1. NAME AND LOCATION OF PROPERTY

Historic Name: Montgomery County Jail and Sheriff's Residence

Other Name/Site Number: Rotary Jail Museum, Tannenbaum Cultural Center

Street and Number (if applicable)**:** 225 North Washington Street

City/Town: Crawfordsville **County:** Montgomery **State:** Indiana

Designated a National Historic Landmark by the Secretary of the Interior, December 11, 2023.

2. SIGNIFICANCE DATA

NHL Criteria: 4

NHL Criteria Exceptions: N/A

NHL Theme(s): III. Expressing Cultural Values
5. Architecture, Landscape Architecture and Urban Design
VI. Expanding Science and Technology

Period(s) of Significance: 1882-1889

Significant Person(s) (only Criterion 2)**:**

Cultural Affiliation (only Criterion 6)**:**

Designer/Creator/Architect/Builder:
Architects/Engineers
William H. Brown, supervising architect
Edgar J. Hodgson, architect
Builder/Supplier
Haugh and Ketchum Iron Works Company, contractors
Julian W. Hinkley and James Norris, general contractors
Sherman T. Craig, contractor (power house)

Paperwork Reduction Act Statement. We are collecting this information under the authority of the Historic Sites Act of 1935 (16 U.S.C. 461-467) and 36 CFR part 65. Your response is required to obtain or retain a benefit. We will use the information you provide to evaluate properties nominated as National Historic Landmarks. We may not conduct or sponsor and you are not required to respond to a collection of information unless it displays a currently valid OMB control number. OMB has approved this collection of information and assigned Control No. 1024-0276.

Estimated Burden Statement. Public reporting burden is 2 hours for an initial inquiry letter and 344 hours for NPS Form 10-934 (per response), including the time it takes to read, gather and maintain data, review instructions and complete the letter/form. Direct comments regarding this burden estimate, or any aspects of this form, to the Information Collection Clearance Officer, National Park Service, 12201 Sunrise Valley Drive, Mail Stop 242, Reston, VA 20192. Please do not send your form to this address.

Historic Contexts: *Rotary Jails in the United States, 1882-1969 Assessment of Significance and National Historic Landmark Recommendations* (July 2019)
Architecture, Science and Technology

3. WITHHOLDING SENSITIVE INFORMATION

Does this nomination contain sensitive information that should be withheld under Section 304 of the National Historic Preservation Act?

___ Yes

_x_ No

4. GEOGRAPHICAL DATA

1. **Acreage of Property:** Less than one acre

2. **Use either Latitude/Longitude Coordinates or the UTM system:**

   Latitude/Longitude Coordinates (enter coordinates to 6 decimal places)**:**
   Datum if other than WGS84:

   Latitude: 40.043831 **Longitude: -**86.901416

   OR

   UTM References:

   Zone Easting Northing

3. **Verbal Boundary Description**:
   Entire lot numbered Sixty-Five (65) and 6 ½ feet of the north side of lot numbered Sixty-six (66), as the same are known and designated on the original plat of the town (now city) of Crawfordsville, Montgomery County, Indiana, located at the northwest corner of North Washington Street and East Market Street, now Indiana State Highways 231 and 136, respectively, the Rotary Jail and Sheriff's Residence, with the associated power house, occupies approximately one-half of one-quarter of the block, The building fronts on North Washington, the properties eastern boundary. The northern boundary is West Spring Street. The western boundary is North Walnut Street. The southern boundary (of the block) is West Market Street.

4. **Boundary Justification:**
   The nominated property includes the entire parcel historically associated with the Montgomery County Rotary Jail and Sheriff's Residence property, in addition to the power house.

5. SIGNIFICANCE STATEMENT AND DISCUSSION

INTRODUCTION: SUMMARY STATEMENT OF SIGNIFICANCE

The Montgomery County Rotary Jail and Sheriff's Residence, located at 225 North Washington Street, Crawfordsville, Montgomery County, Indiana, is nationally significant under National Historic Landmark Criterion 4 for its distinctive architecture and design that combines a sheriff's residence with an innovative form of incarceration. Constructed in 1882, the Montgomery County Rotary Jail and Sheriff's Residence is an excellent example of a unique prison cell type that was invented as an economic alternative for the county jail system during the late nineteenth century. Not only does it possess the only remaining operational rotary mechanism that still functions as originally intended, the Montgomery County Jail and Sheriff's Residence is the earliest extant rotary jail in the United States where a sheriff's residence is combined with a rotary jail in a single building envelope in a vigorously bold architectural style. The buildings were designed by William H. Brown, supervising architect, and architect E. J. Hodgson, with Haugh and Ketchum Iron Works Company, which provided all iron and steel components of the rotary jail portion. Hinkley and Norris was the general contractor. A second building, the power house, stands to the west of the jail. Sherman T. Craig, Crawfordsville, constructed it in 1887 to house new boiler equipment that replaced the outdated 1882 system. The property also represents NHL Theme III, Expressing Cultural Values: 5. Architecture, and Theme VI, Expanding Science and Technology. The period of significance extends from 1882 to 1889, reflecting the time frame in which the rotary jail reflected national trends in penal reform.

The "Assessment of Significance and National Historic Landmark Recommendations for Rotary Jails in the United States: 1882-1969," provides the larger historic context for this nomination.[1] Additional research was completed on the Montgomery County Rotary Jail and Sheriff's Residence, as well as on other rotary jails built between 1882 and 1888 during the preparation of this nomination. The Montgomery County Jail and Sheriff's Residence was documented for the Historic American Engineering Record in 1974 as the "Montgomery County Jail," HAER No. IN-17. The building was listed in the NRHP as "Montgomery County Jail and Sheriff's Residence" on May 1, 1975. It and the associated power house currently serve as the Rotary Jail Museum and Tannenbaum Cultural Center of Montgomery County, respectively.

The Montgomery County Jail and Sheriff's Residence is an excellent example of a unique prison cell type that was developed as an economical alternative for the county jail system during the latter portion of the nineteenth century. The rotary jail is a separate manufactured cage unit, built of iron and steel that was invented by Benjamin F. Haugh and William H. Brown of Indianapolis, Indiana. By 1889 a total of eighteen rotary jails were located within fourteen states. These jails were constructed in small rural counties where financial consideration and easy management were important to the communities. The size of the jail cage ranged from one to three stories, holding a minimum of sixteen prisoners, as in Daviess County, Missouri, to a maximum of sixty as seen in the rotary jail located in Pottawattamie County, Iowa. Currently, only two rotary jails remain intact, this two-story facility located in Montgomery County, Indiana, and a three-story jail in Pottawattamie County, Iowa. Only the mechanism in the Montgomery County jail still rotates.

The unusual design of the Montgomery County Rotary Jail and Sheriff's Residence exemplifies the use of technology to address the philosophical, economic, and social change in rural America in the late 19th century. The rotary technology, nationally significant for its innovative engineering solution, offered an economical

[1] Prepared for Midwest Regional Office by Cydney Millstein, July 19, 2019.

solution to small county government systems by solving the problem of costs incurred from the necessity of incarcerating local law-breakers. Additionally, it was the intention of Benjamin F. Haugh and William H. Brown that their invention offered a safe, secure, and humane structure for the purpose of incarceration as a scientific means of addressing the many suggested and mandated social reforms of the prison system during the late nineteenth century.[2]

PROVIDE RELEVANT PROPERTY-SPECIFIC HISTORY, HISTORICAL CONTEXT, AND THEMES. JUSTIFY CRITERIA, EXCEPTIONS, AND PERIODS OF SIGNIFICANCE LISTED IN SECTION 2.

Historic Context

When the first rotary jail was constructed in 1882, three primary forces influenced the county board of commissioners to choose rotary jail technology over the more common block style jail that was the norm of the period. First, and foremost, the prison reform movement's call for a modern, safe, humane facility to house prisoners. Second, technological advances that occurred following the Civil War helped to improve and modernize construction methods for jail facilities. Third, as the cost of construction was based on regional economics, cost efficiency was a priority for county governments that relied heavily on voter approved tax dollars.

Background: Prison and Social Reform in the United States: 1830 to 1880

After the Civil War, most small jails across the United Sates were severely outdated. Some communities relied on nothing more than windowless root cellars featuring thick solid wood doors. The earliest prisons in the U.S. had been fashioned out of old guardhouses left from British military posts from the pre-Revolutionary War era, while many others were little more than stone, brick, or log buildings that resembled primitive architecture. Many of these jails were still in use up to and through the Civil War.[3] Often eyesores in the community, many old jails were dark, damp and without ventilation, thereby creating an unhealthy environment. Some were dangerously close to collapsing and allowed for the easy escape of prisoners.

To address the deplorable conditions under which criminals were confined for punishment, prison reform became a priority in both European and American societies. Various parallel reform movements advocated for changes in the penal system that involved improved prison design in order to create a healthier and more sustainable prison environment. They also called for better treatment for the poor, the criminal, women, children, and the insane who found themselves incarcerated among the nation's criminals.

During the 1830s, European reformers took great interest towards social reform in the U.S. Many traveled to the U.S. to consider new ideas and to view the American social landscape of a growing society. Among the items of

[2]Prison reform, during the mid to late 19th century, was a topic of great concern for both government officials, as well as social reformers like Dorothea Dix. In addition, numerous publications offered solutions and recommendations to improve the conditions resulting from poor prison management prior to the American Civil War. Following the war, ca. 1869, documentation of the state of county jails was conducted by Dr. E.C. Wines, Secretary of the National Prison Association of the United States. Further details regarding Wines studies are included later in this narrative.

[3]Theodore Calvin Pease, ed., "Courthouse Etc.: Law Series, Volume I". *Collections of the Illinois State Historical Library,* Vol. XVII (University of Illinois, 1925), 77-80. http://openlibrary.org/b/OL23310011M/laws_of_the_Northwest_Territory_1788-1800 Online book accessed February 22, 2010.

interest to Europeans was the changing American policy regarding crime and punishment. Sponsored by the French government, Alexis de Tocqueville and Gustav Beaumont began their tour of America in 1831 to study the American prison system. As a result, de Tocqueville wrote his classic *Democracy in America, Part I* in 1835 followed by *Part II* in 1840. De Tocqueville's analysis of America's political and civil society was immediately popular in both the U.S. and Europe.

De Tocqueville's study on the American penal system concluded that an increasing deterioration of order was spurred by the rapid growth and westward expansion of the country. He further stated that the "republican thinking" of the gentrified populous created a fear within the social order of the upwardly mobile economic structure. In other words, society would be overrun by criminal activity unless something was done to keep criminals in line. The great pride that America's citizens had in their 'very open society' could instead produce the disorder and disarray that was feared. In this paradigm, the incarceration of criminals was tantamount to guaranteeing the safety of the republic.[4]

As early as the 1820s, the New York, or Auburn System, and the Pennsylvania System were the first two new methods of penal correction to be established for adults and quickly became models for the rest of the nation. Although there were slight differences between these two state systems, both emphasized isolation, obedience, and labor. Reformers were divided in their preference for one system over the other. In most states, county jails served as pre-trial holding areas for male and female prisoners, alike. This standard operation also applied to delinquent boys and girls, and female prisoners with children. In the absence of other family members who could care for them, children of female prisoners were placed in jail with their mothers.

The State of Indiana was progressive in its effort to address the many issues of prison reform. In 1873, the state opened the Indiana Reformatory Institution, a statewide facility for "fallen women." It was the first facility of its kind in the U.S.[5] As an interesting side note, Isaac Hodgson served as the architect for the Indiana Reformatory Institution for Women. His son, E. J. Hodgson, designed the Montgomery Rotary Jail and Sheriff's Residence about ten years later, and subsequently joined his father's architectural firm while working in Denver, Colorado.

Beyond these efforts, Indiana officials instituted additional social reforms in the 1870s that changed the dynamics of the state's prison system by opening two state asylums for individuals found to be insane. Additionally, in 1874, a report to the Indiana governor included recommendations for building additional orphanages, reformatories, and a separate state hospital for those suffering from inebriation.[6]

The rotary jail appeared in Indiana during a time when most counties across the country were struggling to develop economic and social solutions for law enforcement. The population of Montgomery County had remained steady with growth being no more than 13 percent between 1860 and 1870. Other areas of the country were experiencing growth rates that ranged from 62 to well over 200 percent for the same period. At the time the women's Reformatory Institution opened in Indianapolis, the state was already looking to the counties to construct more orphanages, reformatories, and asylums to handle a growing number of orphaned children and mentally insane individuals who had previously been incarcerated within the criminal populations.[7]

---

[4] *Ibid*, 115.

[5] *Ibid*., 353.

[6] "Legislative Documents," Twenty-Second Report of the Superintendent of Public Instruction of the State of Indiana to the Governor, for the years ending August 31, 1873 and August 31, 1874 (Indianapolis: Sentinel Company Printers, 1874), 660-681. Volume 2 (Google eBook).

[7] Cydney Millstein, "Rotary Jails in the United States, 1882-1960." July 2019. Historic context for Prison and Social Reform in the

Criterion 4: Prison Design: Colonial Period to the Advent of the Rotary Jail in the Late 19th Century

Despite numerous calls for social reform, the architecture and administration of county jails remained virtually unchanged in most localities from the early Colonial period through the Civil War. Building materials consisted of wood, brick, and stone, with wrought and cast iron used in the grating. Most jails prior to the Civil War were secure yet simple block buildings that allowed the community to separate prisoners from the general population. Jails often resembled the buildings of the locale and were sited in close proximity to the county courthouse. In some areas, the local jail may have been no more than a root cellar dug into the side of a hill with wood planks serving as a door. Regardless of the community's solvency, it remained an expensive venture to operate a jail. Establishing the jail, hiring the sheriff and additional staff, and funding operating expenses, all required approval by the county's voters. Guarding prisoners, preparing and transporting meals, and distributing work to each individual cell was time consuming and needed a large staff to handle the workload. Thus, cost-effective design and construction became important elements of prison reform.

Although disbanded by 1854, the Boston Prison Discipline Society was one of the most influential organizations at the time. This group considered architectural design a critical component of prison planning. Members focused attention specifically on the divisions of time and space, stating:

> There are principles in architecture, by the observance of which great moral changes can be more easily produced among the most abandoned of our race…. Other things being equal, the prospect of improvement in morals depends, in some degree, upon the construction of buildings.[8]

In the discussion of prison design, the Society noted that any jail building should be a model for the family and the school. It should promote and reinforce the latest plans in hygiene and education. Many reformers also felt that prisons should reflect the best of the community as well. It was this idea that convinced de Toqueville and Beaumont that the prison reform movement in America was the ". . . remedy for all the evils of society."[9]

By the mid-nineteenth century, an important study by E.C. Wines and Theodore Dwight drew further public attention to the need of prison reform. In 1867, the two investigated the nation's prisons during the post-Civil War era. Their extensive report, as presented to the New York State legislature, determined the state of prisons in the U.S. to be deplorable, stating: "There is no longer a state prison in America in which the reformation of the convicts is the one supreme object of the discipline…There is not a prison in the U.S. which …would not be found wanting."[10] Wines and Dwight found overcrowded conditions with one-third of all prisoners living in cells with double the recommended occupancy rates. As space constraints were ignored, chaos took over, fights broke out, and the stronger preyed on the weak, while wardens and guards became harsher in disciplining the inmates. The ideal system of reform was abandoned, replaced by a system of discipline and custodial care. Single occupancy, once seen as the humane and benevolent form of incarceration, became solitary confinement used as punishment to curtail the unruliness of certain members of the prison population.[11]

United States.

[8] Guiseppe di Bennaro, *Prison Architecture,* (London: The Architectural Press, 1975), 16.

[9] *Ibid.*

[10] Morris and Rothman, *Oxford History of the Prison*, 125. E. C. Wines wrote on numerous social issues. His body of work can be found online at http://openlibrary.org/a/OL353072A/E._C._Wines. His son, Frederick Howard Wines, submitted a study of county jails to the American Prison Association in 1920. The terms jail and prison are used synonymously to describe any building or institution used for the purpose of incarceration.

[11] *Ibid*.

Most prisons at this time were approximately thirty to forty years old and many in disgraceful condition. In addition to the dangerous physical condition of the jails, the inability to control inmates living in overcrowded cells resulted in threats to the physical and psychological welfare of inmates and staff, alike. While this situation was true for the state operated facilities, conditions in county jails often faired much worse. The design of county jails changed little between 1800 and 1860. Cells were small, and the doors were usually made of solid wood or wrought iron. Windows and ventilation were poor. It was not until the technology for producing inexpensive steel was introduced in the 1860s that the architecture of prisons began to change.

The Second Industrial Revolution, also known as the Technical Revolution, affected architecture and engineering in the United States. Cost-effective steelmaking process introduced by Englishman Henry Bessemer's process in 1856 revolutionized the steel industry in the states.[12] Additionally, the Seimens-Martin open hearth process (1865) "made possible a much greater volume of production."[13] For the first time, steel was produced cheaply in large quantities, thereby facilitating the mass industrialization of the late nineteenth and early twentieth centuries in the United States.[14]

Metal manufacturing companies were able to expand their operations, as the application of iron and steel changed the way buildings were constructed. Benjamin F. Haugh, a blacksmith and engineer, was fortunate enough to begin working in 1858 as a supervisor in the structural iron factory owned by Levi Williamson and his father, Emmanuel Haugh. By 1863, ownership of the factory passed to Benjamin F. Haugh, who steadily guided the firm in the manufacture of jail and courthouse fittings, along with architectural ironwork that included decorative wrought iron fencing.[15]

In 1868, Haugh filed for what appears to be his first patent, an improvement for prison door bolts. On August 16, 1868, Haugh received Patent No. 81,165 for this invention.[16] His firm supplied the iron bars, grates, doors, hinges, and numerous other fittings for the construction of jails throughout Indiana. Haugh's firm was contracted to build the jail in Lancaster, Grant County, Wisconsin, in 1872.[17] In 1878, Haugh was contracted to supply all ironwork for the courthouse in Cambridge, Henry County, Illinois.[18] Haugh's firm worked with Hinkley and Norris, serving as general contractors, on both projects. Haugh, with E. J. Hodgson and his father Isaac Hodgson were given the contract to build the courthouse in Indianapolis, Marion County, Indiana.[19]

---

[12]Frank Tracy Carlton, Ph.D., *The Industrial Situation: Its Effect Upon The Home, The School The Wage Earner and The Employer* (New York: Fleming H. Revell Company, 1914), 15-20.

[13]Carl W. Condit, *American Building Art: 19th Century* (New York: Oxford University Press, 1960), 286. Condit also states that in 1875 "the price [of steel] fell to a point where the new metal could be used on a large scale in building, but even then, it was 15 years before it was common in structural frames." The Bessemer process was introduced in the U.S. by Alexander Holley and the Seimens-Martin process by Abram Hewitt, both shortly after the Civil War.

[14]Thomas J. Misa, *A Nation of Steel: The Making of Modern America, 1865-1925* (Baltimore: Johns Hopkins University Press, 1995). Accessed online, 16 March 2010, http://www.tc.umn.edu/~tmisa/NOS/1.1_intro.html.

[15]*Semi-Annual Report of the Indianapolis Board of Trade of Indianapolis, Indiana*, January 1871 (Indianapolis: Journal Company, 1871), n.p.

[16]Patent Search, "Benjamin F. Haugh," Google Scholar, Patents On-line, http://www.google.com/patents?hl=en&lr=&vid=USPAT81165&id=I74AAAAAEBAJ&oi=fnd&dq=Haugh&printsec=abstract#v=onepage&q=Haugh&f=false

[17]Castello N. Holford, History of Grant County, Wisconsin: Including Its Civil, Political *Geological, Mineralogical, Archaeological and Military History, and a History of the Several Towns,* (Wisconsin: Walsworth Printing Company, 1900), 77.

[18]Courthouse Postcards, Henry County, Illinois Courthouse, Online, Courthouse History.Com, On-line., accessed July 2013. http://courthousehistory.com/gallery/states/illinois/counties/henry

[19]David J. Bodenhamer and Robert G. Barrows eds., Marion County Courthouse, "City County Buildings," *The Encyclopedia of*

Long before Haugh and William Brown filed a patent for their invention of the rotary jail, there appear to be only a few examples of rotating floor space. The design of European theaters fitted with rotating stages began appearing circa 1620 when Tomasso Francini designed a revolving stage at the Louvre for Louis XIII. The watermill, which appeared widely across regions of England, France and Flanders in the twelfth century rotated on a structure called a buck or center wood shaft. The buck contained the shaft and gears that rotated a millstone or pumped water. Wind or water typically turned the mill houses. In the absence of both, livestock supplied the turning power. These mill houses supplied energy " . . . to mill grain, operate saws, bellows and forge hammers."[20]

Walter A. Lunden addressed the application of a revolving cage as a jail in an article entitled "The Rotary Jail, or Human Squirrel Cage," which appeared in the *Journal of the Society of Architectural Historians* in December 1959.[21] In it, he discussed the rotary design of the Pottawattamie County Jail in Council Bluffs, Iowa, in terms of its uniqueness and limitations. Lunden recounted the design of the English "Panopticon" of 1791, as a possible influence for the rotary jail based on the letters and design concept of Jeremy Bentham, a Utilitarian philosopher and theorist. Bentham's panopticon allowed everything to be visible from one central viewpoint. Although Bentham hired architect Willey Reveley to draft plans according to his directions, the Panopticon remained only a concept and was never built.[22] Additionally, it did not revolve.

No other examples of large revolving architectural structures (similar to the European mill houses) appear until 1843 when a young New York inventor, Theodore Timby, designed a land-based revolving gun-turret. This invention appears to be a more likely model for the rotary jail cages.[23] A working model of Timby's turret, measuring 15' in diameter, was placed on display in 1843 at the old New York City Hall in an attempt to generate interest in its military application.[24] Timby may have applied for a patent as early as 1843 or 1844. It was not until July 8, 1862, however, when he was finally issued Patent 35,846 for his revolutionary "revolving battery tower."[25] That same year, Timby's invention was placed on the *USS Monitor*, the first ironclad warship commissioned by the U.S. Navy and was also used in the design of gun turrets on Union warships.[26] Timby's invention relied heavily on the use of iron plating, along with a cog and wheel system to turn the center support of the tower, which was suspended from the top of the structure.[27]

Indianapolis (Indianapolis: Indiana University Press, 1994), 429, 695.

[20]Chad Randl, *Revolving Architecture: A History of Buildings That Rotate, Swivel and Pivot* (New York: Princeton Architectural Press, 2008), 16.

[21]Walter A. Lunden, "The Rotary Jail, or Human Squirrel Cage," *Journal of the Society of Architectural Historians,* Volume XVIII, No.4, December 1959, 149-157.

[22]Jeremy Bentham, *Panopticon Letters;1787,* Ed. Bozovic, Miran (London: Verso, 1995). p. 29-95. Accessed online, January 2014. http://cartome.org/panopticon2.htm.

[23]Lunden, 156.

[24]Rueben D. Ferguson, Thesis, "The Effect of the *USS Monitor* and the *CSS Virginia* on Naval Warfare," February 1999, 8-10.

[25]Theodore Ruggles Timby, Revolving Battery Tower, Patent No. 35, 846, Google Scholar On-line: Accessed July 30, 2013. http://www.google.com/patents. Timby continued to improve upon his original invention with several additional patents including, Patent No. 312,231 dated Feb 10, 1885, and Patent No. 330,638 dated November 17, 1885. It became an instrumental part of the weaponry used by the United States Navy.

[26]Naval History and Heritage Command On-Line. "US Navy Ships: USS Monitor (1862-1862)." Accessed July 30, 2013. http://www.history.navy.mil/photos/sh-usn/usnsh-m/monitor.htm.

[27]*Ibid*.

The cog and wheel system used in Timby's invention also appears in Brown and Haugh's revised patent for the suspension of the rotary jail column, issued in 1885. Brown's personal history suggests that Timby's design may indeed have influenced a rotary jail concept. First, William Brown served in the Union Army with an Indiana regiment during the Civil War while still a student of architecture.[28] It appears that Brown was assigned to the U.S. Army Corps of Engineers in a division in charge of transport, bridges, and vessels where Brown most likely had firsthand knowledge of various projects including the *USS Monitor.* Haugh also served very briefly in the Union Army as a private in Company H of the 107th Infantry of Indiana. This period coincides with the dates of Haugh's employment in Indianapolis, Indiana, as a manufacturer of iron and steel goods. As inventors and engineers in their own right, Haugh and Brown easily could have used Timby's turret as a stepping-stone in the development of their more complex invention of the rotary jail. Further influences from Timby's invention are found within the publishing history of the U.S. Patent process, as outlined in the next section.

Technical Revolution and Its Impact on the Invention of the Rotary Jail

Technology played a key role in the development of the rotary jail and its patent as an answer to long overdue social and economic reforms in the prison system. The use of innovative thinking to solve social and economic problems was not a new concept, but industrial technology was still in its infancy in the United States. Several laws passed in the late 18th century set up basic measures that were used to protect intellectual rights. Patents issued in this early period were filed at the local level before being sent to Congress for approval. Local libraries kept copies of decrees for future patentees to search. The patent system was limited in scope and often caused problems in identifying intellectual property. It was not until 1836, when the U.S. Patent Office was established, that the country had a dedicated agency to file, approve, reject, and record all patent applications. The first patent issued from this office occurred on July 13, 1836, for the design of a steam engine.[29] Between July 1836 and May 1865, 48,010 patents were issued, an average of 1,700 patents per year.

The development of inexpensive steel after 1860 led to an explosion of new inventions, processes, and procedures in construction as well as commerce and transportation. The average number of patents issued in the years following the end of the Civil War in May 1865 through July 1881, increased to well over 12,200 annually.[30] Benjamin Haugh and William H. Brown applied for the first rotary jail patent on April 12, 1881, and received Patent No. 244,358, along with John L. Ketcham, on July 13, 1881. The patent for the "Jail or Prison" explained:

> The object of our inventions is to produce a jail in which prisoners can be controlled without the necessity of personal contact between them and the jailer or guard... it consists, first, of a circular cell structure of considerable size (inside the usual prison building) divided into several cells capable of being rotated, surrounded by a grating in close proximity thereto, which has only such number of openings (usually one) as is necessary for the convenient handling of prisoners. [31]

---

[28]"W. H. Brown, Veteran Architect Dies," *The Indianapolis News March* 1929. See also, "Pioneer Builder, W. H. Brown Dies," *The Indianapolis Star* 26 March 1929.

[29]Locomotive Steam Engine, US Patent No. 000000001, July 13, 1836, United States Patent and Trademark Office, Online Accessed July 16, 2013, http://patimg1.uspto.gov/.piw?Docid=00000001&idkey=NONE

[30]*Ibid*. These numbers were compiled by averaging the data obtained from the USPTO website beginning with the first patent, No. 1 issued in July 1836, through Patent No. 244,358 issued in July 1881. The years up to 1865 were compared as well.

[31]William H. Brown and Benjamin F. Haugh, "Rotary Jail," United States Patent Office, Patent No. 244,358. July 12, 1881. Google Scholar On-Line. Accessed July 30, 2013, http://scholar.google.com/

The full description of Haugh and Brown's original U.S. Patent No. 244,358 includes lengthy and complicated specifications. To summarize the characteristics of the rotary jail, *The Pauly Jail Building and Manufacturing Company Catalogue*, contains a description of the jail's general features and mechanics based on the original patent. It explains how the Montgomery County Rotary Jail, a two-story facility, was operated.

> The circular cell structure is intended to be any required number of stories in height, with ten or less cells to each tier and rotates, bodily, on a central vertical shaft, turning upon conical steel rollers, like a railway turntable. …The cells are surrounded with a heavy stationary combination iron and steel grating, extending from floor to ceiling, with only one door opening it for each tier of cells. As the cell structure revolves and the several cells contained therein are successively presented in front of the door in the stationary grating, it is possible for prisoners to be put into or taken out from the cells, provided the door is opened by the keeper, but at no other time is this possible, as all the cells except the one opposite the door, are securely closed by the grating behind which they move. By this means, all possibility of a rush of prisoners upon the keeper is removed and the prisoners can be handled and controlled at all times with perfect safety, as the keeper never comes in contact with more than the occupants of one cell at a time.
>
> The cells are rotated by a crank at the entrance door; or during the nighttime in large jails, the cells can be kept slowly rotating by a small water motor, or any motive power most convenient and cheapest; thus, prisoners are deprived of the chance of working for escape.
>
> A ventilating shaft… eight feet in diameter extends up through the cell structure and discharges into the open-air through a turret on the top of the building. Each cell is provided with a permanent water closet… projecting from the rear end of the cell into the ventilating shaft and is suspended over an open trough of running water, with a grated ventilating register over each closet. Now, with the great cast iron heated smoke stack from the furnace in the cellar running up through this ventilating shaft, it will readily be seen that a powerful upward current of the air is created, which will cause all the prison odors to be rapidly drawn from the cells and discharged into the open air above the roof, thus affording the best system of ventilation known.[32]
>
> The cells, which rotate about the vertical shaft, are made of a combination of iron and steel jail plates or iron plates lathed with five-ply bars, three layers of iron and two of steel, which makes it most difficult for prisoners to work at, even if provided with tools. The stationary latticework, which encases the cells, is made of either round or flat bars… This outside grating is always made of the combination bar, or iron and steel, unless otherwise specified in contract.[33]

The walls between the cells were constructed of solid steel-plate metal to prevent prisoners from seeing each other. The rotary portion was placed inside an outer, gridded stationary cylindrical cage, bolted to a flagstone floor and iron plates in the ceiling. Generally speaking, the cage features rectangular bars (two-and-one half inches in size, spaced three-and-one half inches apart) and ribbed with horizontal bars of the same size (one foot long, spaced three-and one-half inches apart). Prisoners were taken from the holding or turnkey area to the cells through a heavy iron door or could be sent to the exercise room, called the bullpen area, located outside the

[32]As the cells made a revolution, a valve would open, thereby clearing the latrine bowl. This particular aspect of the rotary function of the jail was a subsequent improvement to the 1881 patent made by Peter J. Pauly, Sr.
[33]The Pauly Jail Building and Manufacturing Company Catalogue, c. 1887, 21-22.

stationary cage. The rotary jail design reduced over-crowding, separated men and women, and provided at least in theory, if not practice, improved sanitation and ventilation, as well as an opportunity for exercise.

Montgomery County and the Economics of Building a Rotary Jail and Sheriff's Residence

Economic conditions greatly influenced civic leaders as they rebuilt communities after the Civil War. Many communities had limited resources, and this was no truer than in the small rural counties needing to rebuild or expand with the increasing rural population as people migrated westward. The growth and post-war recovery process were expensive. William H. Brown, who marketed the rotary jail to local county governments, emphasized the affordable construction and cost-efficient management of the system versus the design of the more common block style jails of the period.

Approximately one month before Haugh and Brown filed their extraordinary patent, the Montgomery County Commissioners met with Brown and Edgar J. Hodgson, architect, to discuss the design and construction of a new county jail and sheriff's residence.[34] The Montgomery County commissioners met on March 10, 1881, to outline the Article of Agreement for the new rotary jail and sheriff's residence. At this meeting, Brown, with E. J. Hodgson, presented four sets of plans marked A, B, C, and D for the design and construction of the jail and residence. One of the four plans was for a jail with rotating cells and iron work, which was chosen by the board that same day. Included as a condition to build the rotary jail, Brown and Hodgson were asked to provide a written warranty to cover the mechanical operation of the rotating cells and the sewage system to be kept in good and perfect working order for the period of five years after the date of completion.[35]

It was agreed that Brown and Hodgson would receive $600 in payment for the plans and specifications with $300 paid immediately. Brown had already been chosen to serve as the supervising architect for the proposed new county jail.[36] On April 20, 1881, eight days after filing for the rotary jail patent, the plans and specifications were accepted by the Board of Commissioners. Additionally, a notice for bid proposals was approved and ordered published.[37] On June 14, 1881, Haugh, Ketcham and Company Iron Works of Indianapolis, Indiana, were contracted for the construction and installation of all iron and steel work related to the rotary jail. Haugh's bid for $10,800 was the only bid. Julian W. Hinkley and James Norris were named general contractors with a low bid of $15,150 for the construction of the building. Ironwork was not included in the general contractors bid. An additional $10,000 was approved for the complete wrought, cast, and carbonized ironwork to be used in the construction of the rotary cages. Acceptance of the bid was contingent on the approval of a bond that would be used to pay the Haugh firm.[38]

On June 15, 1881, the final Article of Agreement was signed by Montgomery County and Haugh, Ketcham and Company Iron Works. The final agreement was required by the county because the newly patented jail was the first of its kind in the state. Brown served as superintendent for installation of the rotary cells and mechanisms. In addition, he was granted full power by the county commissioners to inspect and accept or reject all work

[34]Montgomery County Commissioner's Minutes, Vol. 11, Dec. 1880 - Sept 1881, 115 -512; and Vol. 12, Sept. 1881 – Sept. 1882, 87-507.
[35]*Ibid*, 116.
[36]*Ibid*, Vol. 11, 115-116.
[37]*Ibid*, 152-154.
[38]*Ibid*, 197-199.

supplied by the Haugh firm. The agreement further stipulated that the ironwork throughout the jail and residence was included in the cost of the rotating cells.[39]

In addition, an agreement with general contractors Hinkley and Norris covered workmanship and material, but excluded the wrought iron, cast iron, and carbonized iron used in the construction of the jail and residence. On November 7, 1881, eight months into the project the county determined it was necessary to add two additional rooms, built of brick on a stone foundation with a slate roof, to the sheriff's residence. Hinkley and Norris constructed the addition for less than $1,500, as stipulated by the county.[40] The jail cell block was functioning by the end of December 1881.

The Montgomery County Board of Commissioners developed a list of guidelines for the operation of the rotary jail prior to its occupancy. The Montgomery facility appears to be the only rotary jail for which such guidelines were developed before the first prisoners arrived in mid-June 1882. Many of the rules addressed the need to give prisoners constructive activity while they earned their keep. Humiliation, while not extreme, was still part of the process of keeping order within the jail. Protection against abusive treatment was added to the provisions stating that work hours would not exceed ten hours per day and the prisoner's medical health was considered when work duties were assigned. While the State of Indiana took progressive action in correcting past abuses in the penal system, as with the Women's Reformatory of 1874, it is unclear whether or not the following rules were actually adopted:[41]

1. Able bodied male prisoners, those who were there on fines and other cost, were put to hard labor on the construction of the jail and other such civic led projects.
2. Prisoners were to labor not less than eight and no more than 10 hours per day.
3. If any prisoner refused to work or obey proper officer, they were to receive only bread and water until they agreed to perform said work.
4. Any escape attempt or unruly behavior would require the punishment of a ball and chain attached at the ankle.
5. The county official in charge of said prisoners on work duty was to adhere to the work requirements of the supervisor of the specific county worksite.
6. Any prisoner unable to work due to physical limitations had to present a Medical Certificate to the sheriff.
7. Officers or guards appointed to watch prisoner on work detail will be compensated at a rate of $1.50 per day for each day of employment.
8. Any payment received by the sheriff from the City of Crawfordsville, Indiana for work done by prisoners on city projects was to turn the monies in to the county treasurer's office.
9. Prisoners were not to work under these provisions without a filed request for a work order to the sheriff. In addition, the work had to be of equal or greater value to the expense of hiring a guard.

Although the facility was completed by January 1882, it did not officially open until June 17, 1882, when prisoners were transferred from the old jail. The first sheriff to manage the new Montgomery County Rotary Jail was Sheriff James Q. W. Wilhite.[42]

[39] *Ibid*, 200-203.
[40] *Ibid*, 235-36.
[41] *Ibid*, 277-78.
[42] *Ibid*, Vol. 12, 506-07.

County Commissioners of Montgomery County, Indiana, arguably were drawn to the rotary jail for the affordability of its preformed steel construction. The rotary design made it possible for one person to operate and manage an entire jail facility, which reduced the need for additional staff to operate and secure the jail. For Haugh and Brown, the design was their attempt to address and facilitate jail construction by incorporating the important elements of social reform. By utilizing the newest technology to meet the economic needs of rural counties, these two men designed what was a unique, modern jail, unlike anything seen before.

Biographies of Designers, Architects, and Builders Associated with the Montgomery County Jail and Sheriff's Residence

Examining the history of the individuals involved in constructing a type of jail that was not seen prior to 1882 nor since 1888 uncovered some interesting and somewhat unexpected connections between the principal architects and engineers involved in the building campaign of the Montgomery Rotary Jail and Sheriff's Residence. The stories of the individuals intertwine with a background of inventions and patents, some of which applied to the field of architecture, expanding into the complexities of the technology of the period. Additionally, they were creative inventors and applied their knowledge of the latest technology to solve problems that existed within their society.

Benjamin F. Haugh (1829-1912)

Benjamin Franklin Haugh is best known for his years as the president of Haugh, Ketcham and Company Iron Works of Indianapolis, Indiana, and through his patented inventions. He was born in Maryland in 1829. His family moved to Indianapolis when he was seven years old. Haugh, like his father Emmanuel, was a blacksmith by trade. His father partnered with Levi B. Williamson in 1856 as Williamson and Haugh, manufactures of iron rails. In 1858, Benjamin joined the firm as a supervisor. Genealogical sources note that Haugh joined the Union Army for a total of two weeks in July 1863 as a private in Company H of the 107th Infantry Regiment of Indiana. The reason for his short, but reportedly distinguished, term of service is not known.[43]

In 1875, Haugh and Company, led by Benjamin F. Haugh and his brother, Joseph R. Haugh, moved their factory across the river to Michigan Street, west of Germania Avenue. This area quickly became known as Haughville and was incorporated as such in 1883. In 1881, owing to financial complications, the firm reorganized as Haugh, Ketcham and Company, and by 1885, it was incorporated as the Haugh, Ketcham and Company Iron Works.[44] The following advertisement from 1871 presents a picture on the scope of work offered by the Haugh firm.

> B. F. HAUGH . . . HAUGH & Co., Manufacturers of Jails & Court House Work, B. F. Haugh's Celebrated Jail Doors And Fastenings, Business House Fronts, Wrought And Cast Iron Railing, Jails, Verandahs, Bank Vaults, Iron Doors, Shutters, Bolts, Stamps, And Iron Fronts, All Kinds Of Wrought and Cast Iron Work, Plain And Ornamental. 300 Samples Of Iron Fences, Balustrading And Verandas. On Hand To Select From, Being The Largest and Best Assortment In The West. We Feel Confident That All Parties Contemplating Building Jails Will Do Well To Consult Us. 68, 72, 71, 76, 78, & 80, South Pennsylvania Street, Indianapolis, Ind.[45]

[43] "Benjamin F. Haugh," Online reference Rootsweb at www.Ancestry.com.

[44] Jacob Piatt Dunn, *The History, the Industries, the Institutions, and the People of a City of Homes,* Vol. I (Chicago: The Lewis Publishing Company, 1910), 441 – 442.

[45] *Semi-Annual Report of the Indianapolis Board of Trade of Indianapolis, Indiana*, January 1871 (Indianapolis: Journal Company, 1871), n. p.

By late 1879, the firm of Haugh and Ketcham was successfully producing iron works for a variety of building and decorative uses. Many of the iron fences designed by Haugh and built at the foundry can still be found in and around Indianapolis.[46] Haugh sought out William H. Brown a well-known Indiana architect to join the firm to provide architectural services. On March 10, 1881, the Indiana House of Representatives contacted Haugh about designing a jail. With Brown on board, the company was able to submit several plans for the new jail. On April 20, 1881, the representatives chose the soon to be patented rotary jail as the winning choice for their new facility.

In addition to the rotary jail patent, Benjamin Haugh had at least nine other patents. While he collaborated on a few of the patents with William H. Brown, most were filed in his own name. On December 20, 1881, shortly after filing the rotary jail patent, Patent No. 251,341 for the design and construction of a turntable to be used for locomotives was filed under Haugh's name only. The patents for two similar forms of rotary machinery occurred at roughly the same time. During this period and well into the twentieth century, Haugh was actively engaged in developing new engineering designs and making improvements to existing technology

Benjamin Haugh remained president of the firm through 1890. The next year Brown is listed as president and by 1895, the Haugh name was removed, and the company became Brown-Ketcham. Listings for Benjamin F. Haugh thereafter list only his residence at 670 Pennsylvania Avenue until 1896 when he is identified as vice-president of the Haugh-Noelke Iron Works. A business journal published the year before contains an article on the Haugh-Noelke Iron Works of Indianapolis also identifying B. F. Haugh as vice-president of the firm.[47]

Although Haugh was successful in the iron and steel works business, he continued to research and develop patented inventions well after the rotary jail. In addition to his partnership with Noelke in 1895, he also served as president of The Cushion Car Wheel Company at which time Haugh turned his attention to improvements of automobile wheels. He received two patents: Patent No. 443,047 was filed on December 16, 1890; and No. 480,922 was filed on August 16, 1892. The first described the invention of a cushioned wheel for automobiles and trucks; the second made improvements to the original patent.[48]

Haugh–Noelke seems to be the last firm with which B. F. Haugh was affiliated and it is not known when or why Haugh left the business. After his death, the successor firm was Noelke-Richards' Ironworks of Indianapolis. Benjamin Franklin Haugh, age 83, died at the home of his son in Anderson, Indiana, in 1912.

William Henry Brown (1841-1929)

William H. Brown was a well-known architect and builder in Indianapolis, Indiana, and was born in Lawrenceburg, Indiana, in 1841. At the age of 17, he moved with his family to Indianapolis, where he later married Isabelle S. Pearsall, of Greensburg, Pennsylvania, on October 5, 1859. Brown planned for a career in architecture, but his studies were interrupted by the Civil War. He enlisted in the U.S. Army serving with an Indiana regiment. After the war, Brown returned to his career in architecture.[49]

[46]Richard McGaughey, "Crawfordville's Circular Bastille: Indiana's Modern Jail in the 1880's?" Thesis, Legal History Indiana, University Law School, Indianapolis, n.d. 13.
[47]"Haugh-Noelke," *Indianapolis of Today* (Indianapolis: Consolidated Illustrating Company, 1896), 193.
[48]United States Patent Office, On-Line, accessed August 2, 2013., http://www.uspto.gov/patents/process/search/index.jsp
[49]"W. H. Brown, Veteran Architect Dies," The *Indianapolis News March* 1929. See also, "Pioneer Builder, W. H. Brown Dies," *The Indianapolis Star* 26 March 1929.

The known extent of Brown's private life and his body work as an architect is limited. Although Brown is credited for the design of the Marion County Courthouse built in 1876, all scholarly work identifies Isaac Hodgson as the architect for the $1.5 million Second Empire-Style building (razed in the 1960s).[50] Most of what is known about Brown's contributions to architecture and technology is through his patents dated between 1871 and 1895. William Brown became the vice president of Haugh, Ketcham and Company Iron Works of Indianapolis in 1889. In 1890, Brown was listed as president, however the company name remained the same. In 1899, the name of the company was changed to Brown-Ketcham Iron Works. Brown-Ketcham remained in business through 1911. In 1912, Brown-Ketcham was listed as a trusteeship. By 1913, there were no further listings for the firm.[51]

After the Brown-Ketcham Iron Works closed, Brown appears to have entered the real estate business as president of Colonnade Realty Company of Indianapolis around 1913. His employment was listed as architect in city directories from 1913 through 1929. William H. Brown died at the age of 88 in March 1929.

William H. Brown seems to have been a supervising architect as noted in County Commissioner's meeting minutes discussing the Montgomery County Rotary Jail. He had an excellent background as a builder and inventor. His body of work is better understood through his relationship with the Haugh, Ketcham and Company Iron Works and the numerous patents that he developed on his own and with Isaac and E. J. Hodgson, as well as with Benjamin F. Haugh.

Edgar Jackson (E. J.) Hodgson (1854–1916)

Edgar Jackson (E.J.) Hodgson learned the architecture profession from his father Isaac Hodgson. The list of their work in the State of Indiana, both individually and together, includes courthouses, jails, schools and residential buildings in addition to the State Capitol building in Indianapolis, the 1876 Marion County Courthouse, the State Orphan's Asylum, and the first women's reformatory in the country, the Indiana State Women's Reformatory in Indianapolis.[52]

E.J. Hodgson was a member of the American Institute of Architects from 1884 to1889. He was the oldest son of Isaac Hodgson, also an architect, who was born in Belfast, Ireland, on December 16, 1826. At the age of sixteen, Isaac entered the office of Sir Charles Lanyon, a well-known English architect who worked primarily in the Belfast region. Isaac studied under Lanyon for three years. Lanyon's work exposed Hodgson to the architecture of churches, jails, and courthouses across Northern Ireland. In 1848, when 22 years old, Isaac sailed for the U.S. and settled in Decatur, Indiana, where he met and married Mary Ann Edwards. After a short-term assignment as assistant architect in Louisville, Kentucky, Isaac returned to Indiana where he designed numerous buildings throughout Indiana and other states.[53]

---

[50]David J. Bodenhamer and Robert G. Barrows eds., Marion County Courthouse, "City County Buildings," *The Encyclopedia of Indianapolis.* (Indianapolis: Indiana University Press, 1994), 429, 695.

[51]"Haugh, Brown, Ketcham," Historical Directories, 1889-1913, Marion County, Indiana Online, Accessed July 1, 2013. https://sites.google.com/site/onlinedirectorysite/Home/usa/in/marion

[52]B. J. Bright," Report of the Board of Managers of the Indiana Reformatory Institution for Women and Girls to the Legislature," Issue 1 (Google eBook), Indiana Reformatory Institution for Women and Girls (N.P.: 1871), 5-10. Accessed October 2013.

[53]"Isaac Hodgson," *Biographical History Of Eminent And Self-Made Men In The State Of Indiana,* Volume I (Cincinnati: Western Biographical Publishing Company, 1880), 904. Very little is known about the body of Hodgson's work. While research was quite thorough, only lists of buildings were uncovered.

Isaac Hodgson's influence played an important role the development of his son's architectural career as the two frequently worked in tandem. According to a biography of his father, E. J. completed his early education in Indianapolis public schools and then enrolled in the Racine College in Wisconsin before beginning work as an architect in his father's firm.[54] Additionally, E. J. served as a witness for his father's patents of various improvements to construction tools and materials. One such patent, for a fireproof roofing system, was filed by his father, with William H. Brown, on May 30, 1871, under No. 115,471. At the time, E. J. was just seventeen years old. In succeeding years, he would share in his father's patents as well as develop his own inventions.[55]

During the early 1880s, along with his father, E. J. Hodgson is listed as the architect for more than twenty projects throughout Indiana. While the majority of these were residential, the list also includes banks and jails for Huntington and Delaware Counties, a hospital, and a hotel, in addition to the Montgomery County Rotary Jail and Sheriff's Residence.[56]

In 1884, E. J. Hodgson moved to Minnesota and formed a partnership with Alan Stem in St. Paul. The firm lasted until 1891 when Stem joined Charles Reed in the firm of Reed and Stem, one of the most successful architectural firms in Minnesota.[57] That same year, E. J. joined his father in Colorado where they are listed as architects in the *Denver Business Directory*.[58] It is unclear how long Isaac and E. J. Hodgson stayed in Colorado.

By 1902, both men appear in the City Directory of Hennepin County, Minnesota.[59] Although they maintained their partnership as architects, it appears they also diversified their interests into technology for the automobile industry. Edgar J. Hodgson received Patent No. 738,863 on August 28, 1902, for his invention of an early speed indicator for automobiles. Later, father and son received a patent for the design of tire construction. Each of the patents issued in the Hodgson name originated in Minneapolis, Minnesota. Four additional patents, issued to Isaac Hodgson between 1902 and 1908, named E. J. as one-half owner. Isaac died in 1909 at the age of 80.[60] E. J. Hodgson continued to live in Minneapolis with his wife Anna at 516 12th Avenue, S. E., where he was listed as an architect from 1902 through 1915. Hodgson died on January 25, 1916, at the age of 61.[61]

General Contractors, Hinkley and Norris

The firm of Julian W. Hinkley and James Norris, named Norris and Hinkley, appear in several archival resources identifying the men as general contractors. In July 1872, Hinkley and Norris, of Monroe, Wisconsin, were hired as subcontractors to Haugh and Company of Indianapolis who were chosen to build a new jail for Lancaster County, Ohio. Hinkley and Norris were to complete all but the ironwork. [62] Julian W. Hinkley was

[54] *Ibid.*

[55] United States Patent Office, Patent No. 115,471, May 30, 1871. Google Scholar On-Line. Accessed July 30, 2013., http://scholar.google.com/

[56] "E. J. Hodgson," Photocopy, Files on Architects and Architectural Firms, Historic Landmarks Foundation of Indiana.

[57] "E. J. Hodgson," Reed and Stem Papers, Northwest Architectural Archives, Manuscript Division, University of Minnesota. Online. Accessed July 30, 2013, https://www.lib.umn.edu/special

[58] "Hodgson," *Colorado State Business Directory, 1891*, (Denver: James R. Ives, 1891), 237, 699, 1560.

[59] "Hodgson," *Minneapolis City Directories: 1900 – 1917,* Hennepin County Digital Library, Online http://box2.nmtvault.com/Hennepin2/

[60] *Ibid,* 1909 Directory.

[61] *Ibid,* 1916 Directory

[62] Castello Holford, *History of Grant County, Wisconsin: Including Its Civil, Political, Geological, Mineralogical, Archaeological and Military History, and a History of the Several Towns,* (Wisconsin: Walsworth Publishing Company, 1900), 77-80.

the general contractor for the Henry County, Illinois, courthouse in 1880. Similarly, Hinkley and Norris performed in the same capacity during the construction of the Montgomery County Rotary Jail and Sheriff's Residence.

Julian Wisner Hinkley was born in Connecticut in 1838. When he was eleven years old, his parents, Lucius and Laura, moved the family to Wisconsin. Julian left home in 1858, teaching school and working as a carpenter in the summer months. In 1861, Hinkley was appointed First-Sergeant of Company E of the Third Wisconsin Infantry. By 1863, he took command of Company E as Captain and shortly before the war ended, he was promoted to Major. After the war, Hinkley went into business as a general contractor.[63]

James C. Norris was listed with D. J. Jones in 1867 as the contractor for the brickwork on the Wayne County Warden's House, as designed by Isaac Hodgson. Through the history of this building a connection is also established between Hodgson, Norris, and B. F. Haugh, who did the iron work for the Warden's house.[64] Although James C. Norris was frequently listed with Julian W. Hinkley, no information has been found to identify his origin or biographical background. There were numerous men with the name James Norris, several in the business of carpentry, trimmers and/or builders. As more historical journals become indexed and publicly available, a biography of James C. Norris may yet be located.

Additional Rotary Jails by Haugh and Brown: 1882-1886

Haugh and Ketcham Iron Works of Indianapolis, with William H. Brown serving as the supervising architect, constructed five additional rotary jails between 1882 and 1886. These include the following.

1. Paducah, McCracken County, Kentucky (non-extant): This rotary jail was furnished and built on site by Benjamin Haugh's firm simultaneously with the Montgomery County Jail. Paducah installed its first prisoners three weeks before prisoners were housed in the Montgomery County, Indiana, facility. Although Brown served in the capacity of supervising architect for the project, the identity of the architect for the envelope of the building remains unknown. An article published in the *Paducah Daily News* on June 10, 1882, confirms the date the jail opened.[65] Prisoners were transferred into the new jail the day before, June 9, 1882. The rotary jail with the sheriff's office was constructed at a cost of $19,500. A new McCracken County Jail replaced the rotary jail in 1936. This rotary jail was demolished shortly after the transfer of the last prisoner to the new facility.[66]

2. Maryville, Nodaway County, Missouri (non-extant): This jail was built in 1882, costing the county $19,400. The total prison capacity was for eighteen prisoners. Eckel and Mann of St. Joseph, Missouri, designed the building. In 1904, a decision to weld the rotary floor in place was made after a prisoner's head was crushed between the bars in an attempt to escape. With the floor locked into place, doors were then cut into the outer cage to give access to each cell, making it impossible to isolate prisoners form one another. Although the jail had been slated for closure many times over the next two decades, it did not happen until 1984, which marks

[63]Julian W. Hinkley," A Narrative of Service with the Third Wisconsin Infantry," *Wisconsin History Original Papers*, No. 7, (Wisconsin: Democrat Printing Company, 1912), Preface.

[64]Historic American Buildings Survey, "Wayne County Indiana Warden's House," HABS No. IN-105, 1975. Accessed online, October 2013, http://www.loc.gov/pictures/item/in0143.color.572126c/resource/

[65]Matt Jaeger, Local & Family History Department, McCracken County Public Library in Paducah, Kentucky.

[66]Cliff Gill, *Doin' Time for a Living: The Story of a Kentucky Jail* (Paducah: Cliff Gill Books, 2008), 10-15. Gill's book contains some minor errors in dates. At the time Gill wrote about the Kentucky rotary jail, he apparently had not discovered the *Paducah Daily News from May through June* 1882*,* which was supplied to the authors by Matt Jaeger.

this rotary jail as the longest in use. The property was demolished on January 2, 1985, to make room for a new county jail.[67]

3. Council Bluffs, Pottawattamie County, Iowa (extant): This three-story rotary jail was designed between 1882 and 1884. It features a three-tier cage with ten cells per tier, the only extant three tier rotary jail built by Haugh and Brown.[68] It opened in September 1885. Eckel and Mann, of St. Joseph, Missouri, also designed this building. In 1960, the jail temporarily closed for renovations and improvements. At this time, after 65 years of operating as originally designed, the rotary shaft was made inoperable and cemented in place. Prisoners who had been temporarily housed in the Council Bluff city jail were returned to the rotary jail four months later. In 1969, a new county jail was constructed, and the rotary jail was closed on December 1 of that year. In 1970, the Council Bluffs Park Board agreed to purchase the old jail with plans to renovate the facility as a museum in conjunction with the Historical Society of Pottawattamie County. Today the jail and residence serve as a county museum. The property, "Pottawattamie County Jail," was listed on the National Register of Historic Places on March 16, 1972.[69] On August 6, 1980, the Pottawattamie County Rotary Jail and Sheriff's Residence was documented for the Historic American Buildings Survey in HABS-IA-88-1.

4. Maysville, DeKalb County, Missouri (non-extant): The jail was attached to the north wall of the DeKalb County Courthouse in the 200 block of Main Street between Washington and Polk Streets, as seen on the 1909 Sanborn Map for Maysville, Missouri. The DeKalb County Rotary Jail was under construction in 1885. The St. Joseph architectural firm of Eckel and Mann designed the county courthouse and as well as the envelope for the rotary jail. It appears that the jail had only one tier as the building is listed as one and one-half stories with a basement. The number of cells was eight with two cells to facilitate hospital care. The jail was demolished in 1938.[70]

5. Appleton, Outagamie County, Wisconsin (non-extant): This is the first jail that was known to be contracted with the Chicago Patented Rotary Jail Company in July 1885, represented by Charles H. Sparks, a sales agent working with Haugh and Brown. The contract price was listed at $14,500.06. Completion scheduled for December 1, 1886, was delayed until March 1, 1887. On July 22, 1886, the county contracted with Henry Paepke, Neenah, Wisconsin, to build the jail for $8,835. Later the contractor agreed to build the third story for an additional $500.

The Outagamie County Rotary Jail was not a design-build contract that was typical business for the Pauly Jail Building and Manufacturing Company, indicating that this facility was already under construction when Pauly bought the patent from Haugh and Brown.[71] Although the ownership of the Haugh and Brown patent was purchased by the Pauly Jail Building and Manufacturing Company, St. Louis, Missouri, sometime in 1886, prior to the completion of the Outagamie, Wisconsin, rotary jail, it appears that the facility was constructed under the direction of Haugh and Brown.

---

[67]Paul Stewart, "Historic Jail at Maryville Being Razed," *St. Joseph Gazette,* January 18, 1985. B1, 4.

[68]In 1888, the Pauly Jail Company also built a two-tier rotary jail in Pueblo County, Colorado, but it is no longer extant.

[69]"Pottawattamie County Jail, Council Bluffs, Iowa," National Register of Historic Places Nomination, United States Department of the Interior, National Park Service, entry number March 16, 1972.

[70]Marian M. Ohman, *Missouri Courthouses: DeKalb County* (Columbia: University of Missouri-Columbia Extension Division, 1980), n.p. Accessed online: http://extension.missouri.edu/p/UED6031

[71] Thomas Henry Ryan, "History of Outagamie County, Wisconsin." Accessed online, http://www.foxvalleymemory.org/

The two-story building with basement and attic spaces included a two-tiered rotary jail with ten cells per tier. The contractor was listed as the Patent Rotary Jail Company of Chicago, with Charles H. Sparks as the agent. In August 1886, the local newspaper described the jail as "A Structure Architecturally Elegant and Admirably Adapted to the Conventions of Keepers and the Security of Prisoners."[72] The jail was later declared unfit and was closed in 1905, however, the building was still standing in 1917 according to an atlas from that year. [73] The building, wrongly identified as the county courthouse, was located on the same site and situated next to the courthouse in an undated historic photo that showed both buildings.[74] The date of demolition is unknown.

Pauly Jail Company and the Second Generation of Rotary Jails, 1886-1888

Sometime in 1886, prior to the completion of the Outagamie County, Wisconsin, Rotary Jail and Sheriff's Residence, the Pauly Jail Building and Manufacturing Company, St. Louis, bought the rights to the Haugh and Brown patent and continued to improve upon their original design. The Pauly firm built an additional twelve rotary jail and sheriff's residences. Charles H. Sparks, an agent for the Haugh firm, briefly continued to sell rotary jails as an independent agent for the Pauly Company. In contrast to Haugh, Ketcham and Company Iron Works, the Pauly Company was strictly a design-build contractor that specialized in jail construction. It appears that the Pauly firm worked from a catalog of set plans and infrequently used independent architects to design their buildings.[75] While reasons for this sale are unknown, there is some speculation that Haugh had family problems and needed to sell the company.

The Pauly Company was a family-owned business operated by two brothers, Peter Joseph (P. J.) and John Pauly.[76] The brothers worked as journeymen blacksmiths in the foundries of St. Louis shortly after their arrival in 1846 from Koblentz, Germany. It was not long before they went into business for themselves, where they became highly regarded up and down the Mississippi and Missouri Rivers for their work on steamboats. As the steamboat trade dwindled, the brothers decided that jail construction would be their next business venture.[77] After the Pauly Jail Building and Manufacturing Company acquired the rights to the Brown and Haugh rotary jail patent, they went on to build the remaining twelve rotary jails constructed between 1887 and 1888. The Pauly Company's internal architectural division headed by P. J. Pauly, Jr., drafted the designs for the later rotary jails. The Pauly Catalog of 1888 offered more than six-hundred jail designs from which to choose, many of which were adopted from the original Haugh and Ketcham catalogs. A list of rotary jails built prior to 1886 by the Haugh and Ketcham Iron Foundry appeared in the Pauly catalogues dating between 1887 and 1889, perhaps indicating that the Pauly Company took over all of the existing Haugh and Ketcham contracts for the maintenance and improvements of their previously installed rotary systems.[78]

---

[72]"The New Jail," *The Appleton Post,* 12 August 1886, n. p.

[73]Douglas K. Miller, "The Salt Lake County Rotary Jail," *The Utah Historical Quarterly,* Fall 2007, Vol. 75 No. 4, 327, 338.

[74]Fox Valley Memory, Atlas 1917, 105. Accessed online, http://www.foxvalleymemory.org/

[75]*The Pauly Jail Building and Manufacturing Catalogue*, 1888-89. A reference to a catalog published in 1882 under the title *Patent Rotary Jail Company of Chicago, Illinois* was located at the University of Chicago, but the catalog, itself, was missing from the collections. Included in the card catalog was a ". . . description of the patent rotary steel jail (file and saw proof) the only steel jail in existence from which prisoners have not escaped" by Chas. H. Sparks. If located, this catalog, a 16 page booklet with illustrations, may shed more light on the history of the rotary jails as constructed while under the ownership of Haugh and Ketcham Iron Works.

[76]"The Pauly Jail Building and Manufacturing Company," *The Industries of St. Louis* (St. Louis: J. M. Elstner & Company Publishing, 1887), 82.

[77]E. D. Kargau, "Pauly Jail Building & Mfg. Co," *Mercantile, Industrial, and Professional St. Louis* (St. Louis: Nixon-Jones PTG. Company, 1902), 311-313.

[78]The Pauly Company also assumed control of the maintenance contracts for the first six rotary jail cages and mechanisms.

Pauly and his successors held numerous patents, primarily improvements to components like grating designs, lock systems, door mechanisms, and numerous other patents of equipment used in general prison design and technology.[79] The Pauly firm also developed a few of their own rotary patents as improvements to the original rotary jail design. Patent No. 390,093, issued to Peter J. Pauly, Sr. on September 25, 1888, redesigned the stack that extends from the top to the bottom of the center iron support and changed the way human waste flowed from the top to bottom tier of jail cells, then to drains in the basement. This improvement prevented the waste disposal system from clogging.[80]

The Pauly Jail Building and Manufacturing Company built twelve rotary jails between 1887 and 1888. The last rotary jail opened at Pueblo, Colorado, in 1889. It is unclear why or exactly when the marketing of the rotary jail design was abandoned. Images have been located for nine of the twelve Pauly Rotary Jails.

1. Rapid City, Pennington County, Dakota Territory (non-extant), was built sometime between 1885 and 1887 although the number of tiers is unknown, the legible portion of the contract states there were ten cells.[81] South Dakota did not receive statehood until November 1889. In 1897, a fire broke out but the building survived and was used until 1921, at which time it was razed to provide a site for a new courthouse and jail.[82]

2. Williamsport, Warren County, Indiana (non-extant), was built sometime during 1886-1887 and was found listed in a Pauly catalog.[83] A short history of a jail facility in of Warren County gives a grim description of a rotary jail cage: "Warren County cannot be said to have a jail. The only means of confining prisoners is in the basement of the Courthouse. These are fitted up quarters for both men and women. Those provided for the women are little more satisfactory than those for the men, which consist of eight cells arranged in a revolving cylinder in one of the basement rooms." [84] This is the extent of the information found for this facility.

3. Sherman, Grayson County, Texas (non-extant), contracted for a new rotary jail on February 19, 1887. According to the contract, the jail consisted of two tiers and possibly ten cells per tier. This jail was built in 1887 at a cost of $100,000 and may have included some regular block style cells in addition to the rotary unit as it was designed to hold 100 prisoners. There was a dungeon cell in the cellar designed to contain difficult prisoners. After having trouble with the turning cell system, the cells were torn out and regular cells with key openings installed. This jail was closed by 1936 and later demolished.[85] A new courthouse built in 1936, included a jail.[86]

4. Burlington, Chittenden County, Vermont (non-extant), was built in March 1887. It was located on the corner of Main and Winooski in the town of Burlington. The jail and residence was described as a "neat two-story, mansard roof brick building."[87] The rotary jail cylinder had ten cells while the front of the building was

[79]"The City of St. Louis and Its Resources," *St. Louis Star-Sayings,* 1893 (St. Louis: Continental Printing Company 1893), 35.
[80]Patent No.390,093, available online http://www.uspto.gov/patft/index.html
[81]Contract, "Rapid City, North Dakota," Rotary Jail Museum Archives, Crawfordsville, Indiana, n.p.
[82]Pennington County, South Dakota, Jail History. Accessed online, 6 October 2010, www.penningtoncountysheriff.com
[83]Pauly Jail Building Catalogue, 1888, Archives of the Pauly Jail Company, Indiana. No further information was found on the initial search.
[84]Williamsport –Washington Township Public Library, *The Warren Republican* 1 January 1901. Accessed online, October 2013. http://www.wwtpl.lib.in.us/HistoryRecordView.aspx?historyRecordID=2503
[85]Grayson County Jail, 1887-1929, Grayson County TXGenWeb, Accessed online, November 2013. http://www.rootsweb.ancestry.com/~txgrayso/photo3.html
[86]Sherman TX, Contract for Rotary Jail, Archives, Rotary Jail Museum, Crawfordsville, Indiana.
[87]Joseph Auld, *Picturesque Burlington: a handbook of Burlington, Vermont, and Lake Champlain,* (Vermont: Free Press Association,

the sheriff's residence and office with the women's jail included. No floor plans or images have been located. The date of demolition is unknown.

5. Gallatin, Daviess County, Missouri (extant but historic integrity compromised), was constructed April 1887. The jail consists of one tier with eight cells. It closed c. 1979 and later was dismantled. Beginning in 1984, the jail cage and mechanism were reconstructed, and the building rehabilitated by Restoration Architects according to *The Secretary of the Interior Standards for the Treatment of Historic Properties*. The building now serves as a museum for the Daviess County Historical Society. It was listed on the National Register of Historic Places on February 23, 1990.

6. Salt Lake, Salt Lake County, Territory of Utah (non-extant), was constructed in May 1887 and located at 268 West Second South Street next to the county courthouse. Utah was admitted to the Union on January 4, 1896. The building was two-stories with a two-tiered cage containing ten cells per tier. The basement contained two cells and was referred to as the dungeon. In 1911, the rotary jail was still standing, but the Sanborn Map of that time listed the jail as vacant and the residence as being occupied. By 1927, the jail portion had been removed but the sheriff's residence was still occupied as an apartment/private residence. It was demolished in August 1927 to make room for a new county jail.

7. Oswego, Oswego County, New York (non-extant), was built in 1887. The number of tiers and cells is unknown. The rotary cage was electrically operated. The electric button often malfunctioned, however, which caused prisoners and sheriff alike distress in getting the prisoners fed via the only grub-hole available. Without the turnkey the cells could not be accessed.[88] The jail was condemned and closed in 1909. Its demolition date is unknown.[89]

8. Dover, Strafford County, New Hampshire (non-extant), was built in January 1888. While the number of tiers is unknown, historical data states there were fourteen revolving cells with an attached sheriff's residence. The jail was torn down in 1918 for scrap metal, which was used to help the war effort during World War I.[90]

9. Wichita, Sedgwick County, Kansas (non-extant), was built in April 1888. The residence had two stories with a basement and attic, with the sheriff's residence located on the southern portion of the building. It was located in the same block with the county courthouse, on the southwest corner of North Market and East Elm.[91] The jail featured two tiers with ten cells per tier. The cells are described as being eight feet six inches in length, twenty-two inches wide at the back of the cell and six feet six inches at the opening. In 1917, twenty-six Industrial Workers of the World (IWW), more commonly known as Wobblies, were confined at the Sedgwick County jail for several months under federal indictment for wartime conspiracy. Some of the IWW's members were held as long as two years. Apparent mishandling of the case by government attorneys led to the extended stay.[92] The most famous prisoner held at the Sedgwick County jail was temperance activist Carrie Nation, who

---

1893), 5. Google eBook, Accessed online, October 2013.
https://play.google.com/books/reader?id=S9c3AQAAIAAJ&printsec=frontcover&output=reader&authuser=0&hl=en&pg=GBS.PA53

[88]Miller, *The Utah Historical Quarterly*, 337.

[89]*Ibid.* 327, 338.

[90]Dover Public Library, "Strafford County Jail/The Revolving Jail." Accessed online, January 2010, http://images.dover.lib.nh.us/DOVEHISTORY/strafford_county_jail.htm

[91]Sanborn Insurance Maps, "Wichita, Sedgwick County, Kansas: November 1892," Digital Sanborn Insurance Maps: 1867-1970, Accessed online October 2013, Plate 4, Kansas City Public Library, Kansas City Missouri. http://sanborn.umi.com.proxy.kclibrary.org/ks/3114/dateid-000004.htm?CCSI=121n

[92]Larry Edward Riedlinger, "Jails and the Correctional Movement in Sedgwick County," Thesis, Wichita State University, 1978. 13.

was sentenced to three weeks for causing a disturbance. In 1919, complaints of inadequate medical care and unsanitary conditions led Joseph Fishman, a Justice Department Prison Inspector, to call it one of the three worst jails he had ever seen, stating that "[Sedgewick County Jail] …was unfit for an animal let alone any human beings."[93] The jail was demolished in 1919.[94]

10. Pueblo, Pueblo County, Colorado (non-extant), began construction of their new county jail in July 1888 at 1501 Martin Street. The contract called for a jail that would contain thirty-seven cells.[95] The rotary portion featured two tiers with ten cells per tier. The description offered in the Pauly catalog, states that the Pueblo County Jail was the largest of the Pauly Rotary Jails built. The Pueblo Jail building featured a third story, but this did not include the rotary cage, which extended only two stories. The third floor held separate housing for women and children, as well as a hospital cell. The cost of construction was approximately $80,000.[96] Taking fourteen months to construct, the first prisoners arrived on September 6, 1889.[97] The rotary cages were dismantled in March 1969, a year after the building was sold to Rabbi Nathaniel Pollack for a sum of $2,400.[98] The building served as a private residence for many years and has since been demolished.[99]

11. Waxahachie, Ellis County, Texas (extant, substantially altered) was built in November 1888. The building is located in the 200 block of Rogers Street within the Waxahachie Historic District. The jail had two tiers with ten cells per tier. Beginning in 1929, the building served as the home of the Relief Work Commission during the Great Depression. It has continued to house a variety of commercial businesses including law offices.[100] While the building still stands, the cage was dismantled and sold. One source stated that the iron was used in the construction of the Ellis County Zoo, however, this information could not be substantiated. The jail and sheriff's residence is listed with the Texas Historical Commission and is included in the Ellis County Courthouse Historic District, which is listed in the National Register of Historic Places.[101]

12. Charleston, Kanawha County, West Virginia (non-extant), December 1888. From a photograph found in a 1901 publication, it appears that this rotary jail and sheriff's residence was a two-story brick building possibly with a two-tier cage. The cost of the jail was stated to be $37,500. The date of opening was not found but it appears to be the last rotary jail constructed. The number of cells per tier, as well as the date of demolition, is unknown.[102]

---

[93] *Ibid*.

[94] *Ibid*, 10-14.

[95] Contract, Pueblo County, Colorado, and Pauly Jail Building and Manufacturing Company, St. Louis, July 30, 1888, located in Archives, Rotary Jail Museum, Crawfordsville, Indiana.

[96] Ken Clark and LaJean Chance, "Pueblo County Jail with Rotary Cell Unit," Reprinted from *Pueblo Lore* May 2009, 5.

[97] *Ibid,* 6.

[98] "Dismantling Started on the Old Jail in Pueblo," *Pueblo Chieftain* 6 Mar 1969, n. p.

[99] Pueblo County Assessors Records. Accessed online, August 27, 2010. http://maps.co.pueblo.co.us/pueblocounty/default.aspx?findvalue=525224017&Layer=Parcels

[100] "The Old Jail," Article obtained from archives located at Rotary Jail Museum, Crawfordsville, Indiana.

[101] Ellis County Courthouse Historic District, April 23, 1975, National Register of Historic Places Program: Research, Accessed online October 2013, http://www.cr.nps.gov/nr/research/

[102] Charleston Chamber of Commerce, West Virginia, *The century chronicle devoted to the capital city: its history, resources and natural advantages* (Charleston: The Chamber, 1901), 27. (Google eBook) Accessed online October 2013. http://books.google.com/books?id=uHQtAAAAYAAJ&dq=Charleston,+Kanawha+County,+West+Virginia+Jail&lr=&source=gbs_navlinks_s

P. J. Pauly's great-great grandsons, Robert James Pohrer and Joseph Pauly Pohrer III continue the family operation in four locations. The corporate office is located in Noblesville, Indiana, with three branch offices in Gulfport, Florida, Weldon Springs, Missouri, and St. Louis, Missouri.[103] While the firm maintains a few copies of documents that survived through the years, there is very little original data. Most of the company records that were stored in a warehouse located at 500 Huber Park Court, Weldon Springs, Missouri, were lost to fire in the late-1990s.[104]

The Importance and Demise of the Patented Rotary Jail

Jails constructed during Reconstruction typically could be found in the basement of a county courthouse or within a sheriff's residence. The footprints of these facilities were either square or rectangular in shape and included small stationary cellblocks lined up in rows. The number of cells could range from a single to multi-storied facility. This type of jail often required a large staff that had constant contact with the prisoners. The invention of the rotary jail was one of the most unique and innovative designs in jail construction in U.S. history and was a radical departure from the jail buildings more commonly found in county jail architecture. The unusual structure led to inventive nicknames such as, the Merry-Go-Round jail, the Lazy Susan, and the Squirrel Cage jail.

The Rotary Jail illustrates a historic perspective on the use of technology and engineering as one design for an efficient and economical county jail facility during the late 19th century. Social reform, economics and technology were the driving forces that shaped the concept and subsequent invention of the rotary jail into a unique and American building type. One major difference in the Rotary Jail design when compared to typical prisons prior to 1880, addressed the need for privacy by designing separate cell space to hold women and children as seen on the second level of the Montgomery County Rotary Jail. The architect, E. J. Hodgson, was likely inspired by his father Isaac's design for the Indiana State Women's Reformatory of 1871, which was purposely constructed to segregate female prisoners from the male prison population.

Economical in its operation, the design of the rotating system of cells isolated prisoners individually and also protected the jailer from the jailed. The design made it possible for one person to operate and secure a prisoner. In the absence of the sheriff, only one additional person was needed to feed and provide water to the inmates. Often this duty fell to a member of the sheriff's family. Its design greatly reduced the need for additional police officers, which made it cost effective and an ideal jail type for small rural counties.

The design and construction of the Montgomery County Rotary Jail and Sheriff's Residence relied heavily on the technology of the patented rotational cell cage system resulting in what is primarily, a patent driven building type. Although the rotary jail and sheriff's residence were similar architecturally to many other county jails built after the Civil War, the patented rotary cage unit made the eighteen rotary jails uniquely different from all other jails of the same period. The design for the jail portion of the building's envelope was determined by the rotary patent in direct relation to the size of the cage unit. As a major manufacturer and supplier of ironwork for the construction of jails, Haugh and Ketcham Iron Works Company strove to provide the best product for the best price possible. Their expertise in the design of safe inescapable jail buildings demanded a high level of knowledge that utilized the latest technology. Haugh and Brown offered a five-year warranty in their construction contract, a testimony to their confidence in the rotary jail design.

[103]The Pauly Jail Building Company. Accessed online, May 5, 2010. paulyjail@ind.paulyjail.com
[104]Interview, Joe Pauly Pohrer III, Nobelsville, Indiana, November 24, 2009.

Patented in 1882, the rotary jail was a progressive design for the late 1800s that appeared safe, secure, and easy to operate on a limited budget. From initial invention, it went into production as an untested system. While the rotary jail was an immediate success for each of the eighteen county locations, its functionality was short lived. The first problems arose with the stability of the rotary mechanism and the central shaft. Settling of the building caused the rotary cages to shift off balance, which in turn interfered with the rotational mechanism. William Brown later attempted to address this issue with an improvement to the original patent with Patent No. 360,508 as used in the rotary jail built in Pottawattamie County, Iowa, in the hope that the column could be stabilized.

Later, as the counties grew, crime markedly increased. There was a tendency to overfill the cell beyond its capacity of two persons per cell as originally intended. The additional weight, presented from overcrowding, caused further problems to the balance of the mechanism. Even repositioning the support system of the rotary column, from a bottom support to a top down, could not solve the problem of overcrowding.[105]

The plumbing system often caused problems when the flush system was neglected. Mismanagement of the toilet stack occurred when it was not flushed daily by the jail staff. The resulting health issues were often cited as the reason for abandoning the use of and eventual demolition of several of the rotary jails.[106] In 1888, the Pauly Jail Company attempted to improve the valve system of the original jail with a patent improvement to the flush valve. However, the valve remained workable only if the jailer provided time for proper maintenance. A majority of these eighteen jails closed because of health issues caused by improper ventilation from blocked toilet stacks.

Heating and cooling the rotary cage area was difficult due to the large area of steel plating, and as a result, the jail was an oven in the summer and a refrigerator during the winter months. The rotary jails that remained open after 1940 were retrofitted with proper heating and cooling systems. Perhaps one reason that the Montgomery rotary jail was able to maintain its longevity was because of the separate power house, constructed in 1887 that was built to address the heating needs of Indiana winters.

Issues of safety for the prisoners became evident as the years progressed. Stories of inmates falling asleep with an arm or leg hanging outside the cell resulted in severe injury or loss of limb. In addition, the open space surrounding Montgomery County's two-story cage was seen as a potential hazard in the safe evacuation of prisoners in case of a fire. In 1938, the Montgomery County commissioners, at the behest of the fire marshal, chose to weld the mechanism in place and install a concrete floor at the second level. New doors were installed on each cell. These changes to the operation gave the Montgomery Rotary Jail another thirty-five years of use. The jail closed completely in June 1973.

The renovation and restoration of the Montgomery County Rotary jail and Sheriff's Residence beginning in 1975 resulted in the restoration of the rotary mechanism, thereby making it the only operational rotary jail in existence. This jail stands as a testament to the spirit of invention as applied to problem solving during a time in U.S. history when the application of science and technology supplied economic answers to many of the social needs of a growing society.

Comparative Analysis of Extant Rotary Jail and Sheriff's Residences

[105]Brown's application of Patent No. 360,508 was used in the construction of the Pottawattamie County Rotary Jail and Sheriff's Residence.

[106]This was a huge factor in the demolition of the rotary jail in Wichita, Sedgwick County, Kansas.

The Montgomery County Rotary Jail and Sheriff's Residence was the second facility of its kind to open in the United States and possesses the only remaining rotary mechanism that still functions. Three other rotary jail buildings remain extant, but with varying degrees of historic integrity. One was manufactured by Haugh and Brown and the remaining two were constructed by the Pauly Jail Company.

Council Bluffs, Pottawattamie County, Iowa: 1884

The well-known architectural firm of Eckel and Mann, of St. Joseph, Missouri, designed the envelope for the Pottawattamie County, Iowa, rotary jail. Haugh, Ketcham and Company of Indiana, as with the first six rotary jails, constructed and oversaw the installation of the three-tier rotary jail cage. Although construction plans began late in 1882, the building was not completed until late 1884 due to a county tax issue that warranted voter approval on two separate occasions. Being the largest Iowa county in size, Pottawattamie residents in the northeastern half of the county wanted the jail built there. The agreement and final vote for the construction of a rotary jail in Council Bluffs also included a second or sub-courthouse and jail to be constructed in Avoca, Iowa.[107]

By the time this jail was built, William H. Brown had filed Patent No. 360,508 as an improvement for the installation of the structural support system, changing it from a bottom support to a suspended support from the attic level. This proved to be a better system for supporting the cage unit. This rotary jail survives as the largest extant rotary jail having a configuration of three-stories with ten cages per story. It had the capacity of housing up to sixty prisoners, allowing for two prisoners per cell. This jail also included a solitary confinement cell located on the first or main level of the jail.

Unlike the Montgomery County Rotary Jail, where the column of the cage was welded into place in 1938, the Pottawattamie column was operational until 1960, when it was cemented in place. New doors and flooring were also installed in 1960. The jail remained in use until 1969 at which time prisoners were relocated to a new, more traditional Pottawattamie County Jail.

The interior layout of the sheriff's residence and access to the jail area was very different in Pottawattamie County. While the Montgomery facility included a formal living room and dining area with a large kitchen, with spacious living quarters on the second floor for the sheriff and his family; the Pottawattamie facility is more utilitarian by design. The first floor includes office space with a rather small kitchen area that also provides the traffic access to an outdoor exercise yard that wraps around one-third of the building to the rear. The second floor, sparse and devoid of any embellishment, contains two bedrooms. The same stairway used to access the upper levels of the jail also provides access to the living quarters of the sheriff and his family. The Pottawattamie facility presents a stark illustration of the grittiness of a nineteenth century sheriff's job.

The architecture of the Pottawattamie County Rotary Jail features elements of Italianate and Romanesque Revival in lieu of the Eclectic approach used by E. J. Hodgson in the design of the Montgomery County facility. Pottawattamie County Rotary Jail has been well maintained over the years and remains in good condition. It was listed on the National Register of Historic Places on March 16, 1972 and documented for the Historic American Buildings Survey in 1980.

[107]Ryan Roenfeld, "Early Days at Avoca, Pottawattamie County, Iowa," Historic Society of Pottawattamie County, Iowa, On-line, http://www.thehistoricalsociety.org/avoca.htm The courthouse and jail located in Avoca were built in 1885 and resembled the courthouse in Council Bluffs that was demolished for the construction of the rotary jail. Like in the old courthouse, the new jail was located in the basement.

The restoration of the Montgomery County Rotary Jail has given that facility a somewhat sanitized appearance, in comparison to the Pottawattamie facility, which retains a certain air of use and smell, leaving the essence of incarceration within its walls. Graffiti, left behind by inmates occupying the cells from earlier decades, remains untouched and is scattered across the walls of the cells and bullpen recreation area. Like the Montgomery County Rotary Jail, this facility currently serves as a museum and is home to the Pottawattamie County Historical Society.

Gallatin, Daviess County, Missouri: 1887

The Pauly Jail Building and Manufacturing Company constructed this one-story rotary jail and sheriff's residence in 1887. J. P. Pauly, Jr., was the architect whose sketch for a similar style appears in the Pauly Jail Catalog circa 1888. This is the smallest of the extant rotary jails. Had the original cage been left intact, this facility would have been the only remaining example of a rotary unit built by the Pauly Jail Building and Manufacturing Company. As retrofitted during the renovation process, the jail consists of one tier with eight cells and sits within the original octagonal shaped building envelope. The sheriff's residence is two-stories.

Where the Montgomery County Rotary Jail provided a vision of an elegant lifestyle for the county sheriff within a residential neighborhood, the Daviess County Rotary Jail provides what is perhaps a more typical example of a very plain rural county jail of the period. Architecturally, it is very simple and lacks any embellishment or outstanding features.

The cage and turntable were removed in 1964 and replaced with block style cells.[108] This facility operated as Daviess County jail until it closed in 1979. The building remained in use as a dispatch center and provided a residence for the deputy sheriff until 1980. Unlike the facilities in Montgomery County, Indiana, and Pottawattamie County, Iowa, this building was substantially altered in 1984 when the rotary cage was reconstructed with a non-original replication. This, along with the removal of the rotary cage in 1964, compromised the historic integrity of the facility. It was listed on the National Register of Historic Places in 1990 at a local level of significance.[109] The building now serves as a museum for the Daviess County Historical Society and is open for tours.

Waxahachie, Ellis County, Texas: 1888

The Ellis County Rotary Jail and Sheriff's Residence in Waxahachie, Texas, is located in the 200 block of Rogers Street within the Waxahachie Historic Court District. This jail was originally very similar to the floor plan of the Montgomery Rotary Jail. Two cells used for "solitary confinement, were situated in the basement [where] perpetrators of heinous crimes were placed."[110] The smaller of the two rooms included four iron rings attached to the floor and wall used for locking down a solitary prisoner. In addition, "the whole area of the jail lot was enclosed by a fence of iron bars, eight-foot high on the sides and extending to the back of the yard. In the front of the jail the fence was only four feet high."[111]

[108]Jim McCarty, "The Squirrel Cage: Gallatin's Rotary Jail Was No Place To Do Time," Rural Missouri, June 1987, 9.
[109]Cydney Millstein, "Daviess County Rotary Jail and Sheriff's Residence," National Register of Historic Places Nomination, United States Department of the Interior, National Park Service, February 23, 1990.
[110]John Hancock, "Ellis County Jail: 1888," Online, http://www.rootsweb.ancestry.com/~txecm/index.htm#historical%20info
[111]Ibid.

This rotary jail had two tiers with ten cells per tier for a capacity of twenty prisoners, as compared to the Montgomery rotary jail that featured two tiers with only eight cells per floor. The Waxahachie rotary jail was closed prior to 1929 when it was replaced by a much larger jail. During the Great Depression, the old rotary jail building served as the home to the Relief Work Commission.

In October 1941, a bid was accepted for the removal of all metal from the jail. The cages were dismantled at this time, although the building envelope remained in place until 1947, when the jail property was sold at public auction. Thomas Hipp, owner of an automobile business, purchased the building and began making structural changes to accommodate his business. The sheriff's residence, which remained largely intact with a few interior alterations, became Hipp's residence. The jail was substantially altered when Hipp removed the entire two-story section that once housed the rotary cage to accommodate his garage and office space. A lift for raising cars was installed in the basement.

The building, as it stands today, is dominated by a round turret and conical roof, visible at the main façade. It is in very good condition but lacks historic integrity as a rotary jail. Over the decades, it housed a variety of commercial businesses and at the time of this writing, provides office space for a law firm.[112] The Ellis County Rotary Jail and Sheriff's Residence is part of the Ellis County Historic Courthouse District in the Waxahachie Multiple Resource Area which was listed on the National Register of Historic Places on April 23, 1975.[113]

CONCLUSION

The Montgomery County Rotary Jail and Sheriff's Residence is nationally significant under NHL Criterion 4, Theme III Expressing Cultural Values, for its distinctive architecture and design that combines a sheriff's residence with a unique form of incarceration as presented in the form of the patented rotary jail. The property retains a very high degree of historic integrity for the period 1882 to 1938, when the rotary jail operated as originally designed. The property is one of only two extant rotary jails that have survived since the inception of the engineering and technological design patented in 1881 by Haugh and Brown. In addition, as the oldest rotary jail and the most elegant in design, this is the only rotary jail that possesses a functional rotary mechanism. Although disabled in 1938, the machinery has been fully restored. Stewards have preserved the property in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

The eighteen rotary jails constructed in fourteen states between 1882 and 1888 represented a transitional phase during a period when the United States prison system was under growing criticism as a brutal form of punishment for the incarcerated. The rotary jail design was seen as a way to offer security for county governments while implementing a more humane form of incarceration for the prisoners. Although many jails of the period included the sheriff's residence, which was an accepted, cost effective and convenient system of law enforcement during the mid to late nineteenth century, the uniqueness of the rotating jail cell added a dimension of technology that had not been seen prior to that time nor after.

The unusual design of the jail represents NHL Theme VI, Expanding Science and Technology, as an example of the use of technology to address the economic and social changes in rural America. Antebellum technology was rudimentary when compared to the explosion of new technology, innovative design, and the entrepreneurial

[112]"The Old Jail," Article obtained from archives located at Rotary Jail Museum, Crawfordsville, Indiana. See also; Ellis County Jail 1888, On-Line, http://www.rootsweb.ancestry.com/~txecm/ellis_county_jail_1888.htm and http://www.virtualtourist.com/travel/North_America/United_States_of_America/Texas/Waxahachie-881856/Things_To_Do-Waxahachie-Ellis_County_Jail-BR-1.htm
[113]"Ellis County Jail: 1888," Online, http://www.rootsweb.ancestry.com/~txecm/index.htm#historical%20info

spirit that led to an increased number of patent applications submitted to the U.S. Patent Office after the Civil War. Benjamin F. Haugh, the owner of a large steel and iron manufacturing firm, was also an inventor. When he joined forces with William H. Brown, the two men developed their patent for the rotary jail.

The rotary jail's unique design is a reminder of the ingenuity that abounded at the beginning of the Industrial Revolution in the United States, applying technology to social and economic problems. Until the introduction of the rotary jail technology in 1882, county jails resembled much smaller versions of typical state penitentiary facilities. It was not unusual for jails to contain living quarters for a guard staff or as in the case of county level facilities, a residence for the sheriff and his family, yet did not feature the distinctive rotary jail portion within the building envelope. What makes the architecture of the building unique is the polygonal or octagonal space designed to house the round cell cage of the patented rotary jail. The innovative rotary technology offered an economic solution to small county government systems by solving the problem of costs incurred from the necessity of incarcerating local lawbreakers. Additionally, it was the intention of Haugh and Brown that their invention offered a safe, secure, and humane structure for the purpose of incarceration as a scientific means of addressing the social reforms of the prison system during the late nineteenth century.

Furthermore, aside from the unique rotary portion, it is interesting to note that the Montgomery County Rotary Jail and Sheriff's Residence, designed in 1882, representing a key high style architectural expression in a residential neighborhood consisting of modest and large single-family residences. As representative of popular architectural trends, the Montgomery County Rotary Jail and Sheriff's Residence remains a fine example of the American eclectic design before the advent of Richardsonian Romanesque and the Colonial Revival. While it includes a jail in its overall highly textured building envelope, it was designed to blend in with the surrounding architectural environment. Even today, with the changing landscape of the neighborhood, the Montgomery County Rotary Jail, executed in masonry and stone, stands as a key component in the historical and architectural legacy of Crawfordsville, Indiana.

6. PROPERTY DESCRIPTION AND STATEMENT OF INTEGRITY

Ownership of Property
Private:
Public-Local: x
Public-State:
Public-Federal:

Category of Property
Building(s): x
District:
Site:
Structure:
Object:

Number of Resources within Boundary of Property:

Contributing	**Noncontributing**
Buildings: 2	Buildings: 0
Sites: 0	Sites: 0
Structures: 0	Structures: 0
Objects: 0	Objects: 0
Total: 2	Total: 0

PROVIDE PRESENT AND PAST PHYSICAL DESCRIPTIONS OF PROPERTY

Site

The site surrounding the Montgomery County Jail and Sheriff's Residence is flat with a grass lawn. At the east boundary is a curved, two-foot-high iron fence that dates to the building. Perennial flowers and bushes frame part of this façade, as well as the north and south facades. A wide gravel drive separates the jail and residence from the Tannenbaum Center. Here, a variety of perennials including boxwoods and junipers are placed at the mulched grounds at the north façade. Similar plants are scattered along the south end of the grounds at the east façade and at the grounds of the south façade. A metal sign with the building's name is placed close to the north or main façade entry. A gravel alley is located at the buildings western boundary and separates the Tannenbaum Center from a surface parking lot and a U-shaped one-story commercial building.

Exterior

Designed in a boldly articulated expression of primarily Gothic-influenced styles, the Montgomery County Sheriff's Residence and Rotary Jail typifies the hallmarks of the vibrant architectural tastes characteristic of the 1870s-1880s. The building is constructed of masonry bearing walls; roof-framing members are wood. Characteristic features include a prominent hipped roof with lower cross gables, contrasting brick and stonework, checkerboard detailing at the gable end of the main or east façade, a partial-width porch with incised ornamentation and spindle work supports. Asymmetrical in overall design, the Montgomery County Sheriff's Residence and Rotary Jail displays standard face brick, rough and smooth limestone, and decorative wood bracketing at the cornice. The original slate roof, two brick chimneys (at the north and south sides of the residential portion of the building), lightning rods and a decorative venting cupola over the jail were removed at various dates. An accessible ramp has been added to the rear of the building.

The façade of the building faces east and provides the main entry to the two- and one-half story sheriff's residence. At the intersection of the front facing gabled bay and the entry bay is an asymmetrically placed, one-story entrance bay with a gabled roof. Access to the sheriff's residence is through a wood frame, double door entry with transoms, restored to the original design. Architectural detail accenting this entrance includes engaged composite columns that flank the door. Above the door is a zigzag embellished stone lintel and brick corbelling set above a banded, polychromatic stone arch. The date of 1882 and the names of the county commissioners in office at the time of construction are carved into the blind arch. A series of concrete stairs lead directly to the door and are accentuated by prominent domed newel posts displaying circular patterning on each side.

To the south of the entry bay is a two-and-one half story projecting wing with slender one-over-one, double-hung sash tripartite windows at the first and second floors. A half-round multi-paned window at the attic level is set in a corbelled gable with a checkerboard inset, echoing the polychromatic display at the gabled entrance. North of the entry bay is a small porch with paired, turned columns painted polychrome. There are jigsaw panels between each column and paired carved brackets at the roofline. The porch entablature displays zigzag patterning at its base. The porch shelters paired windows with limestone labels and sills at the first floor that match the fenestration of the south bay.

Featuring limestone hood molding, string-coursing and quarter-round windows at the attic level the detailing of the far east bay of the north side echoes that of the main façade. Fenestration, defined by single windows, is double-hung, one-over-one wood frame and flanks the remnant of the original two-and-one half story chimney that now terminates below the gabled attic level. Here, checkerboard patterning further articulates the gable end. A two story, one-bay unit which functions as the turn-key area, features a single-leaf door with stone surround at the center bay of the north side and is recessed from the east bay. A single, one-over-one-double-hung sash window with stone surround and sill is located above the entrance.

The rear of the building, where the two-and-one half story rotary jail portion is located, is octagonal in shape. Each canted corner, marked by single window units set in thick stone surrounds, measures six feet, while the bays featuring gabled dormers, each measure 26 feet. The pyramidal roof covering the jail portion is steeply pitched and features non-original asphalt shingles. Three prominent gabled dormers mark each side of the rear unit where the jail is located.

Windows at this rear location are double hung on the first floor and fixed on the second floor. Tripartite fenestration marks the north, south and west walls. Tripartite window units, deeply recessed below a segmental arch, are set below carved stone piers that divide the windows. The bottom portion of the stone arch is articulated with a carved triangular corbelling motif, while the whole is flanked by buttresses embellished with stone amortizements and crowned by a thin stone arched surround above the brick headers.

Above each tripartite unit is a steeply pitched gabled dormer, within which is a deeply recessed, semicircular arched window. Above the window is a semicircular arch made of brick voussoirs. The window is fixed and divided into six separate units. Thick wood mullions evenly divide the window units, while a stone muntin horizontally divides the units, creating larger units above, and smaller units below. Brick corbelling and a diamond-patterned panel set at the apex of the gable further embellish the exterior. Large carved wood brackets are mounted at the sides.

The south side of the building displays the same detailing as that of the south wing of the main or east façade; however, instead of the tripartite fenestration configuration, the windows are paired and embellished with

limestone hood molding. The gable end matches that of the east façade, as well.

Other features of the exterior of the rotary jail and sheriff's residence include stone string coursing throughout, which visually connects the first floor window sills and lintels with an intermediate course in between, tightly spaced carved wood modillions at the cornice, stone label molding and a prominent coursed, rough-cut stone foundation. The exterior remains in excellent condition and retains all of its historic features.

Interior

According to a 1994 article that appeared in *The Indiana Historian*, the "two-story circular cell unit rests on 16 roller bearings and by turning a hand crank, a series of gears and shafts are put into motion which enables the cell structure to rotate clockwise or counterclockwise around the central shaft."[114] This description is still accurate. The crank mechanism used to rotate the cells is located to the right of the outer door, which leads to the cells, placed in a narrow, recessed niche.[115] The outer door, made of steel, leads to an inner door made of steel bars. Both the lever and the crank used to turn the turntable, as described above, are operational.

Built to the specifications as noted above, the rotary portion of the building Montgomery County Jail features a two-story cellblock consisting of sixteen, triangular wedge-shaped cells, eight to a floor, centrally arranged around a central rotary mechanism. In other words, the rotary cage is held in place on a rotary shaft that extends from the cellar floor to the roofline. The cell block weighs approximately 54,000 pounds and is placed within a stationary, semi-circular cage bolted to the floor and ceiling. The cog and wheel mechanism that turns the cage is located in the basement while the turnkey area is placed on the first level in the jail vestibule, north of the original pantry area, now a bathroom. Also called the guardroom, the turnkey area is accessed through a separate entrance at the north side of the building.[116]

A concrete walkway, featured at the outer chamber of the basement level of the rotary portion, encircles the inner chamber and was originally designed as access to the coal chute placed at the exterior west wall. The coal chute was later infilled with limestone to match the foundation. The inner chamber of the basement level, which houses the center shaft, is formed by a curved brick wall (covered with mortar in 2011) that supports the weight of the bars surrounding the rotary cells, above. There are four arched openings in the inner chamber, placed equidistance at the north, south, east and west. While an east entry reached by a wood stairway provides access to the basement proper, these arched openings originally were designed to provide sunlight to the inner chamber through windows placed at the outer chamber wall prior to electrical connection to the building. Two short brick walls, placed at the west and north sides of the inner chamber, were originally used as overspill for coal.

The rotary portion measures approximately 21 feet in diameter and eight feet in height. Each cell, measuring eight feet across at the entry point, was originally equipped with a bunk bed furnished with a straw mattress, and a latrine, which doubled as a washbasin. The cells provided space for a total of 32 prisoners. Except for the original mattresses, these features remain extant and retain a high degree of historic integrity. A bullpen is

[114]Carole Allen, Janine Beckley, et. al., "Montgomery County's Jail Machine," *The Indiana Historian*, October 1994.

[115]After the jail closed in 1973, the hand crank was inadvertently thrown into the trash during a cleaning. It was found a year later in the city dump.

[116]Patent No. 244,358 for the rotary jail shows that the center column for the rotary mechanism was originally designed to balance from the floor upward, as built in the Montgomery County Jail. A patent filed in 1886 by William Brown revised this design with an improvement that suspended the center column from the roof downward in an attempt to correct problems caused by foundational settling that occurred in the original design.

placed outside the cells in leftover space between the outer wall of the jail building and the rotary cage. This area allowed prisoners some time outside of their cells. Originally, the only access to the individual cells was from one opening through the door off the turnkey area.

The entire first and second floors of the rotary cell block were exclusively for men, while the second floor of the building contained a women's cell wing for up to four women on the north side with a so-called "cell for the insane" on the south. The third story of the jail was to contain a hospital unit for sick and injured prisoners to be housed in three small cells, but instead was used as a temporary holding area for incoming prisoners. The third floor originally offered access to the top of the rotary axis in the event the cylinder needed balancing adjustment.[117]

During the 1930s, the Montgomery County fire marshals became concerned about the potential fire hazard of the jail and subsequently registered a formal complaint. Because of a Grand Jury investigation and the initial fire marshals' reports, in 1938 the rotary cylinder was welded to its stationary outer shell. The County Commissioners also ordered the jail cellblock "welded immobile following the injury of one inmate during the rotation of the cells."[118] Doors were cut into the outer cage for each of the pie wedged cells and a circular metal catwalk was built around the second level to provide egress from the cells. Ultimately, the doors were removed altogether, and prisoners were given unlimited access to the bull pen area outside the rotary cage.[119]

A separate jail entrance and lobby or turnkey area are located on the north side of the building. The two story, one bay brick exterior houses an open lobby that originally served as the turnkey's office. It is situated between the sheriff's living quarters and the rotary jail. Here, the sheriff's deputy, who also referred to as the turnkey, conducted administrative duties, received attorneys and visitors for the prisoners. Entry to the jail was through this jail lobby where the turnkey performed his duties and where the crank mechanism used to turn the rotary cage was located. The turnkey's office now displays artifacts associated with the historic jail. A steel staircase in this room leads to the second and third floors. The rooms located on the second floor, directly over the turnkey office, provided separate holding cells for women and juveniles, as well as the location of the drunk tanks, where inebriated prisoners were held temporarily.[120]

Much of the original interior spaces and detailing of the sheriff's living quarters remains intact. At the first floor, the front door opens onto a central hall that bisects the building. A straight run staircase is located on the south wall of the hall. The main staircase, built of butternut wood, features decorative newel posts and solid rail. To the north of the foyer is the formal parlor, measuring 300 square feet; and to the southeast is the family parlor room, also measuring 300 square feet. Each room features wood baseboard and ceiling molding, while the south parlor features a modest fireplace. To the west of the family parlor is the original dining room measuring 308 square feet. Except for the floor of the foyer, which is wood, all floors in these rooms are carpeted. The kitchen, measuring 206 square feet, is located to the rear of the dining room. The original pantry, located to the north of the kitchen, behind the dining room, is now a bathroom.

Three bedrooms and an office were originally located on the second floor off of the double-loaded hall which is placed directly above the first-floor hall. The bedrooms have been used for display rooms in the past, but more

[117]See "The Self-Guided Tour of the Old Jail Museum." Rotary Jail Museum.

[118]Dean, "The Construction of the Old Jail," 15; "Desire New Jail and Courthouse," *The Lebanon Reporter* 25 August 1938, n. p.

[119]Pamphlet, "The Old Jail Museum," Indiana Department of Commerce.

[120]Please note that the term, turnkey, is used for the sheriff's deputy who processed prisoners and the room or area where he conducted these tasks.

recently for office space and collections storage. The north bedroom, now museum storage, measures 176 square feet. The south bedroom, now an office, measures 307 square feet, while the southwest bedroom measures 204 square feet. Museum storage is also located in a room above the kitchen measuring, 210 square feet, and reached by a separate rear staircase. There are four additional rooms located at the attic level that are unfinished.
The basement level of the Sheriff's residence is accessed by the main stairway located off the dining room. A boiler room and two storage rooms (roughly ten feet by twelve feet) are placed directly beneath the two first floor parlor rooms at the east and north sides, and the main foyer of the residence. A smaller storage room, accessed through the west entrance to the kitchen, is placed below the dining room and bathroom of the first floor.

Power House

Heating was found to be problematic shortly after the opening of the Montgomery County Rotary Jail and Sheriff's Residence. In 1883, two radiators were moved from the third-floor hospital to the guardroom; the guardroom radiators were then moved to the women's and juvenile's cells. The original heating system was completely inadequate to provide sufficient heat during the cold Indiana winters.

Originally built in 1887 as a steam plant to heat the Rotary Jail and Sheriff's Residence and the Montgomery County Courthouse, as well, the power house building was designed and built by Sherman T. Craig of Crawfordsville for $2,645. J. H. Kirkhoff, Indianapolis, was responsible for designing the heating apparatus and for the construction of tunnels beneath the adjacent streets to carry the main and return pipes. The cornerstone of the power house was set on August 31, 1887, with the foundation being completed the next month. By December, the heating apparatus was fully operational. In 1928, new heating and plumbing was installed in the power house and a separate heating system was installed in the courthouse.[121]

The main façade of the power house, now serving as the Tannenbaum Cultural Center, faces north. A non-original double-door aluminum-framed entry, originally the location of a one-bay garage door, is set below a stone lintel and placed at the center of the main façade. It is flanked by segmental arched, four-over-one single hung windows with stone lug sills. Above the main entrance are three long and narrow multi-paned fixed windows placed above a continuous stone lug sill. Each window unit features a stone lintel; the flanking windows are shorter than the center unit.

A large brick chimney is placed at the east end of the building and features stone coursing at the bottom third. Fenestration on this wall repeats that of the main façade of the first story. Two ocular window units are placed at the south end of the east wall. Fenestration type and configuration of the east wall is repeated at the west end of the building. The south façade is articulated with segmental arched, four-over-one single-hung windows with stone lug sills at the east end of the first story and under the gable end of the second story. An additional single-hung window at the west end, matching that of the east end, is obscured by the gabled, one-story frame addition with weatherboard siding, constructed in 2010. The only articulation of this addition is a single-leaf metal door is placed at the north end of the east façade.

At the time this addition was constructed, the power house steam equipment was removed, and the building was

[121]Dean, "The Construction of the Old Jail," 12-14. Dean also points out that there was a stable and shed attached to the power house by the turn of the twentieth century, but it is not known when these structures were removed.

rehabilitated to serve as a community cultural center. Measuring approximately 1,570 square feet, the original plant featured a full first floor where the boiler equipment was located. The interior of the historic power house is one large room used for community activities. No walls were removed for this purpose. Large triangular trusses support the roof at the interior and hold four large tracks of fluorescent lighting. The 2010 renovation added a kitchenette, an accessible restroom, an art room with two kilns, and an attic area. An accessible ramp leads to the rear door of the Tannenbaum Center.

HISTORIC INTEGRITY

The Montgomery County Jail and Sheriff's Residence retains a high degree of historic integrity for the period of national significance, 1882 to 1938. The building remains in its original location at 225 North Washington Street, at the northwest corner of North Washington Street and East Market Street, now state highways 231 and 136, respectively. The Montgomery County Courthouse is located to the south at the northern edge of the city's downtown neighborhood. Over time, there have been changes to the surrounding environment of the historic property. As illustrated in an 1887 Sanborn Map, the Montgomery County Jail and Sheriff's Residence was sited in a neighborhood consisting of modestly scaled single-family residences along West Spring, North Washington, and the north side of West Market streets. Over the years, many of the residences were replaced with commercial properties. Today, the area adjacent to the Montgomery County Jail and Sheriff's Residence is mostly commercial.

The Montgomery County Jail and Sheriff's Residence reflects the historic function, technology, and aesthetics as it was originally designed by William H. Brown and E. J. Hodgson, with Haugh and Ketchum, in 1882. The form, massing and style of this distinctive building, including prominent hipped roof with lower cross gables; textures, patterning, and materials, with contrasting brick and stonework, checkerboard detailing, incised ornamentation and spindle work; and placement and configuration of fenestration convey the original intent of the architects and engineers of this historic property. Moreover, the slight changes to the exterior with the removal of two chimneys and a cupola, and interior of the jail with modification to the cell area when the rotary mechanism was welded in place and catwalk was added, as well as the residence when the original pantry was changed into a bathroom, have not diminished the building's historic design or its historic integrity. The rotary mechanism was restored and now operates as it did during the period of significance.

The historic property retains key exterior and interior materials from the original design, including brick, masonry, wood, and steel. The rehabilitation retained materials, per the *Secretary of the Interior's Standards for Rehabilitation*, rather than replaced them. The overall craftsmanship of this historic property, including brickwork, mortar joints, tooling, carving, ornamental detailing of the interior, especially the woodwork, and painting is of high quality. The skill required to manufacture the rotary portion of the jail, including cells, roller bearing, hand crank, gears, shafts, and of the outer, surrounding cage is reflected in these components and are representative of the era in which the facility was constructed. While the crank was once welded in place, its historic function has been fully restored. All the physical features of the property convey the intent, purpose, design, and character of this unique property, which served as the Montgomery County Jail from 1882 to June 1973.

The one-story power house, originally built in 1887 as a steam plant to heat the rotary jail and sheriff's residence, and the Montgomery County Courthouse, as well, was rehabilitated in 2010. All steam equipment was removed. The renovation added a room to the south, which features a kitchenette, an ADA accessible restroom, an art room with two kilns and attic area. The building now serves as the Tannenbaum Cultural

Center.

Rehabilitated and restored over the course of twenty years, beginning in 1975, the Montgomery County Jail and sheriff's Residence retains a high degree of historic integrity for the period of national significance. Ongoing stewardship of the property by the Montgomery County Cultural Foundation continues to preserve and maintain the building as a historic museum.

7. BIBLIOGRAPHICAL REFERENCES AND OTHER DOCUMENTATION

Published Sources

Allen, Carol, Janine Beckley, et al. "Montgomery County's Jail Machine." *The Indiana Historian: Exploring Indiana's History*. Indianapolis: Indiana Historical Bureau, October 1994.

American Prison Association. American Prison Association Semi-Centennial 1870-1920: County Jails, "In the Light of the Declaration of Principles of 1870." New York: American Prison Association, 1920.

"Architect, Edgar J. Hodgson." *Colorado State Business Directory*. 1891.

"A Jail that Revolves." *The Weekly Auburnian*. 25 March 1887.

"The Awful Drop." *Crawfordsville Star.* 15 October 1885. Reprint. The last hanging held at the Montgomery County Rotary Jail.

di Bennaro, Guiseppe, ed. *Prison Architecture*. London: The Architectural Press, 1975.

Blackburn, Edward A. *Wanted: Historic County Jails of Texas.* Texas: A&M University Press, 2006.

Bodenhamer, David J. and Robert G. Barrows eds., "Marion County Courthouse: City County Buildings." *The Encyclopedia of Indianapolis.* Indianapolis: Indiana University Press, 1994.

Brown, William H. "Doors for Jails or Prisons." Patent No. 353,662, filed August 5, 1886.

Carlton, Frank Tracy, Ph.D. *The Industrial Situation: Its Effect Upon The Home, The School, The Wage Earner and The Employer.* New York: Fleming H. Revell Company, 1914.

"The City of St. Louis and Its Resources." *The St. Louis Star-Sayings*. Continental Publishing Co.: St. Louis, 1893.

Charleston Chamber of Commerce. *The Century Chronicle Devoted to the Capital City: Its History, Resources and Natural Advantages.* The Charleston: The Chamber, 1901. Accessed online, Google eBooks at http://books.google.com/books?id=uHQtAAAAYAAJ&printsec=frontcover&source=gbs_ge_summary r&cad=0#v=onepage&q&f=false

Colorado State Business Directory:1891. Denver: James R. Ives Publisher, 1891.

Condit, Carl W. *American Building Art: 19th Century.* New York: Oxford University Press, 1960.

Cornelius, George F. *The American Jail.* Saddle River N.J.: Pearson/Prentice Hall, 2008.

Dean, Jonathan R. "The Construction of the Old Jail. 1881-1887." N.P. 1992.

Elliot, William. U.S. Department of State. *A List of Patents Granted by the U.S., for the Encouragement of Arts and Sciences, Alphabetically Arranged from 1790 to 1820.* Washington D.C.*:* Alfred Elliot, 1823. *The Gallatin Democrat,* various dates from 1850 through 1888.

Goldfarb, Ronald. *Jails: The Ultimate Ghetto*. Garden City: Anchor Press/Doubleday, 1975.

"Haugh- Noelke," *Indianapolis of Today.* Indianapolis: Consolidated Illustrating Company, 1896.

Holford, Castello. *History of Grant County, Wisconsin: Including Its Civil, Political, Geological, Mineralogical, Archaeological and Military History, and a History of the Several Towns.* Wisconsin: Walsworth Publishing Company, 1900.

Indiana State Historic Preservation Office. "Edgar J. Hodgson." *Manufacturing and Mercantile Resources of Indianapolis, Indiana.* 1883. N.P. Also available online at http://archive.org/details/manufacturingmer00slsn

Johnston, Norman Bruce. *The Human Cage: A Brief History of Prison Architecture.* New York: The American Foundation, 1973.

Jordan, Phillip D. "Ten Essays." *Frontier Law and Order.* Lincoln: University of Nebraska Press, n.d.

Kargau, E. D. *Mercantile Industrial and Professional St. Louis*. St. Louis: Nixon Jones Printing Company, 1902.

"Legislative Papers." *Twenty-Second Report of the Superintendent of Public Instruction of the State of Indiana to the Governor, for the years ending August 31, 1873 and August 31 1874.* Indianapolis: Sentinel Company Printers, 1874.

Leopard, John C., et al. *History of Daviess and Gentry Counties Missouri*. Topeka: Historical Publishing Company, 1922.

Lunden, Walter A. "The Rotary Jail or Human Squirrel Cage," *Journal of the Society of Architectural Historians.* Vol. XVIII, No. 4, December 1959.

McCarty, Jim. "The Squirrel Cage: Gallatin's Rotary Jail Was No Place To Do Time," *Rural Missouri Magazine*, June 1987.

Maryville, Nodaway County, Missouri. News clippings containing photos and text regarding the destruction of the Nodaway County Rotary Jail. *St. Joseph Gazette* 17 Jan 1985.

Miller, Douglas K. "The Salt Lake County Rotary Jail." *Utah Historical Quarterly.* Vol. 75, no. 4, Fall 2007.

Morris, Norval and David J. Rothman. *The Oxford History of the Prison.* New York: Oxford Press, 1995.

"Pauly Locking Device: Patent No. 591850." *Official Gazette of the U.S. Patent Office*. Washington: Government Printing Office, October 19, 1897.

Pevsner, Nikolaus. *A History of Building Types*. Princeton: The Princeton University Press, 1976.

"Pioneer Builder, W. H. Brown Dies." *Indianapolis Star.* 26 March 1929.

Randl, Chad and Dorothy Ball. *Revolving Architecture: A History of Buildings that Rotate, Swivel and Pivot.* Princeton: Princeton Architectural Press, 2008.

"Revolving House." Patent No. 1,353,798, Specifications and Drawings of Patents issued from the United States Patent Office for Sept. 1920. Washington: Government Printing Office.

"Rotary Jails." Specifications and Drawings of Patents issued from the U.S. Patent Office for July 1881. Washington: Government Printing Office.

———. Specifications and Drawing of Patents for September 1888. Washington: Government Printing Office.

Shanks, Joyce Lakey. "Lazy Susan Cellblock." *The Indianapolis Star* 28 August 1977.

Stewart, Paul. "Historic jail at Maryville being razed." *St. Joseph Gazette*, 18 January 1985.

"W. H. Brown, Veteran Architect, Dies 88." *Indianapolis News* 26 March 1929.

Unpublished Sources

Board of State [Indiana] Charities. Letter Addressed to County Commissioners concerning the climate and conditions at the Crawfordsville Rotary Jail, 16 December 1930.

———. Letter. Addressed to Judge Edgar Rice concerning conditions at the Montgomery County Jail. 16 December 1930.

Causey, Marylee E. "The History of Montgomery County Jail." Senior English Thesis. Crawfordsville High School. December 1983.

Cheshire, Debbie. "A History of the Old Montgomery County Jail." Thesis. 25 August 1978.

Colorado Architects. "Biographical Sketch, Patrick P. Mills (? - 1933)." Colorado Historical Society, Office of Archeology and Historic Preservation. N.D.

Covington, Philip. "Plan of jail to be built in Gallatin," filed in the Gallatin County Clerks office, Gallatin, Missouri, March 26, 1838.

Ferguson, Rueben D. Thesis. "The Effect of the *USS Monitor* and the *CSS Virginia* on Naval Warfare." February 1999.

Gallatin County Court Minutes. Gallatin, Missouri. August 22, 1872-1888.

George, M. Ellen. Jail Inspector. Letter dated January 28, 1919, regarding a fire started by a young male prisoner that resulted in his death by suffocation while jailed in the Crawfordsville Rotary Jail.

Gill, Cliff. *Doin' Time for a Living: The Story of a Kentucky Jail.* Paducah: Cliff Gill Books, 2008. This publication was found to contain a number of errors including the statement that the Montgomery Rotary Jail and Sheriff's Residence was built by the Pauly Jail Company. However, it contains an image of the jail, which was demolished by 1936.

Indiana State Historic Preservation Office. "Architect, Edgar J. Hodgson." List of Commissions.

Johnson, H. C. "Letter to Editor of Gallatin Democrat." Written July 1985.

McDonald, Anne. "Remember when Haughville was more than a Name." Thesis. March 1995.

McGaughey, Richard S. "Crawfordsville's Circular Bastille; Indiana's Modern Jail in the 1880's?" Thesis, Seminar in Legal History Indiana University Law School at Indianapolis. N.D. This thesis contains a bibliography that covers the history of penal institutions in Indiana in the 1880s, making a comparison to other forms of jail architecture. He states that the phenomenon of building the rotary jails lasted a short twenty years, which reflected the Industrial Revolution and the Victorian Period as represented by American social construct.

Millstein, Cydney. "Daviess County Rotary Jail and Sheriff's Residence," National Register of Historic Places Nomination. National Park Service, U.S. Department of the Interior. January 5, 1990.

Montgomery County Board of Commissioners. "Commissioner's Records." No.11: December 1880 – September 1881. Montgomery County Courthouse, Crawfordsville, Indiana.

———. "Commissioner's Record." No. 12: September 1881 – September 1882. Montgomery County Cultural Foundation. "A feasibility study for the sensitive renovation of the Old Jail Museum." July 21, 1987. Archives, Old Jail Museum, Crawfordsville, Indiana.

———. Vertical File containing news articles, brochures, minutes, correspondences, county commissioners and miscellaneous data from 1882-2006. Archives, Old Jail Museum, Crawfordsville, Indiana.

Newell, Kent R. Historic American Building Survey. Pottawattamie County Jail, Pottawattamie County, Iowa. HABS-IA-88-1, August 6, 1980.

Tannenbaum, Max. "Montgomery County Jail," National Register of Historic Places Nomination, National Park Service, U.S. Department of the Interior, January 14, 1975.

Nelson, Ray. "Origins and Evolution of Direct Supervision." Slide presentation notes. U.S. Department of Justice. National Institute of Corrections Information Center. Aurora, Colorado. Revised 1993.

Prawl, Toni M. "E. J. Eckel (1845-1934: The Education of a Beaux-Arts Architect and His Practice in Missouri" Dissertation. University of Missouri-Columbia. December 1994.

Patent Rotary Jail Company of Chicago. "Description of the Patent Rotary Steel Jail." N.P.: Chicago, 1882.

Pueblo, Pueblo County, Colorado. Contract, 30 July 1888. Archives. Old Jail Museum, Crawfordsville ,

Indiana.

Rotary Jail Museum, Montgomery County Indiana. Assorted letters of inquiry. circa 1977-2008. Archives. Old Jail Museum, Crawfordsville, Indiana.

———. Building record contracts including new construction, repairs, alterations, up to and through preservation. Various dates from 1882 to 1998. Archives. Old Jail Museum, Crawfordsville, Indiana.

Riedlinger, Larry Edward. "Jails and Correctional Movement in Sedgwick County." B.A. Thesis. Saint Mary of the Plains College. 1967.

Report to Commissioners. Old Jail Museum Renovation Commission, Montgomery County, Indiana, 21 April 1975. Archives. Old Jail Museum, Crawfordsville, Indiana.

Rosenberg, Robert, and Donald Sackheim. "Montgomery County Jail," HAER No. IN-17. May 1, 1975.

Sherman, Grayson County, Texas. Contract for Rotary Jail. Specifications include Plan No. 54 of the Pauly Jail Building and Manufacturing Company. November 1887.

Stewart, Paul. "Historic Jail At Maryville Being Razed." *St. Joseph Gazette.* January 18, 1985.

Squirrel Cage Jail Museum. Gallatin, Daviess County Missouri. Scrapbook of news clippings, with photos of jail preservation project. *Gallatin News-Press.* Various dates ca. 1990s.

Thayne, Bruce. Sheriff (retired). Personal collection. Photocopies and research notes pertaining to Rotary Jail constructed in Salt Lake County, Utah, circa 1885.

Unknown sources on partial research notes included: contracts for Rapid City, South Dakota; Waxahachie, Texas; Dover, New Hampshire; Pueblo, Colorado. Archives. Old Jail Museum in Montgomery County, Indiana.

White, Dr. Earl Bruce. "The Rotary Jail Revisited." Undated manuscript located at The Old Jail Museum, Crawfordsville, Indiana. A portion of this document is included in Chad Randl and Dorothy Ball's book, *Revolving Architecture: A History of Buildings That Rotate, Swivel and Pivot.*

White, Earl Bruce, PhD. "The Rotary Jail Revisited." Old Jail Museum. Crawfordsville, Indiana, c.1986.

Internet Sources

Auld, Joseph. *Picturesque Burlington: a handbook of Burlington, Vermont, and Lake Champlain.* Vermont: Free Press Association, 1893. Google eBook, Accessed online, October 2013. https://play.google.com/books/reader?id=S9c3AQAAIAAJ&printsec=frontcover&output=reader&authuser=0&hl=en&pg=GBS.PA53

Bozovic, Miran, ed. "Jeremy Bentham: Panopticon Letters." London: Verso, 1995. Online. Cartome 16 June 2001. Accessed October 15, 2009, www.cartome.org/Panopticon1.htmCharleston Chamber of

Commerce, West Virginia. *The Century Chronicle Devoted To The Capital City: Its History, Resources And Natural Advantages.* Charleston: The Chamber, 1901. Google eBook, accessed, October 2013. http://books.google.com/books?id=uHQtAAAAYAAJ&dq=Charleston,+Kanawha+County,+West+Virginia+Jail&lr=&source=gbs_navlinks_s

Digital Sanborn Insurance Maps: 1867-1970. "Wichita, Sedgwick County, Kansas: November 1892." Accessed online October 2013. Kansas City Public Library, Kansas City Missouri. http://sanborn.umi.com.proxy.kclibrary.org/ks/3114/dateid-000004.htm?CCSI=121n

Dover Public Library. Online. "Strafford County Jail/The Revolving Jail." Accessed October 15, 2009. http://images.dover.lib.nh.us/

Hancock, John. "Ellis County Jail: 1888." Accessed online, October 2013. http://www.rootsweb.ancestry.com/~txecm/index.htm#historical%20info

"Haugh, Brown, Ketcham," Historical Directories: 1889-1913. Marion County, Indiana. Online. Accessed, August 1, 2013. https://sites.google.com/site/onlinedirectorysite/Home/usa/in/marion

Historic American Buildings Survey, "Wayne County Indiana Warden's House," HABS N0. IN-105, 1975. Accessed online, October 2013. http://www.loc.gov/pictures/item/in0143.color.572126c/resource/

Library of Congress. *Built in America: American Memory Home.* Search term, "Rotary Jail." Accessed, July 1, 2009. http://memory.loc.gov/ammem/collections/habs_haer/

Prison Association of New York. "Oswego County." *Fifty-Ninth Annual Report of the Prison Association of New York For the Year 1903.* Albany: Oliver A. Quayle, State Legislative Printer, 1904. Also available on-line Google Scholar Book Search.

Pauly Jail Building Company, Inc. "Company History." Accessed online July 1, 2009. http://www.paulyjail.com/about/history.html

Reed and Stem Papers. "Isaac Hodgson." Northwest Architectural Archives, Manuscript Division. University of Minnesota. On-Line, Accessed July 30, 2013, https://www.lib.umn.edu/special

Rosenberg, Robert and Donald Sackheim. Montgomery County Jail, Washington & Spring Streets, Crawfordsville, Montgomery County, IN. HAER IND,54-CRAVI,1-. Historic American Engineering Record, 1974. http://www.loc.gov/pictures/item/in0103/

Ross, Benjamin L. "Works of Isaac Hodgson." Accessed online, October 2013. Also includes several designed by Edgar J. Hodgson. http://www.b-levi.com/research/arch/hodgson/index.php

Timby, Theodore Ruggles. "Patent No. 35,846: Revolving Battery Tower, July 8, 1862." Google Scholar Online: Accessed July 30, 2013. http://www.google.com/patents

Previous documentation on file (NPS):

_x_ Previously listed in the National Register
__ Not previously listed in the National Register

1. NR #: 75000007
2. Date of listing: January 14, 1975
3. Level of significance: not stated
4. Applicable National Register Criteria: A x_B_ C x_D__
5. Criteria Considerations (Exceptions): A__ B__ C__ D__ E__ F__ G__
6. Areas of Significance: Engineering, Architecture, Social History

__ Previously Determined Eligible for the National Register: Date of determination:
__ Designated a National Historic Landmark: Date of designation:
__ Recorded by Historic American Buildings Survey: HABS No.
_x Recorded by Historic American Engineering Record: HAER No. IN-17
__ Recorded by Historic American Landscapes Survey: HALS No.

Location of additional data:

State Historic Preservation Office: Indianapolis, Indiana
Other State Agency:
Federal Agency: National Park Service, Midwest Region, Omaha, Nebraska
Local Government:
University:
Other (Specify Repository): Pauly Jail Company, Nobelsville, Indiana; Reyerson Library, Chicago, Illinois; Rotary Jail Museum, Crawfordsville, Indiana; Montgomery County Courthouse, Crawfordsville, Indiana

8. FORM PREPARED BY

Name/Title: Cydney Millstein, architectural historian
Architectural and Historical Research, LLC

Address: 1537 Belleview Avenue
Kansas City, Missouri 64108

Telephone: (816) 472-4154

E-mail: cydney@ahr-kc.com

Date: January 10, 2020

Edited by: Rachel Franklin Weekley
National Park Service
Midwest Regional Office
601 Riverfront Drive
Omaha, Nebraska 68102

Telephone: (402) 661-1928

Edited by: Roger G. Reed
National Park Service
National Historic Landmarks Program
1849 C St. NW Mail Stop 7728
Washington, DC 20240

Telephone: (202) 354-2278

Photograph Log

Name of Property	Montgomery County Jail and Sheriff's Residence
City or Vicinity	Crawfordsville
County	Montgomery County
State	Indiana
Name of Photographer	Richard Welnowski
Date of Photographs	November 2012
Number of Photographs	26
Number of Figures	20

Photograph 1 This image shows the main or east façade of the Montgomery County Jail and Sheriff's Residence, with a projecting portion of the building with the residence on the left side and the front door to the jail portion on the right. The camera faces west.

Photograph 2 shows the east façade to the right of the image and the south façade to the left. The camera faced northwest when the photo was taken.

Photograph 3 shows the east façade on the left side of the image and north façade on the right. The camera faced southwest when this photo was taken.

Photograph 4 features the north façade of the building. The sheriff's residence is on the left side of the building and the rotary jail is on the right side. The camera is facing south.

Photograph 5 shows the north façade of the building to the left of the image and the west façade on the right. When the photo was taken, the camera faced southeast.

Photograph 6 shows the west façade of the building to the left and the south façade on the right. The camera faced northeast when the photo was taken.

Photograph 7 shows the interior of the first floor entry foyer and main staircase. The staircase rises on the left side of the photo. The camera faces west.

Photograph 8 features the family parlor room with chairs arranged around a small table. The front entrance and foyer are to the left of the parlor. The camera faced east when the photo was taken.

Photograph 9 was taken from the vantage point of the seating area in the family parlor room. The camera faced west. An open door to the right leads to the building entrance and foyer. An open door shown on the left leads to the dining room.

Photograph 10 shows the original dining room of the sheriff's residence. The room features some exhibits and chairs line the right wall. When the photo was taken, the camera faced north.

Photograph 11 shows a bedroom on the second floor of the sheriff's residence. The camera faces northeast.

Photograph 12 shows a room used for solitary confinement. It has a metal bed on the left wall, a metal radiator

and window at the back of the room, and a combination urinal and lavatory on the right wall. The room was located off the second floor hallway. The camera view faced north.

Photograph 13 features the turnkey office for the rotary jail. A metal staircase extends across this room, rising from left to right. The camera faced south when the photo was taken.

Photograph 14 features the crank mechanism for the rotary jail. The mechanism was located in the turnkey office. The camera faces southwest.

Photograph 15 features the narrow entry to the rotary jail located on the first floor. The camera faces west.

Photograph 16 shows the curving wall of the rotary jail cage on the right side of the image. The small bullpen area is on the left. The camera faced east when the photo was taken.

Photograph 17 features the curved jail cage on the first floor of the rotary jail. A small open area is on the left. The catwalk for the second floor of the rotary cage is shown above. The camera faced south when the photo was taken.

Photograph 18 shows a typical jail cell on the first floor of the rotary jail. The view looks into the cell, which has a metal bed and straw mattress on the left wall and a urinal to the rear.

Photograph 19 illustrates the second floor of the rotary jail. It shows the jail cage on the left and a doorway leading to the catwalk ahead. The camera view faces west toward the catwalk.

Photograph 20 shows the third floor or attic, with the camera facing west. The image has the perspective of looking out from a solitary jail cell, with a metal bed on the right wall and a cell door ahead.

Photograph 21 features the outer chamber under the rotary cage in the basement level. The round jail cage is delineated by a curved brick wall. The camera view faces west.

Photograph 22 shows an interior view of the inner chamber located in the basement. The central support for the rotary cage stands in the center of the room. The camera view faces west.

Photograph 23 illustrates the detail of the central shaft or column supporting the turntable above.

Photograph 24 shows a roller bearing and gear revealed in the brick wall of the chamber. The turntable is above. The camera faced east when this photo was taken.

Photograph 25 has a general view of the power house, which stands to the rear of the rotary jail building. The power house is now used for the Tannenbaum Center. The camera faces southwest.

Photograph 26 shows the interior of the power house, containing one room that serves as event space for the Tannenbaum Center. The camera faces south.

Figures Log

Figure 1 illustrates the site plan and key to photographs for exterior images taken of the Montgomery County Jail and Sheriff's Residence and the separate power house which stands behind the jail. Source Schmidt Associates Architects, Inc., "A Feasibility Study for the Sensitive Renovation of the Old Jail Museum," July 21, 1987.

Figure 2 shows the site plan and key to photographs for interior photos taken on the first floor of the Montgomery County Jail and Sheriff's Residence. Source: Schmidt Associates Architects, Inc., "A Feasibility Study for the Sensitive Renovation of the Old Jail Museum," July 21, 1987.

Figure 3 features the floor plan and key to photographs for interior photos taken on the second floor of the Montgomery County Jail and Sheriff's Residence. Source: Schmidt Associates Architects, Inc., "A Feasibility Study for the Sensitive Renovation of the Old Jail Museum," July 21, 1987.

Figure 4 provides the floor plan and key to photographs for the third floor of the Montgomery County Jail and Sheriff's Residence. Source Schmidt Associates Architects, Inc., "A Feasibility Study for the Sensitive Renovation of the Old Jail Museum," July 21, 1987.

Figure 5 has a diagram of the basement floor plan and key to photographs for images taken of the chamber below the rotary jail cage portion of the Montgomery County Jail and Sheriff's Residence. Source: Schmidt Associates Architects, Inc., "A Feasibility Study for the Sensitive Renovation of the Old Jail Museum," July 21, 1987.

Figure 6 provides a diagram of the floor plan of the power house, also called the steam plant as indicated on the diagram. Source: Schmidt Associates Architects, Inc., "A Feasibility Study for the Sensitive Renovation of the Old Jail Museum," July 21, 1987.

Figure 7 shows an overhead aerial view of the lot and property located on the corner of North Washington Street. It is the Montgomery County Jail and Sheriff's Residence located at 225 North Washington Street in Crawfordsville, Indiana. Source Google Mapping.

Figure 8 provides a map of Crawfordsville, Indiana, with an up arrow pointing north in the lower left corner. The Montgomery County Jail and Sheriff's Residence is located at West Spring and North Washington Streets. Source U.S. Geological Survey online.

Figure 9 is a historic image of a Sanborn Fire Insurance Map from 1887 that shows the location of the Montgomery County Rotary Jail and Sheriff's Residence at West Spring and North Washington Streets. Source Sanborn Fire Insurance Map, Crawfordsville, Indiana.

Figure 10 is a historic image of a 1925 Sanborn Fire Insurance map that shows the location of the Montgomery County Rotary Jail and Sheriff's Residence. It is labeled the County Jail. Source Sanborn Fire Insurance Map, Crawfordsville, Indiana.

Figure 11 is a map of the United States that indicates the locations of eighteen rotary jails constructed between 1882 and 1888. Source Base Map from Google Maps Online.

Figure 12 shows a cross section of the rotary jail from William H. Brown and Benjamin F. Haugh Rotary Jail Patent Number. 244358.

Figure 13 is a detail of the center shaft, turntable floor and bearings from William H. Brown and Benjamin F. Haugh Rotary Jail Patent No. 244358.

Figure 14 shows the footprint of the Rotary Jail designed by Brown and Haugh and signatures provided in William H. Brown and Benjamin F. Haugh: Rotary Jail Patent No. 244358.

Figure 15 is a small historic image from 1882 showing the Montgomery County Rotary Jail and Sheriff's Residence located in Crawfordsville, Montgomery County, Indiana. Source The Revised Montgomery County Atlas, 1898.

Figure 16 features a historic photograph from the 1930s that shows the north façade of the Montgomery County jail with the power house in the background.

Figure 17 provides a photograph of a comparative property, the Pottawattamie County Jail located in Council Bluffs, Iowa, in the late 1950s. Source Historic Photos, Local History, Council Bluffs Public Library, Council Bluffs, Iowa.

Figure 18 shows a comparative property, the Daviess County Jail and Sheriff's Residence, located in Gallatin, Missouri, in a photograph taken in the 1970s. Sheriff Lelan Houghton and his dog stand on the lawn in front of the building. Source Daviess County Sheriff's Office.

Figure 19 features a historic photograph dated 1888 of a comparative property located in Waxahachie, Ellis County, Texas. It was known as the Waxahachie Rotary Jail and Sheriff's Residence.

Figure 20 shows the Waxahachie Rotary Jail and Sheriff's Residence in a photograph from 1980. These photographs were found at Ancestry.Com, Ellis County Jail 1888.

Photographs



Photograph 1. Main or east façade of the Montgomery County Jail and Sheriff's Residence. The camera faces west. Photographer Richard Welnowski, Kansas City, Missouri, November 2012



Photograph 2. East façade and south façade. The camera faced northwest. Photographer Richard Welnowski, Kansas City, Missouri, November 2012



Photograph 3. East façade and north façade. The camera faced southwest.
Photographer Richard Welnowski, Kansas City, Missouri, November 2012



Photograph 4. North façade of the building. The sheriff's residence is on the left side of the building and the rotary jail is on the right side. The camera is facing south.
Photographer Richard Welnowski, Kansas City, Missouri, November 201



Photograph 5. North façade of the building and the west façade. The camera faced southeast. Photographer Richard Welnowski, Kansas City, Missouri, November 2012



Photograph 6. West façade of the building and the south façade. The camera faced northeast. Photographer Richard Welnowski, Kansas City, Missouri, November 2012



Photograph 7. Interior of the first-floor entry foyer and main staircase. The camera faces west. Photographer Richard Welnowski, Kansas City, Missouri, November 2012



Photograph 8. Family parlor room. The camera facing east. Photographer Richard Welnowski, Kansas City, Missouri, November 2012



Photograph 9. Family parlor room. The camera facing west. The door on the left leads to the dining room. Photographer Richard Welnowski, Kansas City, Missouri, November 2012



Photograph 10. The original dining room of the sheriff's residence now featuring some exhibits. Camera facing north. Photographer Richard Welnowski, Kansas City, Missouri, November 2012



Photograph 11. A bedroom on the second floor of the sheriff's residence. The camera facing northeast. Photographer Richard Welnowski, Kansas City, Missouri, November 2012



Photograph 12. A room used for solitary confinement. The room was located off the second floor hallway. The camera faces north. Photographer Richard Welnowski, Kansas City, Missouri, November 201



Photograph 13. The turnkey office for the rotary jail. The camera faces south. Photographer Richard Welnowski, Kansas City, Missouri, November 2012



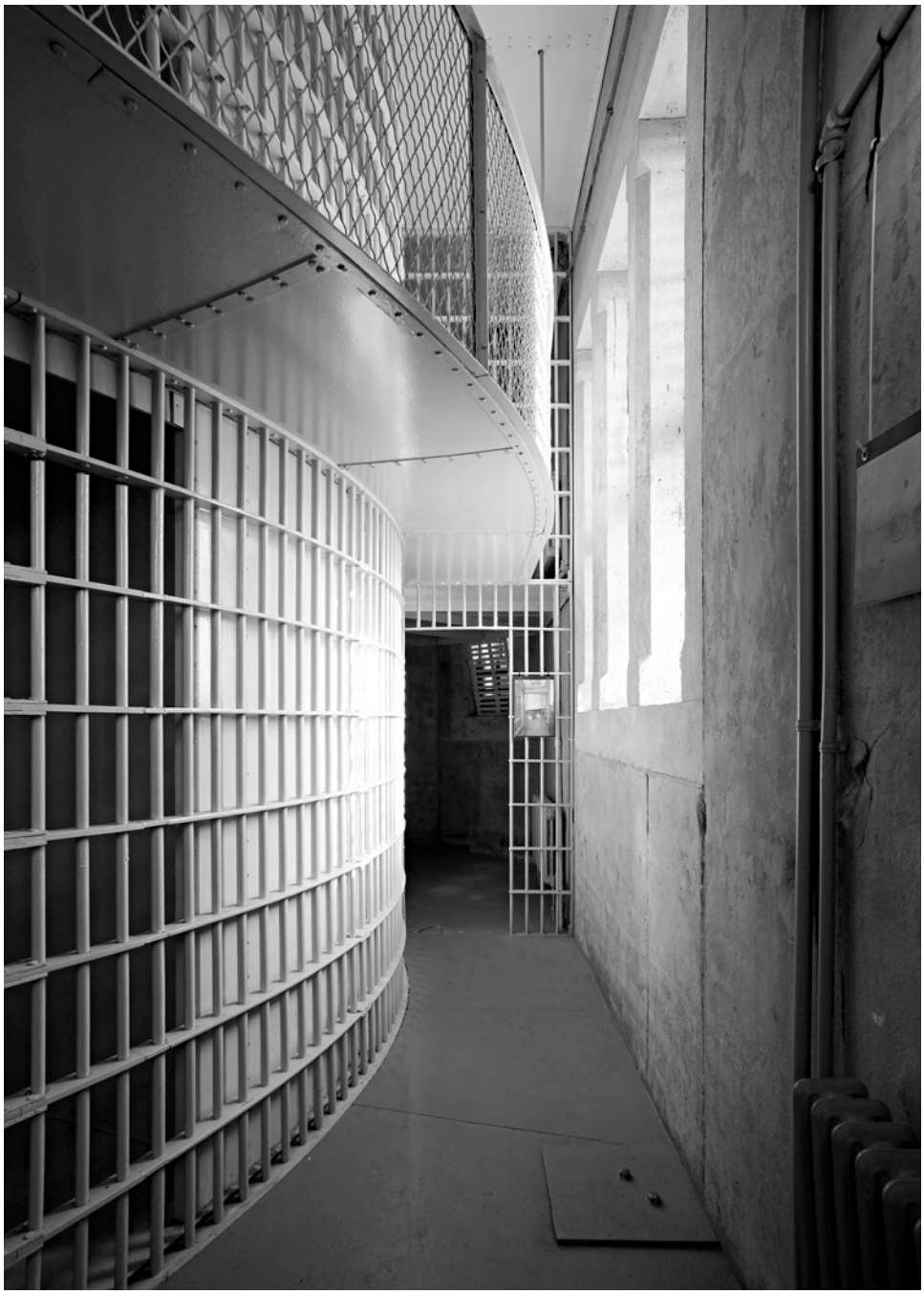
Photograph 14. The crank mechanism for the rotary jail located in the turnkey office. The camera faces southwest. Photographer Richard Welnowski, Kansas City, Missouri, November 2012



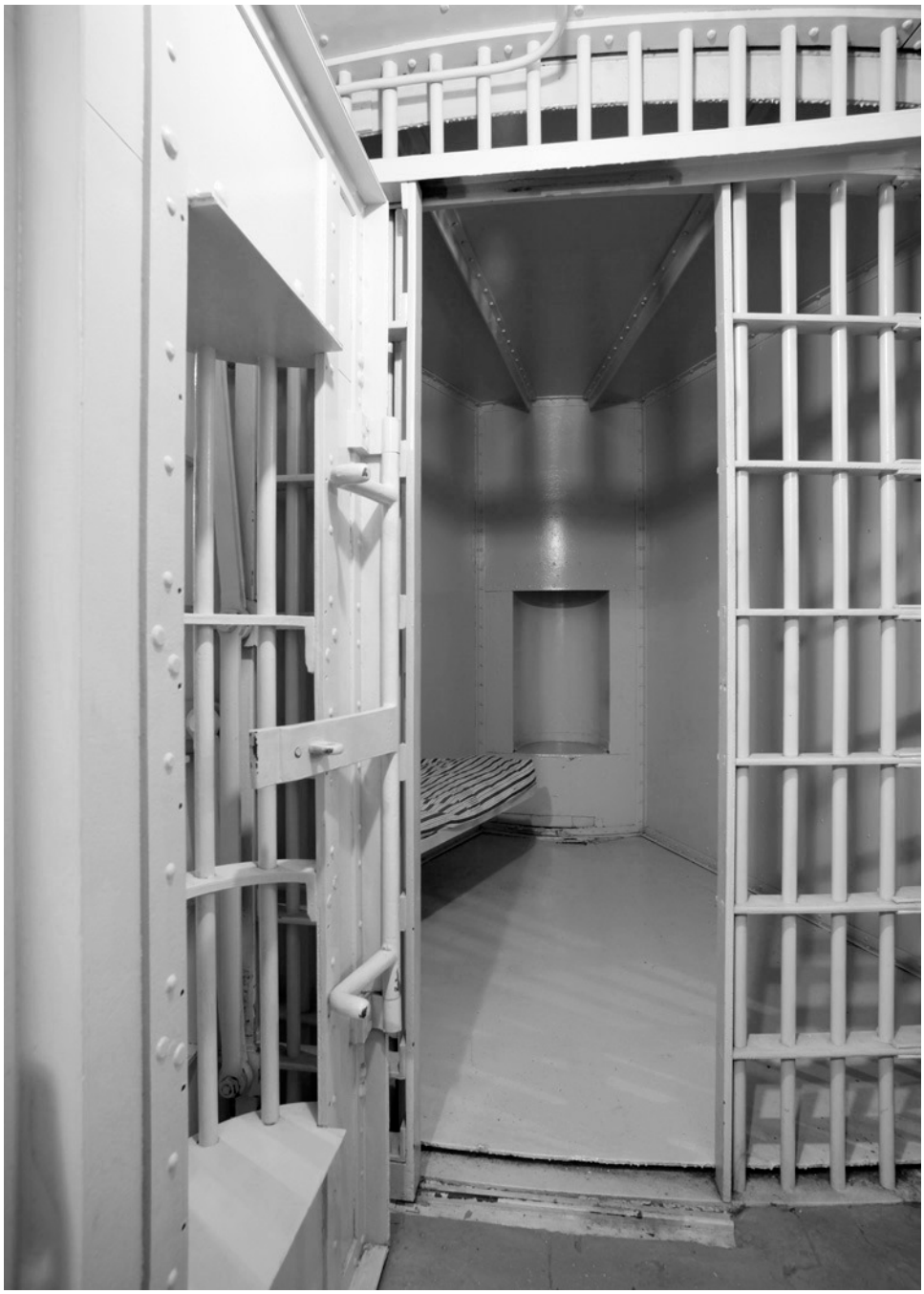
Photograph 15. The narrow entry to the rotary jail located on the first floor. The camera faces west. Photographer Richard Welnowski, Kansas City, Missouri, November 2012



Photograph 16. The curving wall of the rotary jail cage. The small bullpen area is on the left. The camera faces east. Photographer Richard Welnowski, Kansas City, Missouri, November 2012



Photograph 17. The curved jail cage on the first floor of the rotary jail. The catwalk for the second floor of the rotary cage is above. The camera faces south. Photographer Richard Welnowski, Kansas City, Missouri, November 2012



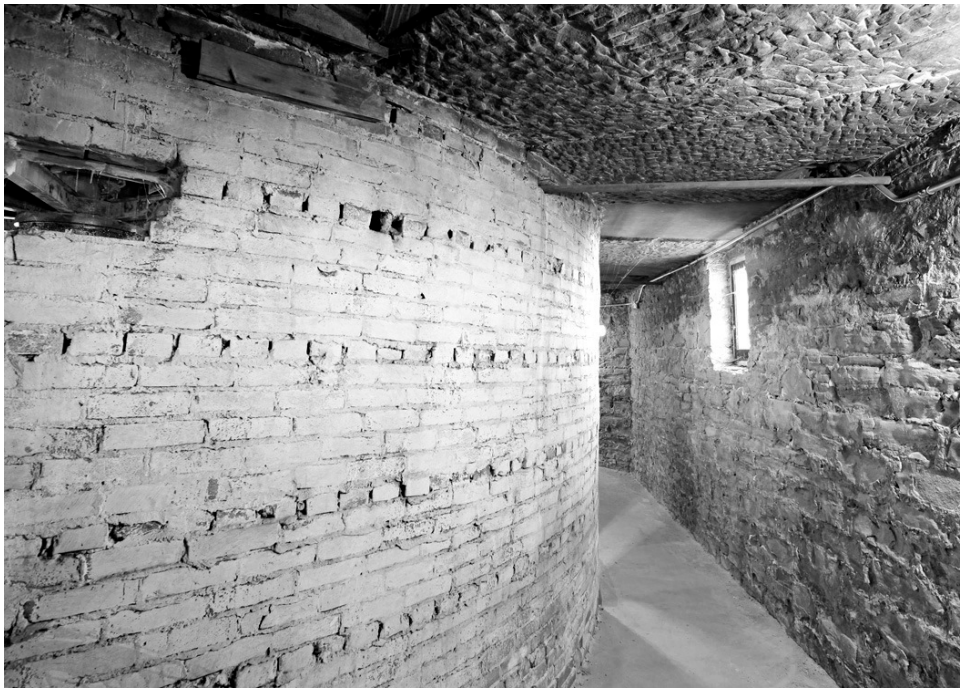
Photograph 18. A typical jail cell on the first floor of the rotary jail. Photographer Richard Welnowski, Kansas City, Missouri, November 2012



Photograph 19. The second floor of the rotary jail. Jail cage is on the left; the doorway leads to the catwalk ahead. The camera faces west. Photographer Richard Welnowski, Kansas City, Missouri, November 2012



Photograph 20. The third floor or attic, looking out from a solitary jail cell, . The camera facing west. Photographer Richard Welnowski, Kansas City, Missouri, November 2012



Photograph 21. The outer chamber under the rotary cage in the basement level. The camera faces west. Photographer Richard Welnowski, Kansas City, Missouri, November 2012



Photograph 22. Interior view of the inner chamber located in the basement. The camera faces west. Photographer Richard Welnowski, Kansas City, Missouri, November 2012



Photograph 23. Detail of the central shaft or column supporting the turntable above. Photographer Richard Welnowski, Kansas City, Missouri, November 2012



Photograph 24. Roller bearing and gear revealed in the brick wall of the chamber. The turntable is above. The camera faces east. Photographer Richard Welnowski, Kansas City, Missouri, November 2012



Photograph 25. General view of the power house, which stands to the rear of the rotary jail building. The power house is now used for the Tannenbaum Center. The camera faces southwest. Photographer Richard Welnowski, Kansas City, Missouri, November 2012



Photograph 26. Interior of the power house, containing one room that serves as event space for the Tannenbaum Center. The camera faces south. Photographer Richard Welnowski, Kansas City, Missouri, November 2012

Figures

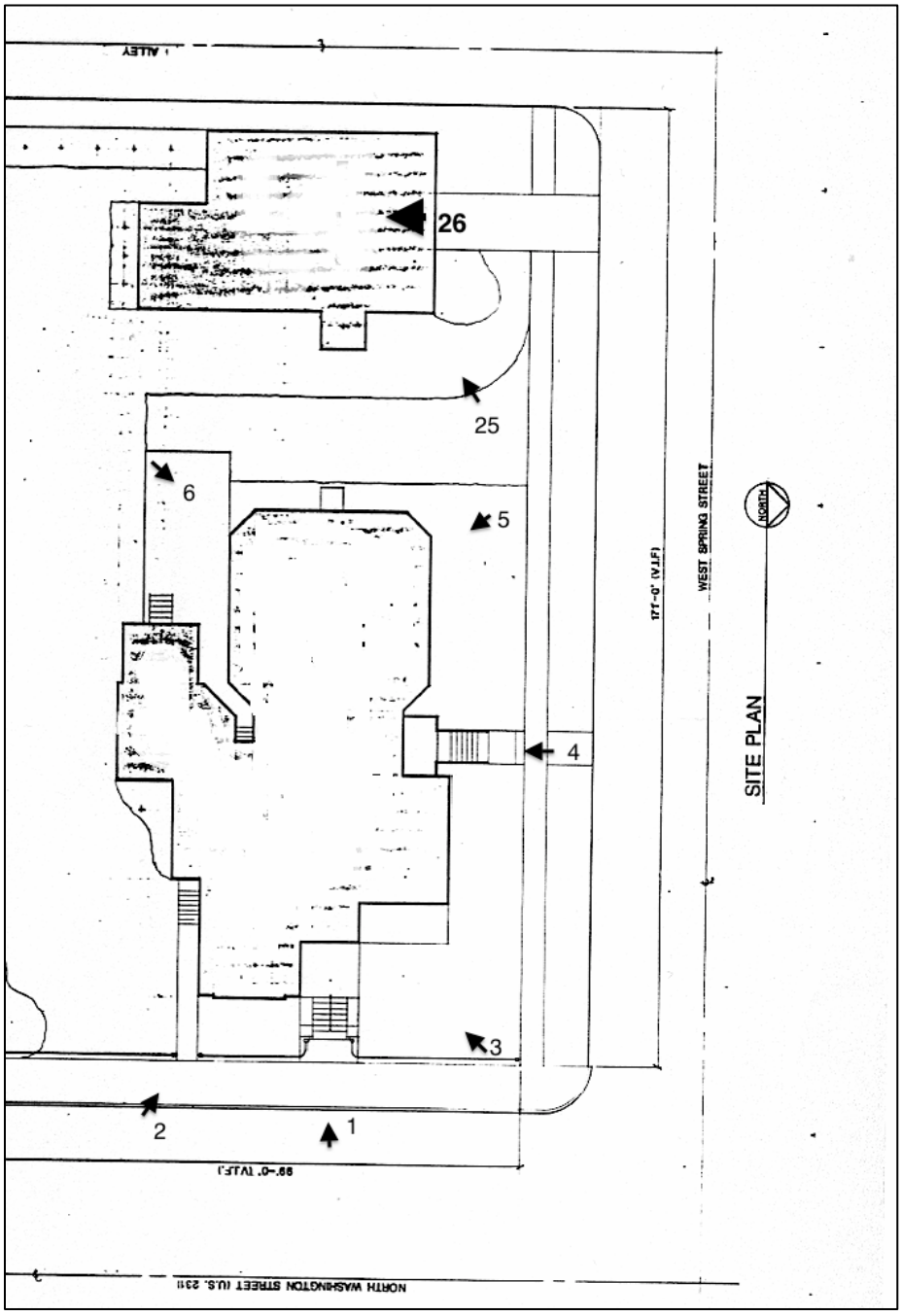


Figure 1 illustrates the site plan and key to photographs for exterior images taken of the Montgomery County Jail and Sheriff's Residence and the separate power house which stands behind the jail. Source Schmidt Associates Architects, Inc., "A Feasibility Study for the Sensitive Renovation of the Old Jail Museum," July 21, 198**7.**

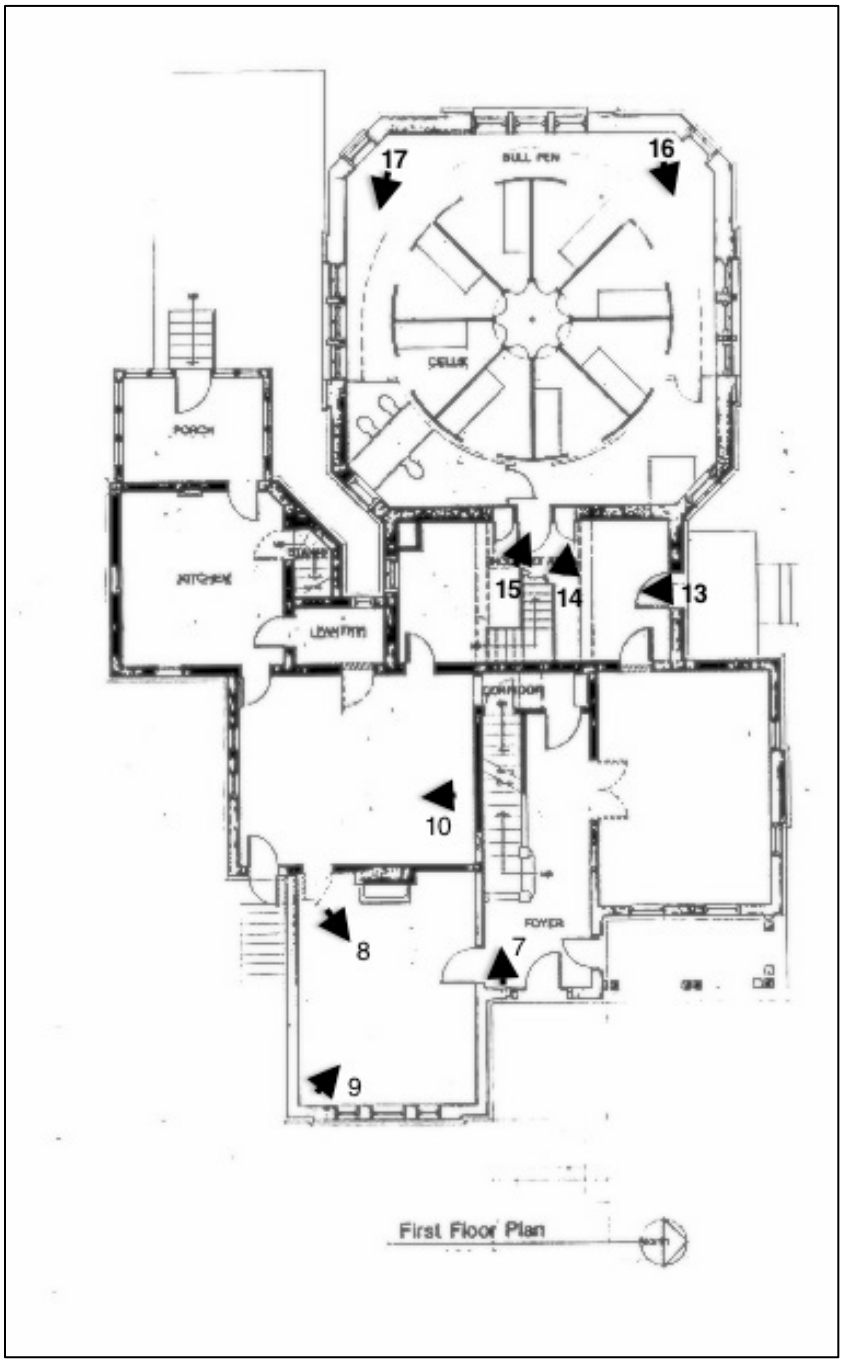


Figure 2 shows the site plan and key to photographs for interior photos taken on the first floor of the Montgomery County Jail and Sheriff's Residence. Source: Schmidt Associates Architects, Inc., "A Feasibility Study for the Sensitive Renovation of the Old Jail Museum," July 21, 1987.

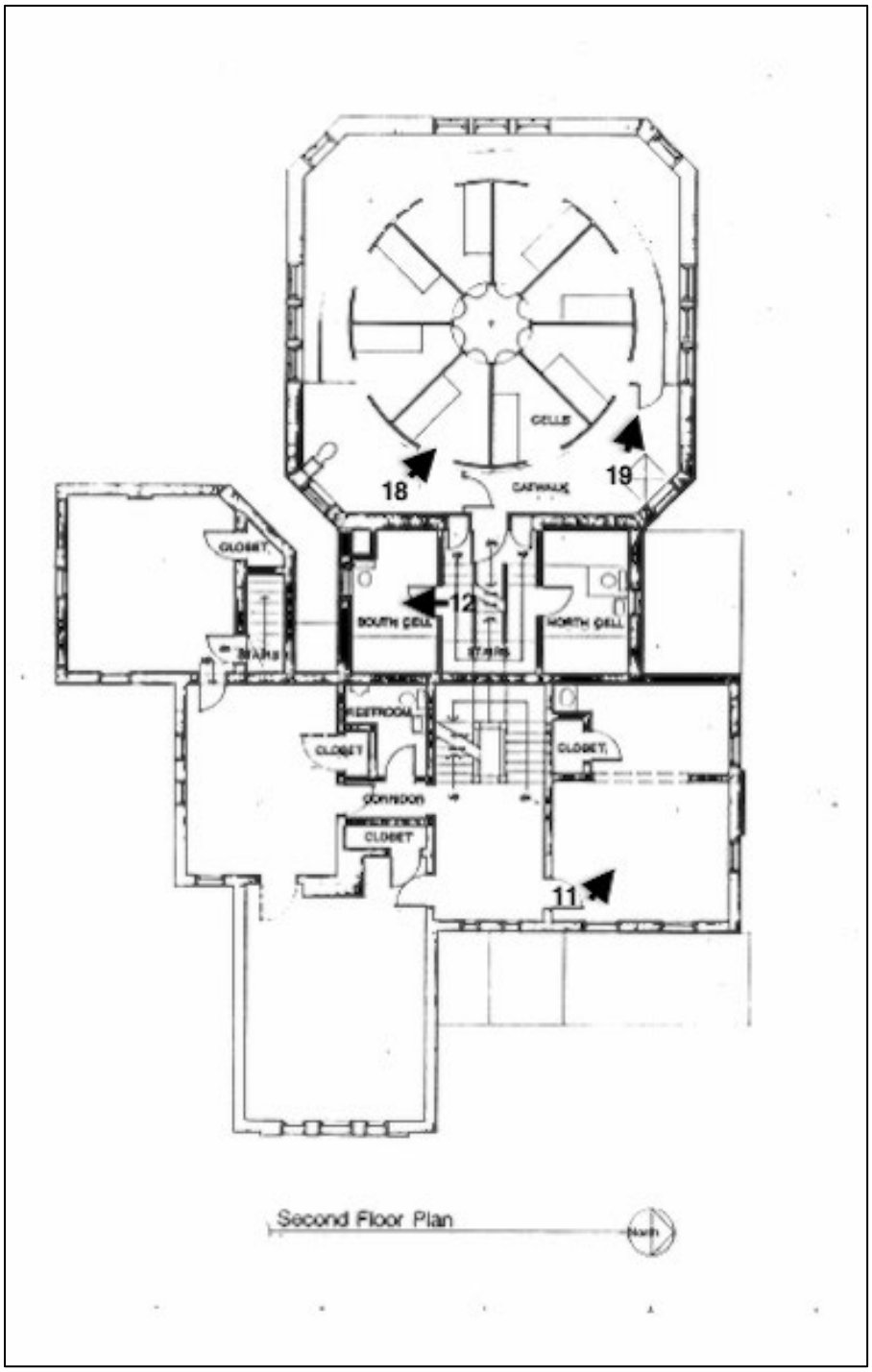


Figure 3 features the floor plan and key to photographs for interior photos taken on the second floor of the Montgomery County Jail and Sheriff's Residence. Source: Schmidt Associates Architects, Inc., "A Feasibility Study for the Sensitive Renovation of the Old Jail Museum," July 21, 1987.

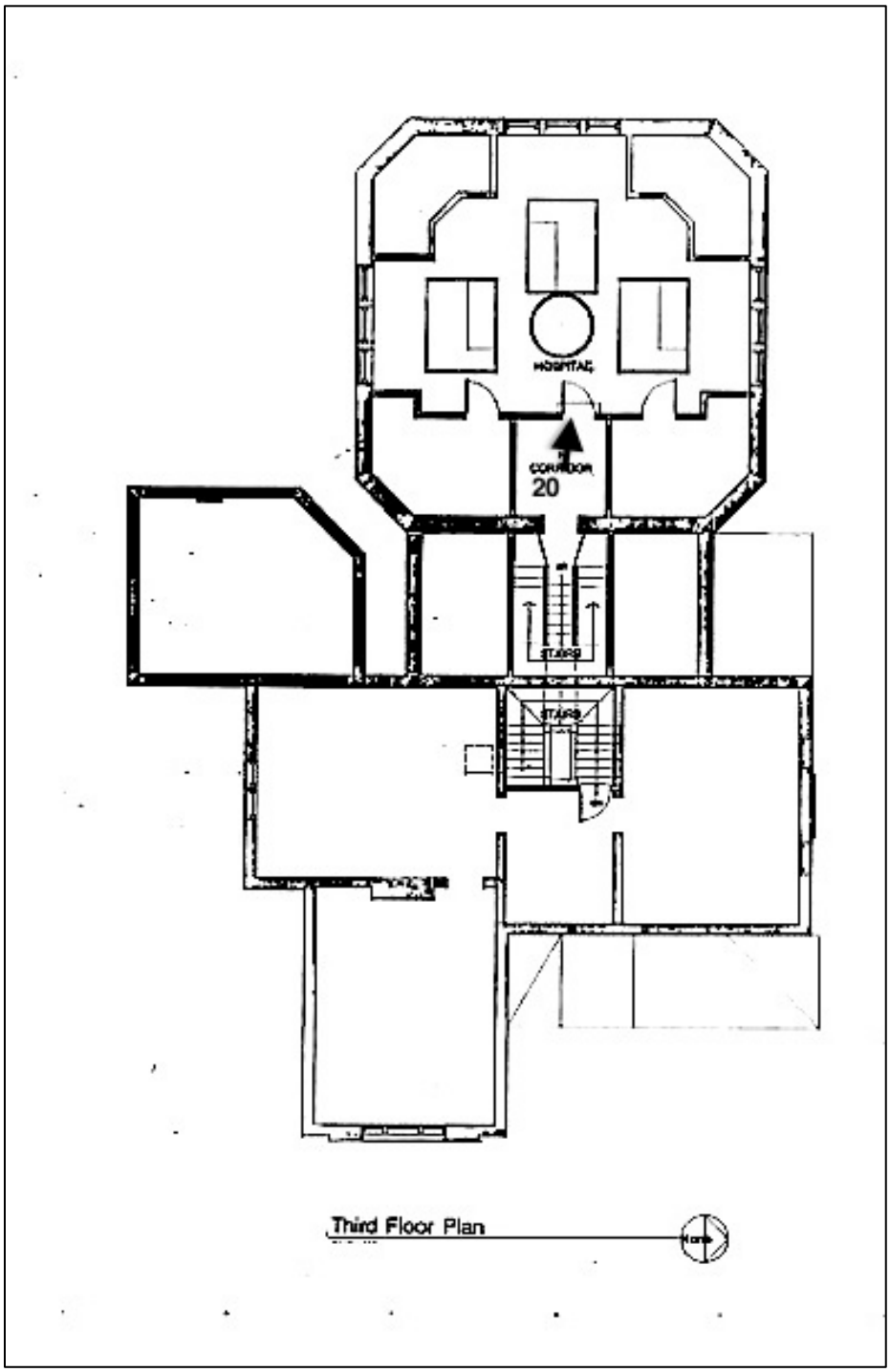


Figure 4 provides the floor plan and key to photographs for the third floor of the Montgomery County Jail and Sheriff's Residence. Source Schmidt Associates Architects, Inc., "A Feasibility Study for the Sensitive Renovation of the Old Jail

Museum," July 21, 1987.

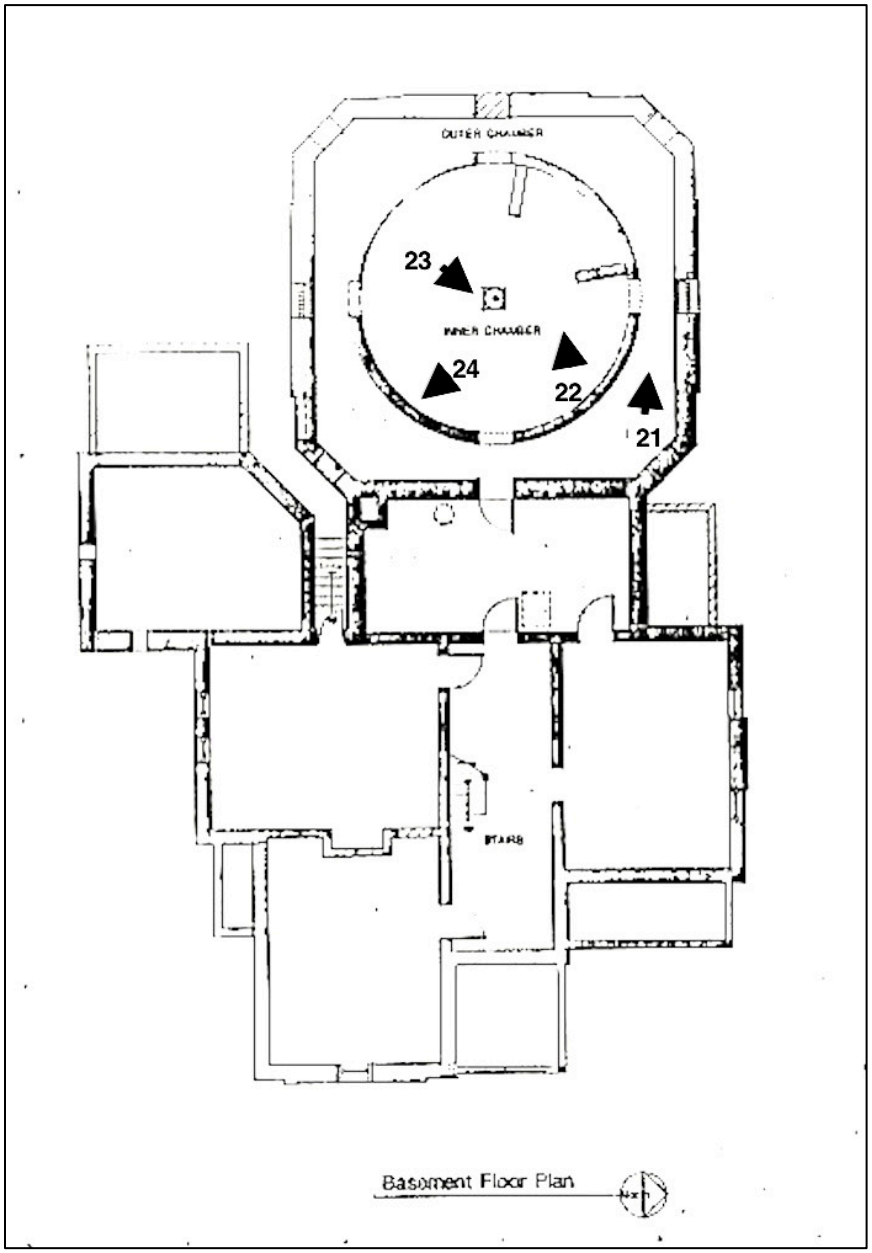


Figure 5 has a diagram of the basement floor plan and key to photographs for images taken of the chamber below the rotary jail cage portion of the Montgomery County Jail and Sheriff's Residence. Source: Schmidt Associates Architects, Inc., "A Feasibility Study for the Sensitive Renovation of the Old Jail Museum," July 21, 1987.

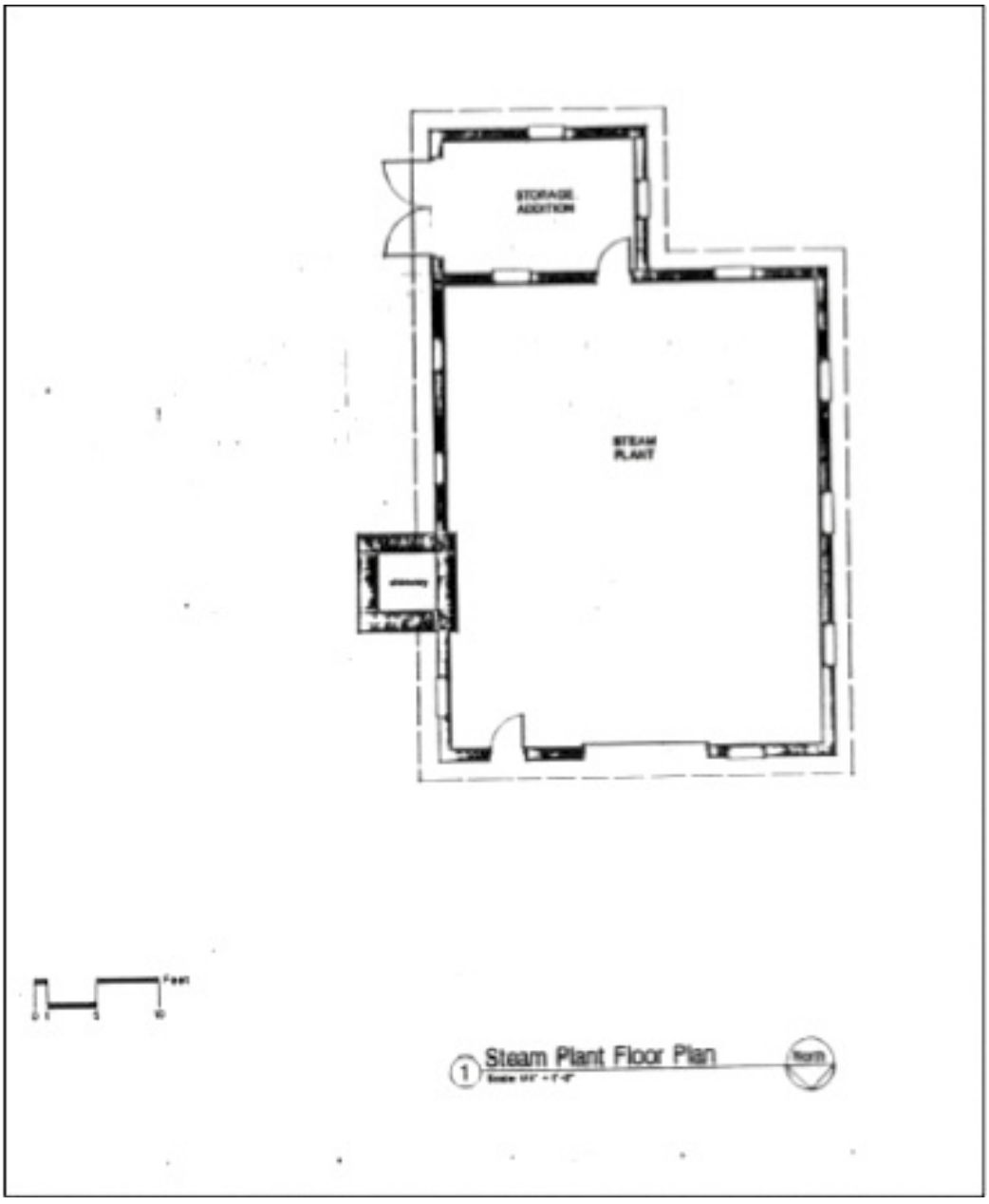


Figure 6 provides a diagram of the floor plan of the power house, also called the steam plant as indicated on the diagram. Source: Schmidt Associates Architects, Inc., "A Feasibility Study for the Sensitive Renovation of the Old Jail Museum," July 21, 1987.



Figure 7 shows an overhead aerial view of the lot and property located on the corner of North Washington Street. It is the Montgomery County Jail and Sheriff's Residence located at 225 North Washington Street in Crawfordsville, Indiana. Source Google Mapping.



Figure 8 provides a map of Crawfordsville, Indiana, with an up arrow pointing north in the lower left corner. The Montgomery County Jail and Sheriff's Residence, noted by a purple star, is located at West Spring and North Washington Streets. Source U.S. Geological Survey online.

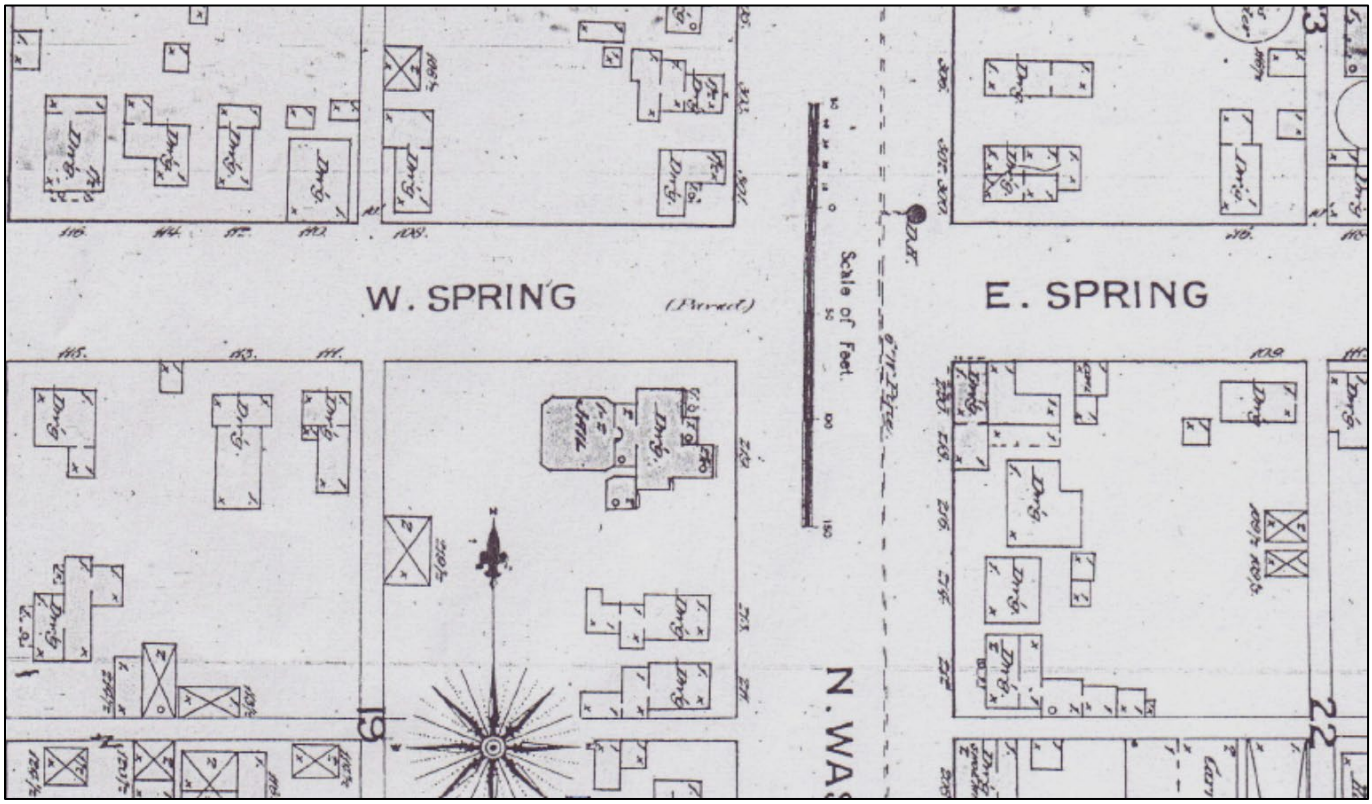


Figure 9 is a historic image of a Sanborn Fire Insurance Map from 1887 that shows the location of the Montgomery County Rotary Jail and Sheriff's Residence at West Spring and North Washington Streets. Source Sanborn Fire Insurance Map, Crawfordsville, Indiana.

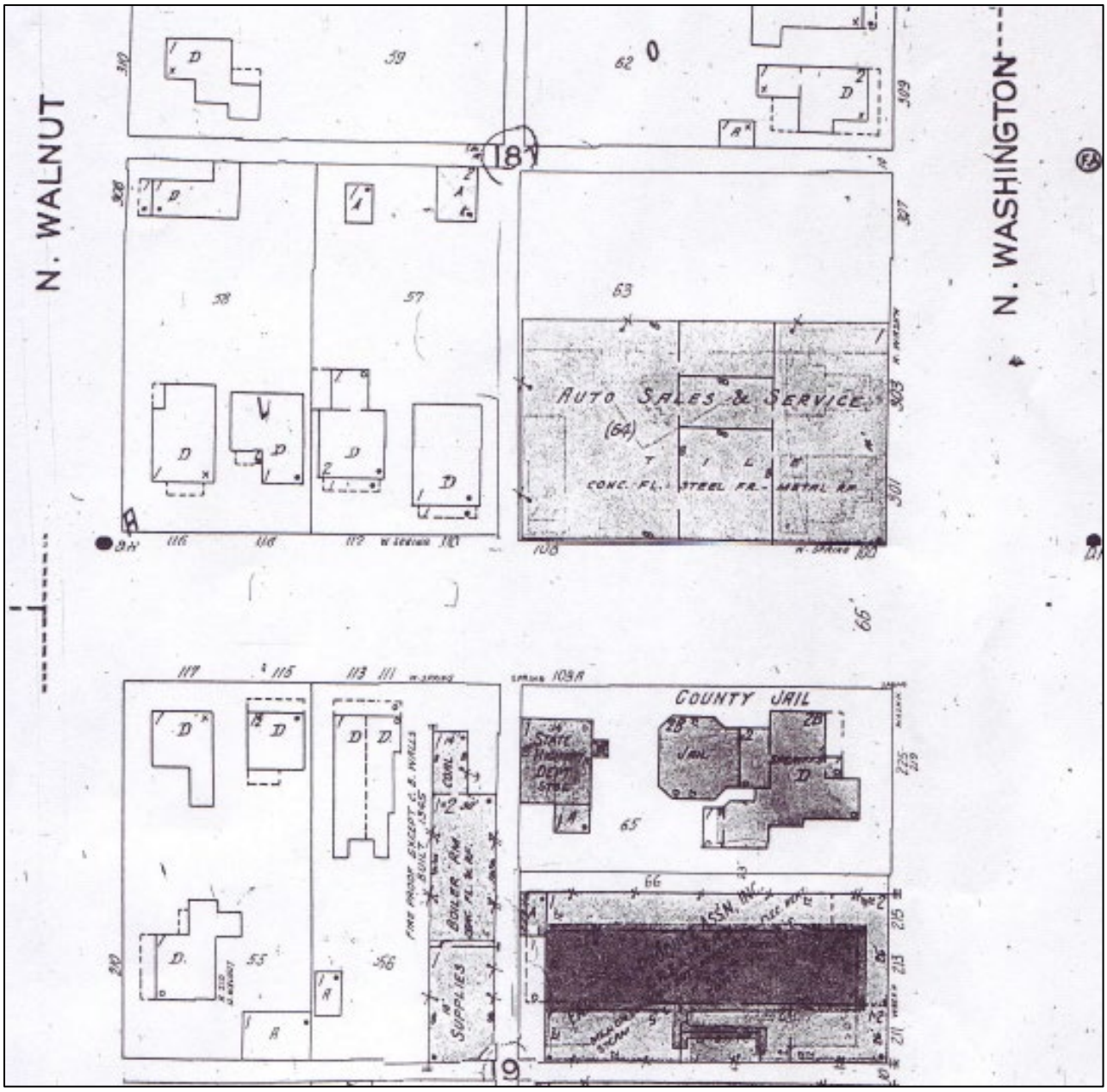


Figure 10 is a historic image of a 1925 Sanborn Fire Insurance map that shows the location of the Montgomery County Rotary Jail and Sheriff's Residence. It is labeled the County Jail. Source Sanborn Fire Insurance Map, Crawfordsville, Indiana.

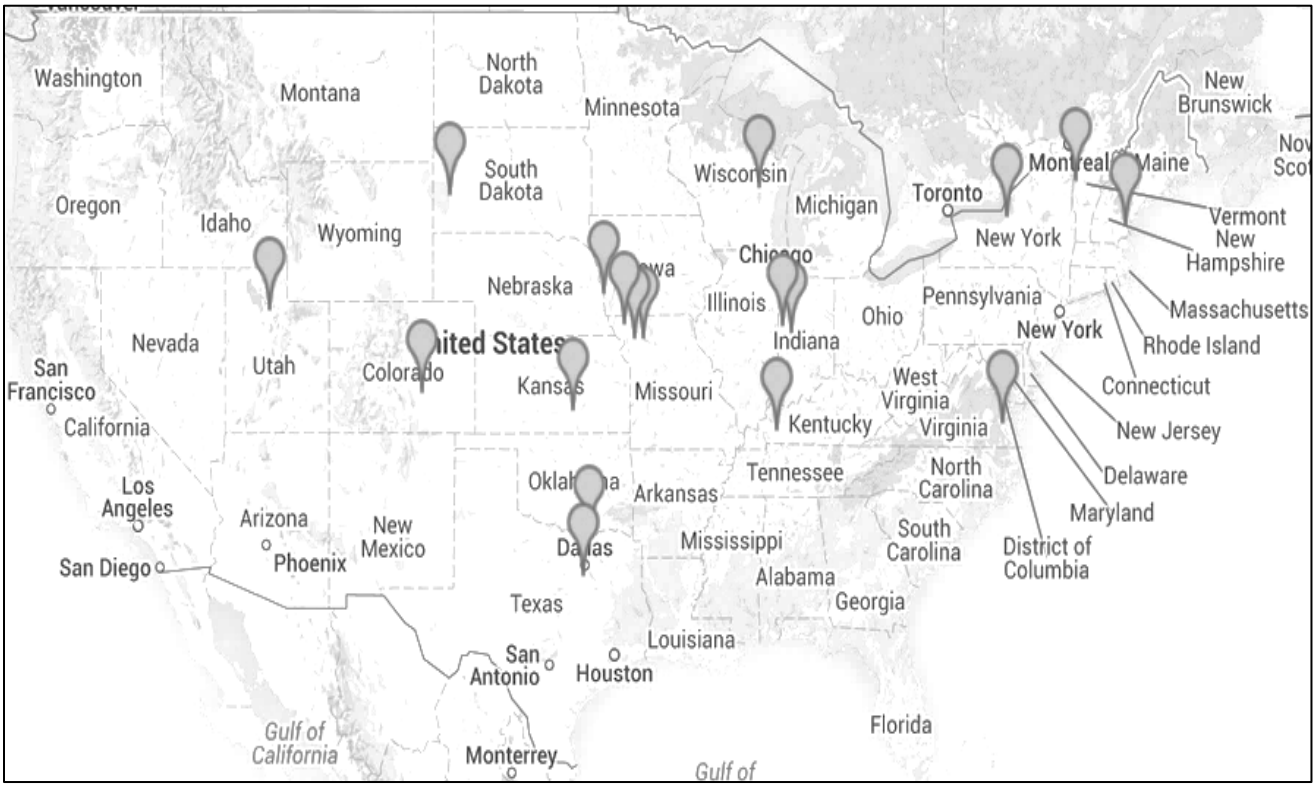


Figure 11 is a map of the United States that indicates the locations of eighteen rotary jails constructed between 1882 and 1888. Source Base Map from Google Maps Online.

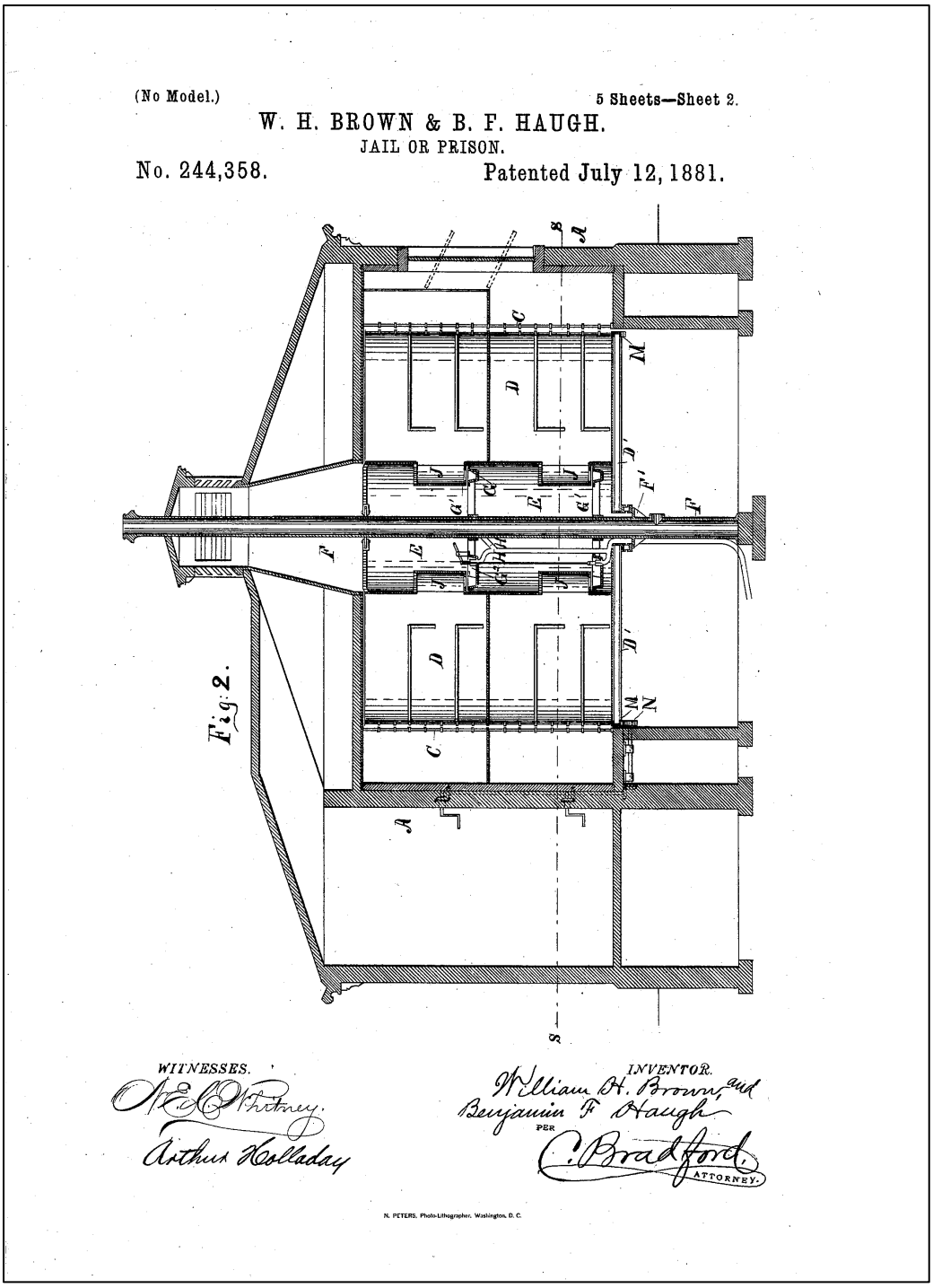


Figure 12 shows a cross section of the rotary jail from William H. Brown and Benjamin F. Haugh Rotary Jail Patent Number. 244358.

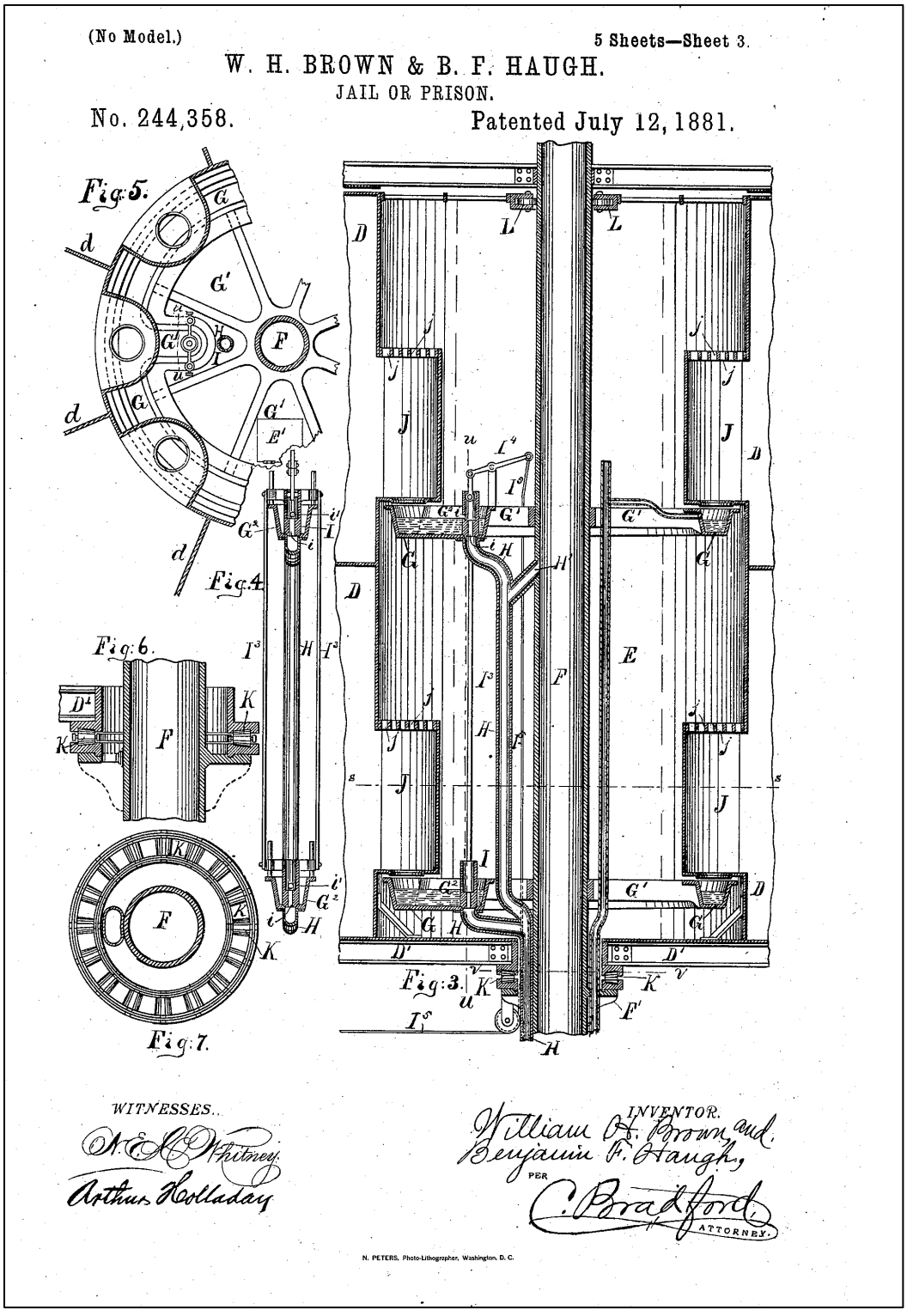


Figure 13 is a detail of the center shaft, turntable floor and bearings from William H. Brown and Benjamin F. Haugh Rotary Jail Patent No. 244358.

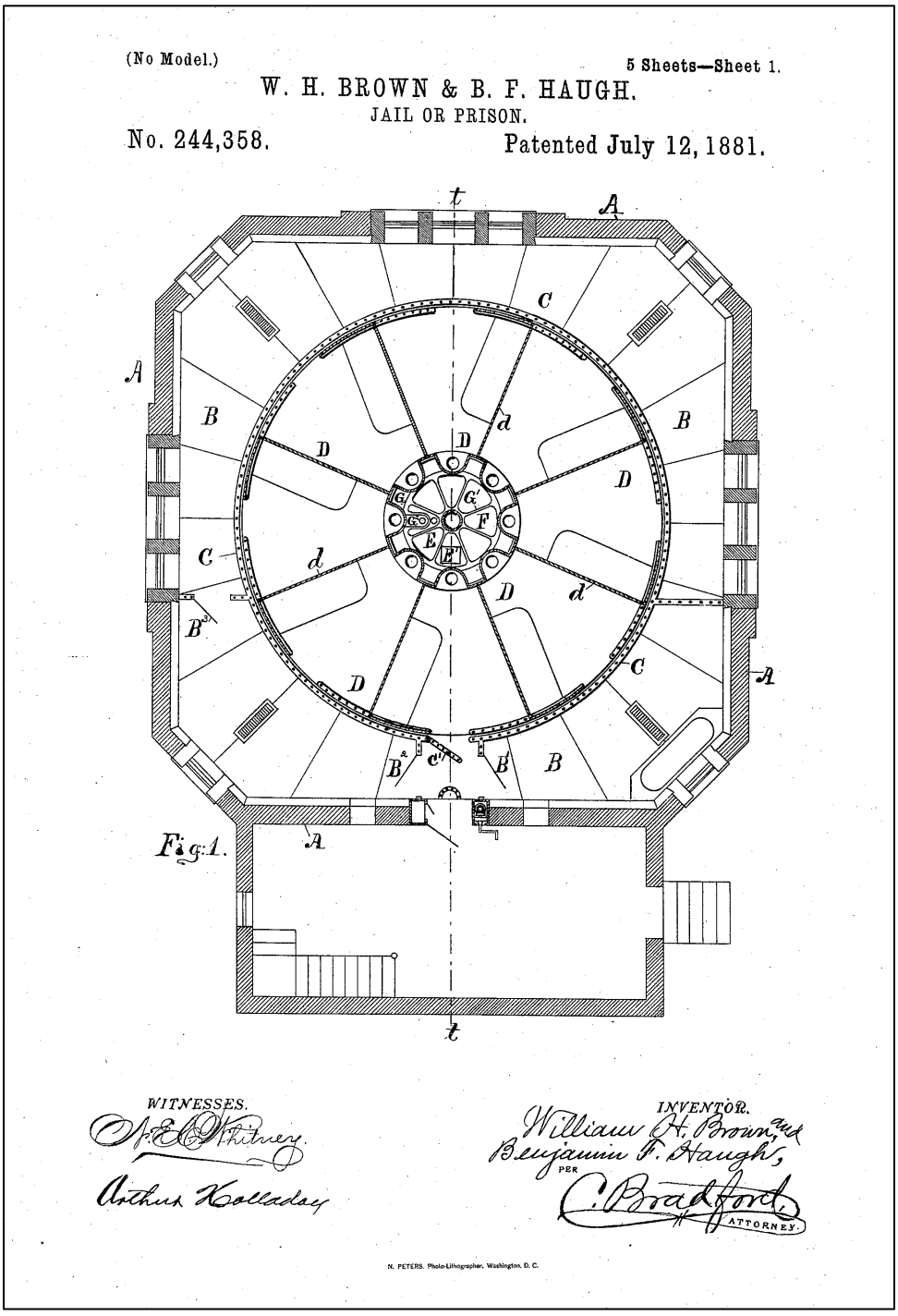


Figure 14 shows the footprint of the Rotary Jail designed by Brown and Haugh and signatures provided in William H. Brown and Benjamin F. Haugh: Rotary Jail Patent No. 244358.



Figure 15. Historic image from 1882 showing the Montgomery County Rotary Jail and Sheriff's Residence located in Crawfordsville, Montgomery County, Indiana. Source: The Revised Montgomery County Atlas, 1898.



Figure 16. Historic photograph from the 1930s that shows the north façade of the Montgomery County jail with the powerhouse in the background.

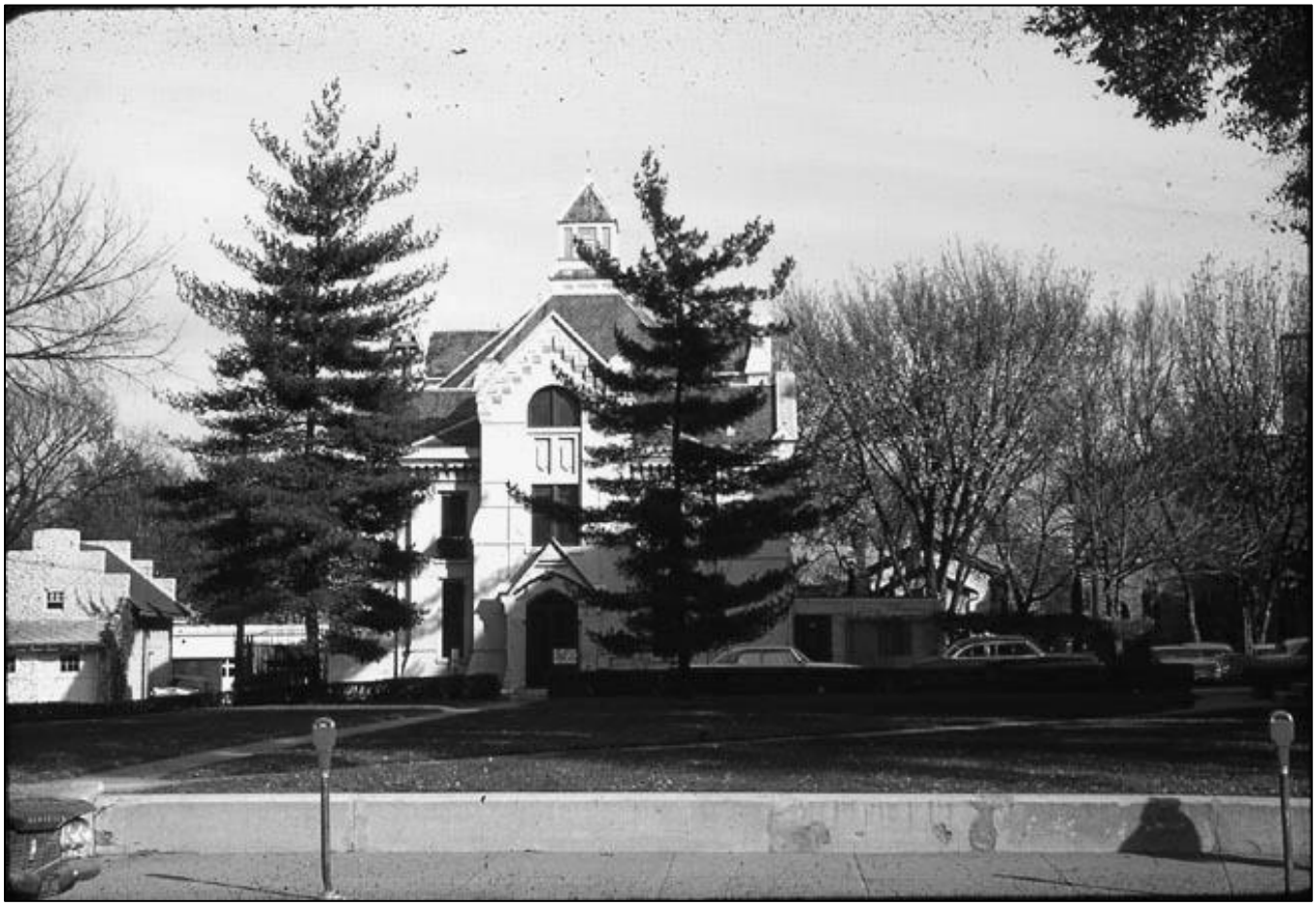


Figure 17. Historic photograph of a comparative property, the Pottawattamie County Jail located in Council Bluffs, Iowa, in the late 1950s. Source Historic Photos, Local History, Council Bluffs Public Library, Council Bluffs, Iowa.



Figure 18. Daviess County Jail and Sheriff's Residence, located in Gallatin, Missouri, in a photograph taken in the 1970s. Sheriff Lelan Houghton and his dog stand on the lawn in front of the building. Source Da**viess County Sheriff's Office.**

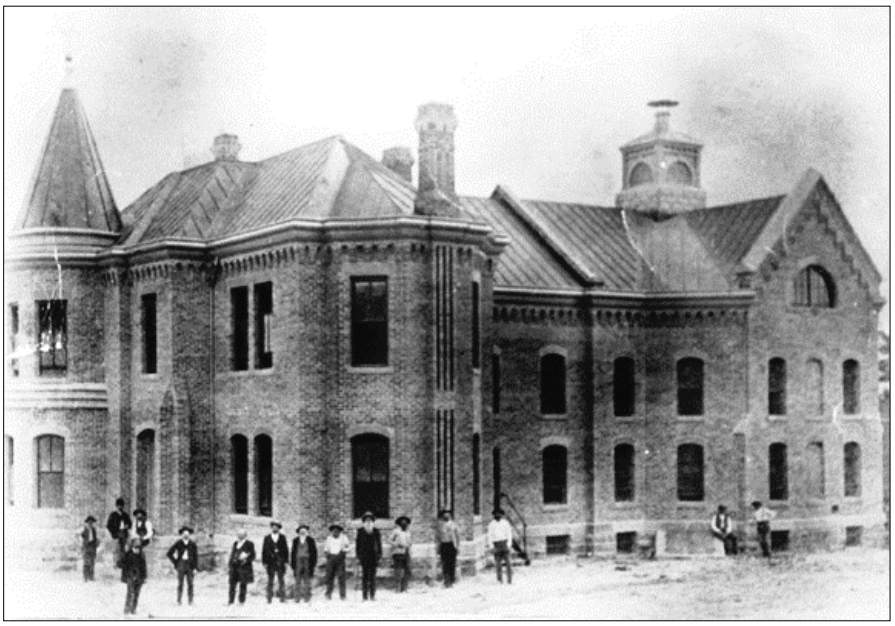


Figure 19. Historic photograph dated 1888 of the Waxahachie Rotary Jail and Sheriff's Residence, a comparative property located in Waxahachie, Ellis County, Texas. Photo located at Ancestry.com, Ellis County Jail 1888.



Figure 20. Waxahachie Rotary Jail and Sheriff's Residence in a photograph from 1980. Photograph located at Ancestry.com, Ellis County Jail 1888.