

Tennessee State Penitentiary, Main Prison
West end of Centennial Avenue
Nashville
Davidson County
Tennessee

HABS No. TN-33

HABS,
TENN,
19-NASH,
10 -

PHOTOGRAPHS

HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey
National Architectural and Engineering Record
National Park Service
Department of the Interior
Washington, D.C. 20240

HISTORIC AMERICAN BUILDINGS SURVEY

HABS No. TN-33

TENNESSEE STATE PENITENTIARY, ADMINISTRATION BUILDING

Location Western end of Centennial Avenue, ()shville, Davidson County, Tennessee
 Latitude: 36°18'33" Longitude: 86°51'55"

Present Owner: State of Tennessee

Present Occupant: Tennessee State Penitentiary

Present Use: Prison

State of Significance: At the time it was built, this penitentiary was considered one of the most modern and humane prisons in the United States. The Administration Building was built almost entirely of materials indigenous to the State of Tennessee. Its appearance, which at first glance belies its use, suggests the European castle as romanticized by the nineteenth-century imagination.

PART I. HISTORICAL INFORMATION

A. Physical History:

1. Date of erection: The first contract was let October 11, 1894, and excavations for the foundations started soon afterwards. However, a year later (October 26, 1895) a new contract was let and the structure which exists today was begun. The building was accepted by the State on November 15, 1897.
2. Architect: In 1893 the Legislature of Tennessee authorized a new prison to be constructed, the cost not to exceed \$600,000. The contract was awarded to J. P. Fulcher and Laurent, the state architect, was to act as supervising architect.

An investigating committee of the Legislature found that the Fulcher contract was in excess of the costs imposed by the bill authorizing the prison. Amid charges of collusion and political favoritism the contract was abrogated. A new contract was awarded on October 26, 1895, to the H. H. Squair and Company of Rockwood, Tennessee. S. M. Patton of Chattanooga was retained as architect, and it was according to his designs that the Main Prison was built.

The contracts entered into by the State in 1895 were as follows:

H. H. Squair and Co., general contract	\$203,400
T. J. Mooney, plumbing	27,000
Nashville Machine Co., heating and ventila- lating	9,357
Metropolitan Construction Co., electric wiring	4,477.25
Lookout Steam Boiler Works	3,395
	<u>\$247,629.25</u>

4. Original plans and construction: The following description is taken from the report of the architect, S. M. Patton, to the Tennessee Legislature in 1896.

"Brief Description of the New Penitentiary.

"For the benefit of the public, as well as the Legislature, we submit the following brief description of the new Penitentiary, reproduced from the report of Architect Patton in his 1896 report, with the modifications found beneficial from actual use:

"The Prison is located on the south bank of the Cumberland River, six miles west of Nashville, and is reached by electric railway passenger cars every fifteen minutes, and a parcel or freight car four times daily, carrying parcel and express packages. A branch of the Nashville, Chattanooga, and St. Louis Railway runs into the Prison yard, and beyond to the Cumberland River, near the brick yard. This railroad runs a passenger train to and from the Prison twice each week day and a freight train at least once every week day, and furnishes unequalled shipping facilities. Cars are loaded and unloaded at the doors of the different manufacturers.

"THE ADMINISTRATION BUILDING.

"Is situated outside of the Prison enclosure. It is fireproof in construction, 50 x 104 feet in size, with four stories and basement, built of white brick, and of beautiful architectural design. It contains the offices of the Prison, the Warden's residence, sleeping rooms for the guards and employees. Its floor area is about 30,000 feet. It is warmed by steam and lighted by electricity, both supplied from the power house of the Prison. The basement contains store rooms for prison supplies, and a fireproof vault with combination lock for safe-keeping of records and valuable papers.

"This building is equipped with a first-class passenger elevator.

"THE MAIN PRISON.

"Under this head is comprised the group of buildings forming the south side of the enclosure, consisting of the central building and the east and west wings. The Administration Building is connected by a passageway to the guard room, forming the first floor. In this room is located the armory, under lock and key, and it is the assembly room for the guards and reception room for visitors desiring to communicate with prisoners. The United States postoffice is located in this room, properly enclosed. Above this room is an open balcony sixteen feet wide, to which entrance can only be obtained from the Administration Building corridor, and from this balcony is the only entrance into the wings or cell houses, except from inside the enclosure. The night guard on duty has, through steel grills in the openings, a command of the corridors in both wings, and is provided with a search light of 5,000 candle-power, by which he can throw light upon any portion of the corridors. From this balcony is a passageway to the third tier of cells in either wing. This arrangement provides for the prisoners to pass into the chapel, situated immediately above. This room is twenty feet above the guard room, and has no windows near the floor. Designed as this chapel is, the danger from massing the convicts is eliminated, and they are as secure in their religious worship as when locked in their cells. The chapel is so arranged that white and colored prisoners are separate, and likewise the females, who are located in the galleries in view of the pulpit, but can not see or be seen by the male prisoners. Experience has, however, developed that the chapel is not of sufficient capacity for Sunday school sessions, which require the different classes to be separated. Some provision will be necessary to overcome this objection if the population of the Prison continues to increase. Perhaps in extending the colored dining-room referred to in another part of this report, this difficulty can be remedied.

"THE CELL WINGS.

"These wings, with the central building, make a total frontage of 700 feet and are over fifty feet high. The front and ends of these buildings up to the line of the window sills is built of Pikeville sandstone, and the remainder of the front of white brick, the same as the Administration Building. In each of these cell buildings, situated on the east and west sides of the central building, there are 400 cells. The cells are fifteen feet from the outer walls in each direction and facing the windows, so that there is not a dark hole in the building. The cells are built of vitrified brick, non-absorbent, and laid in cement and plastered inside and out with cement and alabastine.

The floors are of concrete, laid on arches and steel beams. Each cell has a steel lattice door, with one-quarter-inch mesh for light and ventilation. The cells are of the average size of 6 x 8 x 8 feet, though some are made larger to grade the prisoners. The larger cells are all provided with windows, and double hooks for two beds if required. They are arranged as nearly as possible in groups of twenty each, to carry out the provisions of the act of the Legislature in separating the corrigible from the incorrigible, and the minors from the older criminals. There are forty of these sub-divisions, and each is provided with a different master-key, as well as a shackle or locking device, which locks forty cells at once. This makes a double lock on each door. The bolts are all fileproof steel. The windows in the exterior walls of the cell houses are all ten feet above the ground, and are protected by steel grills. The roof over the walls is additionally protected by chrome or fileproof steel bars placed above the cells. There is no wood used in the construction of this building except the walks of the cell balconies, which are of slow-burning construction. It is absolutely impossible to burn these buildings. There are two guard balconies at either end, with entrances protected by steel doors. Three guards are ample to protect eight hundred to twelve hundred prisoners. In case of mutiny or insurrection the guards are able to be entirely out of reach of the prisoners, and fire-protection hose is provided not only to wash out the corridors, but is a most effective weapon in quelling any riot. Between each tier of cells there is an inner corridor four feet six inches wide, in which is situated the soil and water pipes, the electric wires, and, below, the heating, conduit, and drainage pipes.

"HEATING AND VENTILATING.

"This corridor plays an important function in the heating and ventilating. An average adult consumes about twenty-four cubic feet of air per minute. In order to provide a surplus of fresh air against any possible contingency, sixty feet of fresh air per minute is forced into the outer corridor by means of fans. Atmosphere in the cell buildings is maintained at a greater pressure than the outside air, and as the windows are stationary, the only possible escape for the air is through the cells into the inner corridor, and thence out through the ventilators on the roof. This arrangement is so designed that there is no draught, but a steady flow of air inward, so that any odor from the cells must pass into the foul air corridor. The air is warmed in winter by passing over hot steam pipes, the range of temperature in cell buildings never exceeding twenty degrees, being from seventy to ninety degrees. In summer the air is cooled by drawing the same through burlap bagging, on which cold water is trickled.

"PLUMBING.

"In each of the cells is placed a water closet made of cast iron, enameled, and firmly bolted to the floor. The flushing arrangement is entirely within the control of the occupant, and should he fail to flush his closet the inward draught to the foul air corridor will present any odor from going into the corridor, and the prisoner is the only sufferer by his neglect. At the same time he is not liable to use too much water, as he has to exert a force equal to lifting twenty pounds to flush the hopper. There is also a wash basin in each cell of galvanized iron, with a self-closing cock, where the occupant can wash himself or draw water for drinking.

"FURNITURE OF CELLS.

"The beds in the cells are made of heavy ducking, and are stretched taut, using a block and tackle, and suspended on hooks, thus making a very comfortable and exceedingly clean bed. Each cell is provided with an electric light, and the prisoner furnished with a chair, and many of them have tables and rugs.

"THE WOMAN'S BUILDING.

"The building for female prisoners is situated at the northwest corner of the enclosure, and contains forty-eight cells, eight or ten of them of large size, capable of accommodating several inmates. The doors are of heavy, seasoned oak, thoroughly bolted together. The stairway is of iron, and the building of slow-burning construction and practically fireproof. The cells are arranged to allow any grading or rating of prisoners desired. The building is warmed by steam, supplied from a boiler in the laundry, which is located in this building. The laundry is equipped with fifteen porcelain-lined tubs, two washing machines, extractor, dry room, and mangle, so that if necessary three convicts can easily do the washing for 900 prisoners. The Woman's Building is separated from the main enclosure by a strong, solid fence of wood.

"POWER HOUSE.

"This building contains three 150-horse-power boilers, coal storage room, two direct connected Harrisburg Ideal 150-horse-power engines, and two 100 kilowatt compound-wound, direct connected, age, two directed connected Harrisburg Ideal 150-horse-power engines, and two 100 Kilo-Watt compound-wound, direct-connected, general electric dynamos. The electricity generated by these dynamos is conveyed by large copper wire conductors, at slight loss, to the various electric motors of the contractors, the power furnished at present by

the motors aggregating some 250-horse-power. These dynamos also supply all the light needed in the buildings and on the grounds. There are 830 ten-candle power lamps used, one in each cell, and 318 sixteen-candle power lamps in the corridors and other buildings, and thirty 2000-candle power, long-burning arc lamps in the buildings and grounds. These are all run at 110-current, direct volt, which is not dangerous. The enclosing wall, and also the inner corridor, is protected by a guard wire around the outer wall at a distance of six inches from same, charged, with the use of an electric transformer, to 2,000 volts, and it is said to mean certain death to any one touching it. This wire saves the work of several men, is always wide awake and ready for business, and is a terror to the prisoners, as not one has risked coming into contact.

"The heating fans and steam coils are also situated in the power house, each having a capacity of supplying 6,000 cubic feet per minute. The exhaust steam from the engines is utilized in heating the steam coils, over which the air is forced for warming the buildings.

"In the power house all the essential machinery has been arranged in duplicate, so that the breaking down of an engine is not expected to interfere with the working of the prison. With the addition of another engine and generator, this power plant will be complete, with ample capacity to handle all the business within the walls.

"THE DINING-ROOM AND KITCHEN.

"In this building are two dining-rooms, one for each color, and a large kitchen, serving rooms, store rooms, and bakery attached. The kitchen is equipped with a first-class steam-cooking equipment, equal to that of the best hotels. One hundred gallons of coffee, 250 gallons of soup or boiled vegetables, and sixteen bushels of cooked vegetables, and 500 pounds of meat can be turned out at one time.

"BATHING FACILITIES.

"In the basement of the kitchen building is located the bath rooms, consisting of shower baths and a large swimming pool. These rooms, as well as the water in the pool, are warmed by steam.

"HOME MATERIALS.

"It is estimated that not over twenty per cent of the total cost of the new Penitentiary and its appurtenances were spent for materials outside of the State of Tennessee. All the brick, common and pressed, were made on the State Farm.

All the stone for the walls was quarried in Middle and East Tennessee. Vitrified brick, used in the construction of the cells, were manufactured at Robbins, Scott County, Tennessee. The cast and malleable iron work was made in Nashville and Chattanooga. All the sanitary pipe was manufactured at South Pittsburg. The doors, sashes, etc., were made in Nashville. The boilers, fireproof arches, ceilings, etc., were made in Chattanooga. Wherever practical, preference was given to home manufacturers. A large portion of soft steel work was changed to malleable iron when it was found that the latter could be furnished at the same price and manufactured in Tennessee.

"The hospital and factory buildings are fully described in another part of this report.

"UNITED STATES INSPECTOR'S REPORT.

"It is very gratifying that the inspection of the United States Prison Examiner, hereafter referred to in this report, discloses that the new Penitentiary is in line with the most modern and up-to-date prisons in the country. The Inspector specially commends the heating, ventilating, plumbing, and general construction of the building, and the employment system of the Prison."

5. Alterations and additions: The Main Prison has undergone only such alterations as have been necessary for repairs or modernization. None of these have changed the design of the structure. In 1905 adjustable windows were installed to improve the ventilation. At the same time a sprinkler system was added.

In 1970, the architectural firm Cooper and Waterfield reroofed and air-conditioned the central building.

C. Sources of Information:

1. Old Views: An aerial perspective view drawn by the architect is reproduced in "Report of the Board of Prison Commissioners to the Governor," Nashville, December 15, 1896, page 719.

An early photograph of the building appears in "Nashville, Gateway to the South," a booklet published by S. H. Kress and Co. in 1907 and reproduced in 1970 by James A. Crutchfield, Nashville.

2. Bibliography:

- a. Primary and unpublished sources:

Norman, Lee. A History of the Tennessee State Prison, unpublished manuscript on file at the Research and Development Division of the Tennessee State Penitentiary, Nashville, Tennessee.

Register of Deeds, Davidson County, Nashville, Tennessee.

b. Secondary and published sources:

Report to the Board of Prison Commissioners to the Governor, December 15, 1896. Tennessee State Archives.

Report of the Joint Investigating Committee on Penitentiary Affairs under Senate Joint Resolution Number 3 of the General Assembly of Tennessee. Nashville: Frank M. Paul, Printer, 1895.

S. H. Kress and Company. Nashville, Gateway to the South.
Nashville: James A. Crutchfield, 1970.

Prepared by: John W. Kiser
Architectural Historian
National Park Service
Summer 1971

PART II. ARCHITECTURAL INFORMATION

A. General Statement:

1. Architectural character: The various towers and dormers punctuating the roof are the most interesting features of this building.
2. Condition of fabric: excellent.

B. Description of Exterior:

1. Over-all dimensions: The three-and-a-half-story building measures approximately 144' x 66'.
2. Foundations: Rock-faced Tennessee limestone.
3. Walls: Painted brick, common bond.
4. Structural system: Masonry bearing wall with steel trusses supporting roof.
5. Porches: Stoops at main entrance and side entrances.
6. Openings:
 - a. Doorways and doors: The glass-and-aluminum front door is set in a Romanesque arched opening.
 - b. Windows: First level: eight-over-eight-light sash with arched transoms. Second level: eight-over-eight-light sash with square eight-light transoms. Third level: twelve-over-twelve-light double-hung sash.

7. Roof:

- a. Shape, covering: Steeply pitched hip roof covered with standing-seam galvanized iron.
- b. Cornice: Corbeled brick cornice.
- c. Towers, dormers: Central square tower, which rises another story above the roof, has a pyramidal roof, gable dormers and turrets at each corner. The two front corners of the building have round towers with conical roofs. Between the center tower and the corner towers are large gable dormers flanked by smaller hipped dormers. The gable dormers are two-story; the upper story has a Palladian window, while the lower story has three trabeated windows.

C. Description of the Interior:

1. Floor plans: This building has a simple cross plan. The entry hall provides access to the cell blocks and contains the stairway. The cross hall opens into offices and storage rooms. All floors are similar. The basement contains a kitchen, bakery, and employees' dining room.
2. Stairways: Dog leg stairs with iron newel post, iron balusters, oak handrail, and oak stairs. Above the landing between first and second floors, there are marble stairs with open floral design iron risers. Metal fire escapes at each end of cross halls.
3. Flooring: Vinyl tile on hardwood.
4. Wall and ceiling finish: painted plaster.
5. Doors: Six recessed panels with square glass transom above.
6. Hardware: Much of the original ornate brass door knobs and lock plates remains.

D. Site and Surroundings:

1. General setting: Generally flat site with slope from north to south. Building faces south-southeast. Immediately to the north is a rectangular cell block, with a twenty-one-bay front.

2. Outbuildings: Hospital, dining hall, cell blocks, maximum security, classification, various industry and classroom buildings.

Prepared by: Roy Pledger
Project Supervisor
Historic American Buildings Survey
August 1971

PART III. PROJECT INFORMATION

This project was undertaken by the Historic American Buildings Survey (HABS) in cooperation with the Tennessee Historical Commission and the Historic Sites Federation of Tennessee. Structures were measured and drawn in the summer of 1971, under the direction of James C. Massey, Chief of HABS; Roy C. Pledger (Texas A & M University), project supervisor; Daryl P. Fortier (University of Minnesota), architect; and by student architects Gilbert M. Glaubinger (Rhode Island School of Design), Steve P. Roberts (Ohio State University), and Barry S. Williams (Texas A & M University), at the HABS field office, Vanderbilt University, Nashville, Tennessee. The written historical data were prepared by John W. Kiser, in the summer of 1970. Jack E. Boucher of the HABS staff took the photographs in the summer of 1970.