United States Department of the Interior
National Park Service

National Register of Historic Places
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Mitchell Lewis Building
Racine, Racine County, Wisconsin

Section photos Page 1

Mitchell Lewis Building
Racine, Racine County, WI
Photos by Gary Tipler, November, 2004
Negatives on file at the Wisconsin Historical Society.

- Photo 1. View looking SW of Eighth Street Façade.
Negative 20
- Photo 2. View looking south at ornamental masonry detail of Eighth Street façade.
Negative 35
- Photo 3. View looking N by NE at Ninth Street side or rear and west sides of building.
Negative 12
- Photo 4. View looking NE at south end of West side of building.
Negative 0
- Photo 5. View looking NE at roof monitors at south end of building.
Negative 11
- Photo 6. View looking NW at rear and east sides of building.
Negative 16
- Photo 7. View looking SW from Eighth Street at east side of building.
Negative 23
- Photo 8. View of typical structural post and beams, first floor.
Negative 34
- Photo 9. View looking SE toward Rosenberg freight elevator near Eighth Street entrance.
Negative 33
- Photo 10. View looking NW toward fire door at south masonry fire partition wall.
Negative 32
- Photo 11. View NW of roof monitor at south end of top floor.
Negative 31