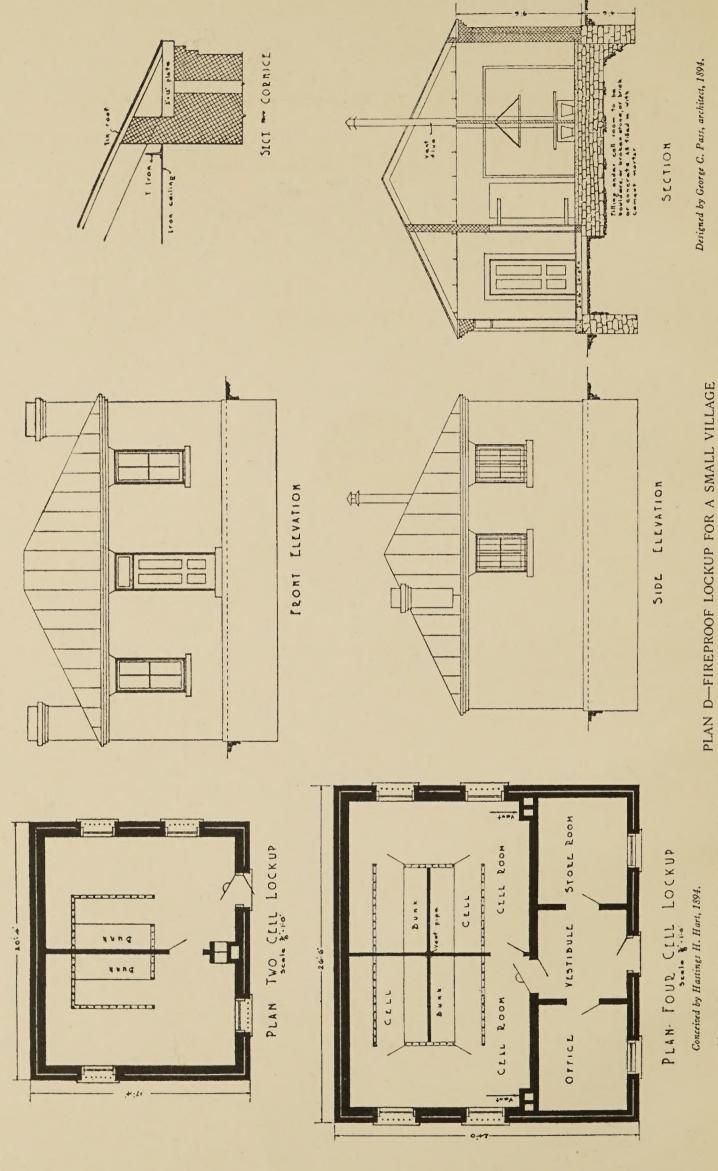
PLANS FOR CITY POLICE JAILS AND VILLAGE LOCKUPS



HASTINGS H. HART



More than 200 lockups have been built in Minnesota on plans which are essentially the same as the above, with slight modifications. For revision of these plans, see page 20.

Plans for City Police Jails and Village Lockups

By HASTINGS H. HART

Consultant in Delinquency and Penology Russell Sage Foundation



NEW YORK
RUSSELL SAGE FOUNDATION
1932

Copyright, 1932, by Russell Sage Foundation

Table of Contents

No. of the contract of the con	FAGE
Preface, by Shelby M. Harrison	4
Plan A.—Police Station for a Metropolitan City	5
PLAN B.—Police Station for a Medium Sized City	10
PLAN C.—POLICE STATION FOR A SMALL CITY	16
Plan D.—Fireproof Lockup for a Small Village	17
Original Specifications for Village Lockups in Minnesota, 1894	19
Revised Specifications for Village Lockups in Minnesota, 1931	19
THE MINNESOTA LOCKUP LAW OF 1895	26

Preface

THE public conscience has been aroused by publication of facts concerning existing conditions and practices in county and municipal jails. Nevertheless each year old jails are replaced with permanent structures of the traditional archaic type and there is no sufficient understanding of the reasons why county and municipal jails and lockups have become a disgrace to our nation and are actually schools of crime.

A study of penal institutions conducted in 1931 by the National Commission on Law Observance and Enforcement revealed that no comprehensive study had ever been made of police jails and village lockups in the United States and that statistics on the subject were completely lacking. Dr. Hastings H. Hart, chairman of the Advisory Committee on Penal Institutions, Probation and Parole of the Commission, therefore, made a special inquiry to secure an estimate of the number of these jails and information about the existing conditions.

Fifteen thousand questionnaires were sent out to city and police officials; the returns from these showed that there are approximately 11,000 police jails and village lockups, outnumbering all other prisons about 3 to 1. The following excerpts from Dr. Hart's published report indicate the major defects in these jails.

Our study reveals that throughout the United States the majority of the 11,000 police jails and lockups are literally a public nuisance, and are unfit for the purpose for which they are designed.

First, many are located in city halls, village buildings, or fire stations, where they occupy space needed for other purposes, and where dirty, noisy, and drunken prisoners are brought into close proximity with public officers and visitors.

Second, some lockups are in separate buildings, on the city hall square, necessitating architecture conforming to that of the city hall, while others are located on eligible and expensive corner lots requiring two expensive architectural faces. As a result, money is expended for architectural effect which ought to be used to make the building efficient for its intended purpose.

Third, thousands of police jails and lockups are fire traps, and not infrequently prisoners have been cremated in them. Our study shows that of the lockups in the small villages of seven states, out of 393, only 169, or 43 per cent, were reported as fireproof. . . .

Fourth, many lockups are antiquated buildings unfit for the purpose. In New England, 20 lockups out of 100, taken at random, are more than 50 years old; in Pennsylvania 10 out of 100 are more than 50 years old, and out of 1,366 lockups in different states, 40 per cent are more than 20 years old. Practically all of these old lockups are insanitary, without adequate lighting, heating, ventilation, or plumbing.

Fifth, very few lockups make proper provision for the segregation and classification of women, witnesses, and young people. It is common for young and inexperienced prisoners and even children to be thrown into intimate association for days at a time with vicious, deprayed, and diseased criminals.

Sixth, many lockups in small cities and villages are used also as lodging places for tramps and vagrants. Our report shows that on the average lockups in places of less than 5,000 inhabitants contain more lodgers than prisoners. This practice works badly both ways. On the one hand, it causes persons who are simply unfortunate to be locked up and treated as prisoners, and, on the other hand, these lodgers, who may be dirty and verminous, make it almost impossible to keep the lockup clean and sanitary.

Seventh, very few lockups are properly furnished. Usually the prisoners sleep on wooden or iron bunks, generally without mattresses or blankets. . . .

Eighth, the "third degree" is practiced extensively throughout the United States, with cruel and illegal treatment and sometimes torture of persons accused of crime, whether innocent or guilty. . . .

Ninth, there is a lack of state supervision of lock-ups.¹

Because of these conditions the author has been impelled to present this book. The four plans of police jails and village lockups for different sized communities embody the principles of adequate classification and segregation of police prisoners and have been designed for the use of officials responsible for the building of new or the revising of old plants, and for the architects engaged in such work.

Shelby M. Harrison, General Director Russell Sage Foundation

¹ Hart, Hastings H., Police Jails and Village Lockups. In Report on Penal Institutions, Probation and Parole, by the National Commission on Law Observance and Enforcement, June, 1931, pp. 330–331.





THE MILWAUKEE PUBLIC SAFETY BUILDING, 1929
Architects are at liberty to make copies of these plans for their own use, but not to publish them in printed form, as they are copyrighted. PLAN A-POLICE STATION FOR A METROPOLITAN CITY

Plans for City Police Jails and Village Lockups

OR more than 150 years the architecture of convict prisons, national, state, county, and municipal, has received a great deal of attention from prison officials and architects in America, but very little consideration has ever been given to that of city jails and village lockups, although the latter are many times as numerous and enrol more than two million prisoners a year.

The problem of the village lockup is, as we shall see, comparatively simple, but the city police station is especially difficult because it generally involves the headquarters of the police, with numerous offices, the municipal court, and the detention prison for persons arrested by the police and held for the action of the court.

There are submitted herewith four model plans for lockups and police stations which the writer believes will meet the needs of cities of all sizes and of villages:

- A. Police Station for a Metropolitan City— The Milwaukee Public Safety Building, 1929
- B. Police Station for a Medium Sized City
- C. Police Station for a Small City
- D. Fireproof Lockup for a Small Village

These plans are intended for the information and guidance of city authorities and architects in designing new institutions of this class. The details will vary according to the special needs of different communities and according to the ideas and ideals of local architects, but the general principles applied to these plans are believed to be sound and practical.

Plan A.—Police Station for a Metropolitan City

Through the courtesy of the architect, Albert Randolph Ross, the plans of the new Milwaukee City Public Safety Building are presented herewith as a model for a central police station and police lockup. This is the latest and one of the best metropolitan police stations built thus far in the United States. It occupies one-half of a square 300 by 280 feet, with a central court 80 by 156 feet. The other half of this square is occupied by the Milwaukee County Public Safety Building.

The City Public Safety Building contains the police station, with office accommodations for its several departments: offices of the superintendent, the detective bureau, identification bureau, traffic department, and the women's police department. It contains day rooms, locker rooms, baths, assembly hall, police school room, police library, gymnasium with a mezzanine running track, shooting gallery, and so forth.

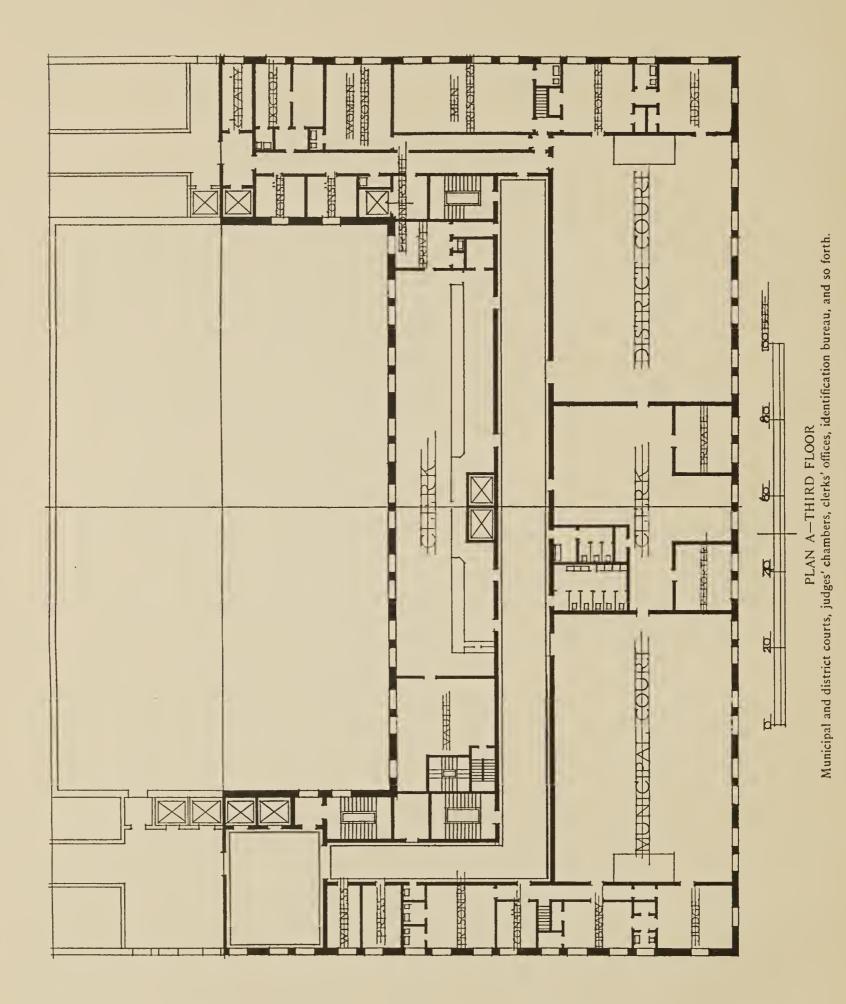
The prisoners enter through the garage; thence they are brought directly to the elevators under cover. There is also an enclosed stairway exit from the cell block down to a sub-basement beneath the garage floor which connects with a tunnel leading to the exterior of the building. In an emergency prisoners can be conducted through this exit to a waiting patrol outside.

The third-floor plan submitted herewith shows the position of the municipal and district courts, with judges' chambers, offices and vaults for court clerks, waiting rooms for witnesses, offices of court reporter, press rooms, physician's office, and detention rooms for male and female prisoners awaiting hearing in the courtrooms.

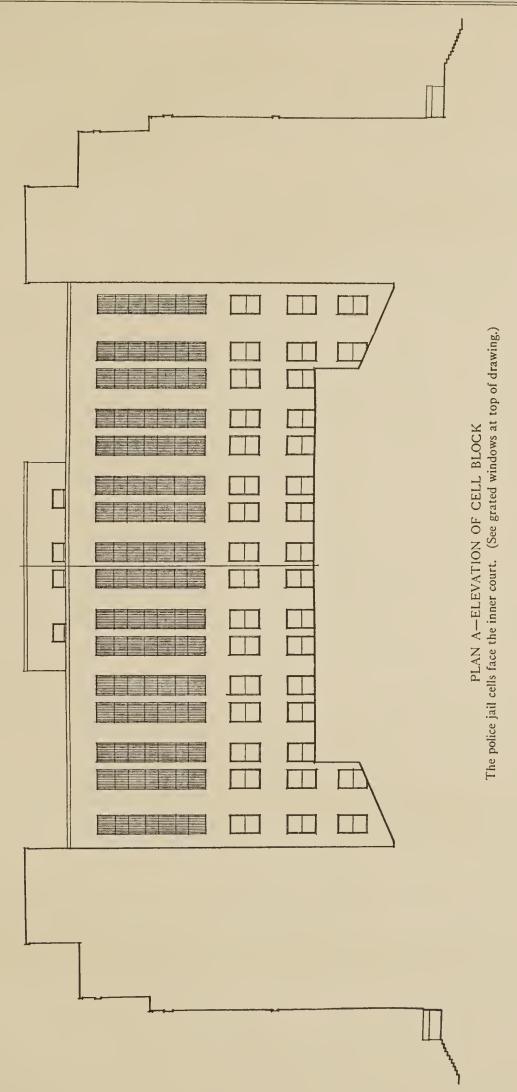
There are four tiers of cells, the first of which is on the third floor, mezzanine; the jail is therefore separated from the public. Each cell is five feet wide, eight feet long, and eight feet high, and receives sunlight daily. The building contains 108 cells.

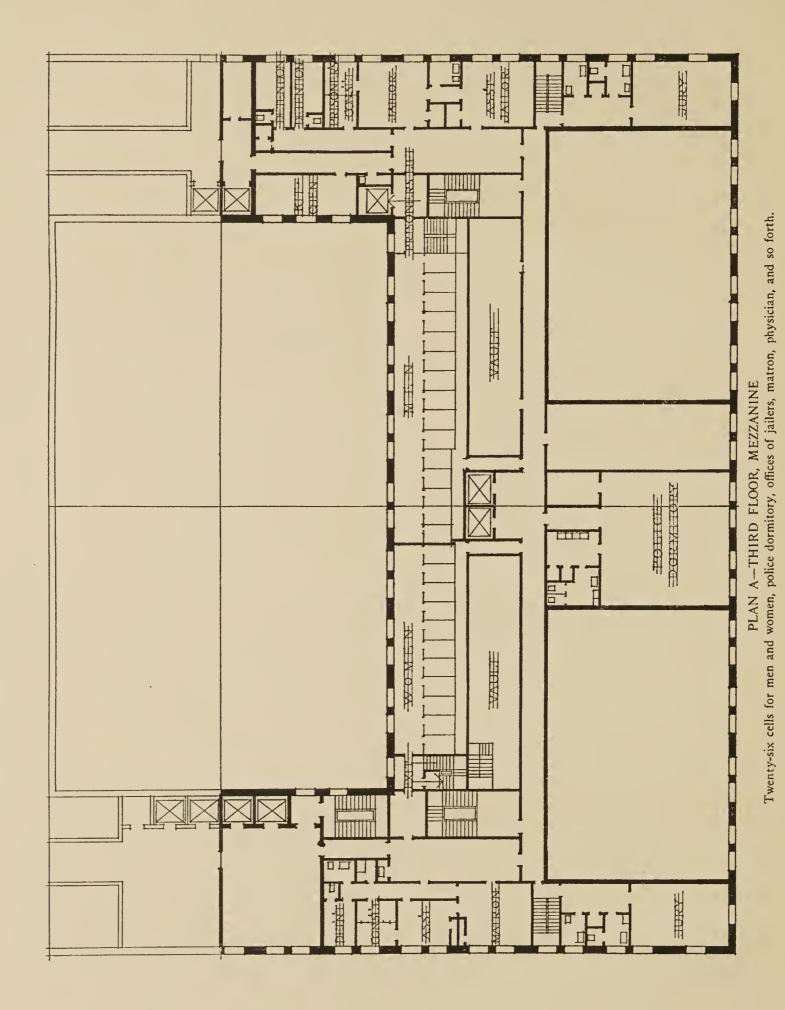
On the third floor, mezzanine, also are the prison kitchen, a police dormitory, interview room for lawyers, jury rooms, and offices of the jailer, assistant jailer, matron, and dentist.

On the fourth floor are the offices of the superintendent, those for finger printing, photostat, photographs and printing.

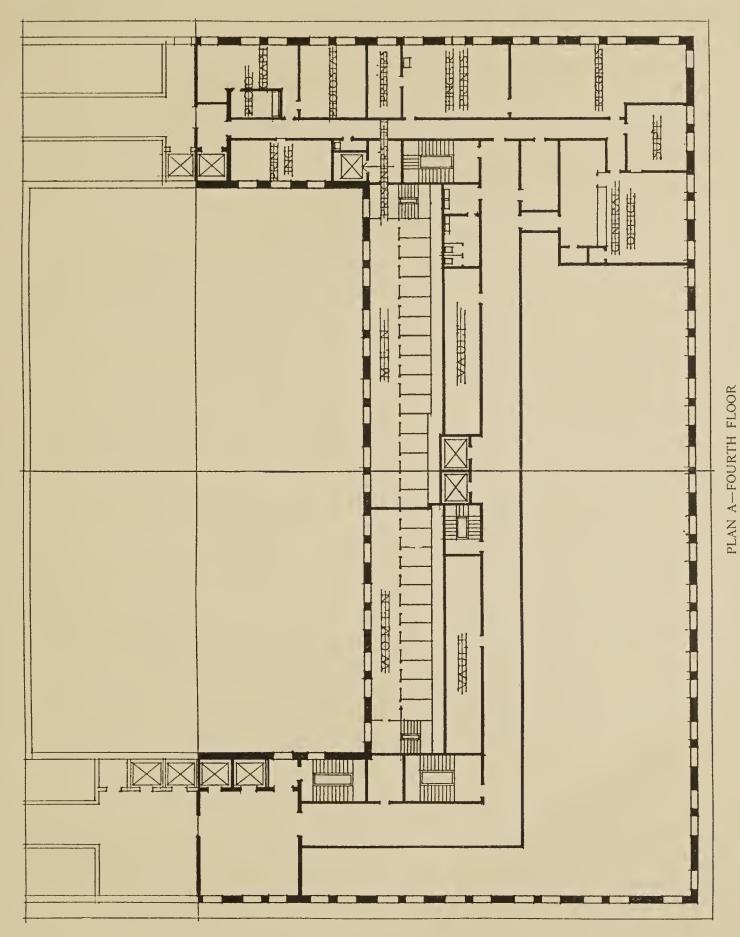


6





8



Twenty-six cells for men and women, general office, storage vaults, identification bureau, finger printing, and so forth.

A court in which the prisoners may exercise is provided above the prison.

The corridors are so arranged that the head jailer, from his office, can have an uninterrupted view from end to end. In the visiting department prisoners can converse in low tones with lawyers or visitors but it is impossible to pass contraband articles.

The floors and walls throughout are so constructed as to permit absolute cleanliness. Steel work has been put into only two cell floors but additional work is to be installed. The jail when visited was as clean as a hospital that maintains high standards. The writer has never seen a cleaner jail except in the city of London.

A better classification of prisoners might be worked out but that is a secondary matter; what is all important is that each prisoner, male and female, be kept in a separate cell and not allowed to associate with any other prisoner.

Plan B.—Police Station for a Medium Sized City

For about twenty years the writer has been looking for a police station in a city of 75,000 to 150,000 inhabitants that he could recommend as a model; while there are a few well-planned police stations, like those in San Francisco and in Springfield, Illinois, he has not found one that seemed to be ideal. He therefore enlisted the co-operation of the office of Louis E. Jallade and Alan B. Mills, experienced prison architects of New York City, and has worked out with them the plan which is submitted herewith.

It is not expected that this plan can serve the needs of any city without modification, because every progressive city has its own local conditions and its own civic ideals; but we believe that the general conception embodied is practical and that it will furnish a basis for constructive development in any American city of medium size. This plan proved to be a difficult undertaking because the modern police station includes three distinct departments:

- 1. The police headquarters, with provision for detective bureau, identification bureau, women's department, record files, and so forth. It includes also a large garage for police vans, automobiles, and motorcycles.
 - 2. The magistrate's court or police court for

prompt trial of minor offenses, including courtrooms, judge's chambers; office of the clerk with ample record files; jury room, waiting room for witnesses, and detention rooms for male and female prisoners awaiting call.

3. The municipal jail for the brief confinement of persons arrested by the police, most of whom are being held for minor offenses, such as drunkenness, vagrancy, prostitution, and petty thefts. Some, however, have been accused of serious crimes. Among the prisoners are many who are degraded habitual offenders. On the other hand, a number of them are inexperienced offenders arrested for the first time.

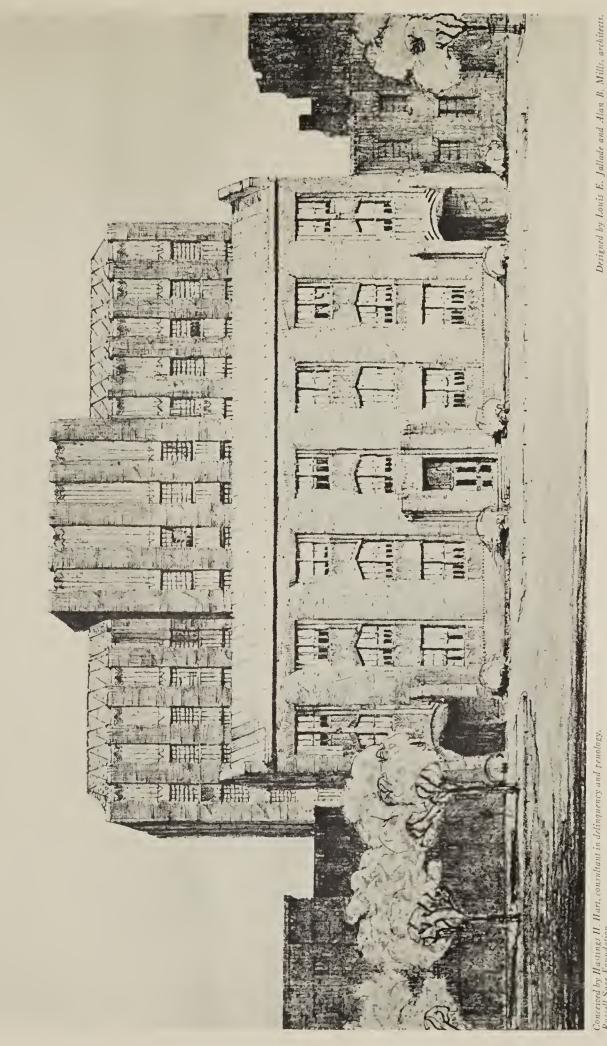
The jail plan submitted provides a separate cell for each person confined, with a sufficient surplus to provide individual cells in all cases except extraordinary emergencies caused by riots or police raids. It affords separate and distinct divisions for the sexes, for diseased inmates and for dangerous and hardened criminals.

The police headquarters and the municipal court, with their auxiliary offices, waiting rooms, and so forth, form a complete building so constructed as to sustain the jail on the top of the police station, entirely separated from the rest of the building; the jail has its own electric elevator and stairways, each floor being divisible into two or three separate classes. No provision has been made for "bull pens," where prisoners might run together, because in a police station every prisoner should be kept in his own cell during the entire time of his confinement, which usually is less than twenty-four hours and seldom more than two or three days.

The cells look east and west, admitting sunlight. The jail is completely separated from the rest of the building and from the public, and it is practically impossible for prisoners to signal or communicate with outside confederates.

It will be observed that there is a difference in the plan for the women's department and the similar floor plans for men. It is expected that at least two floors for male prisoners will be needed in the original building; the amount of space being determined in each city according to the amount of room estimated to be necessary within the next ten or fifteen years.

In the present plan we have endeavored to



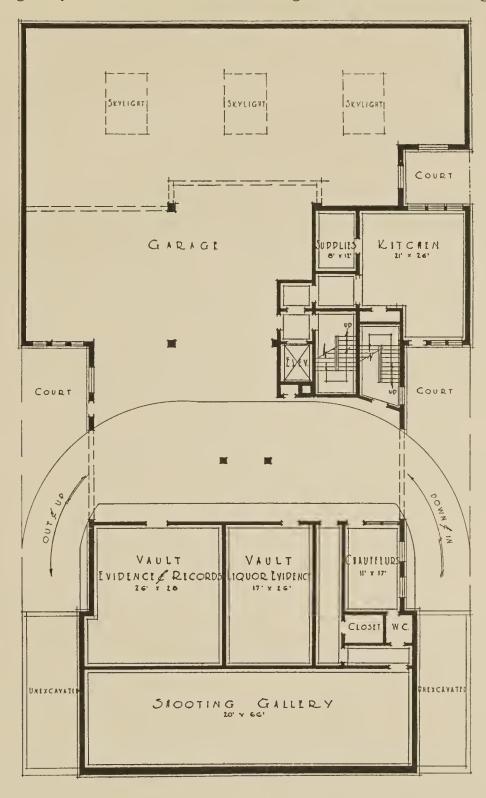
PLAN B-POLICE STATION AND JAIL FOR A MEDIUM SIZED CITY



avoid the difficulties that one encounters in so many police stations:

First, by locating the police station on a con-

Second, by reserving a space 8 or 10 feet wide on the north and south sides of the building for light and air, which also gives room for a



 $\label{eq:planbase} PLAN\ B-BASEMENT$ Ramps to and from garage, kitchen, shooting gallery, storage vaults, jail elevator.

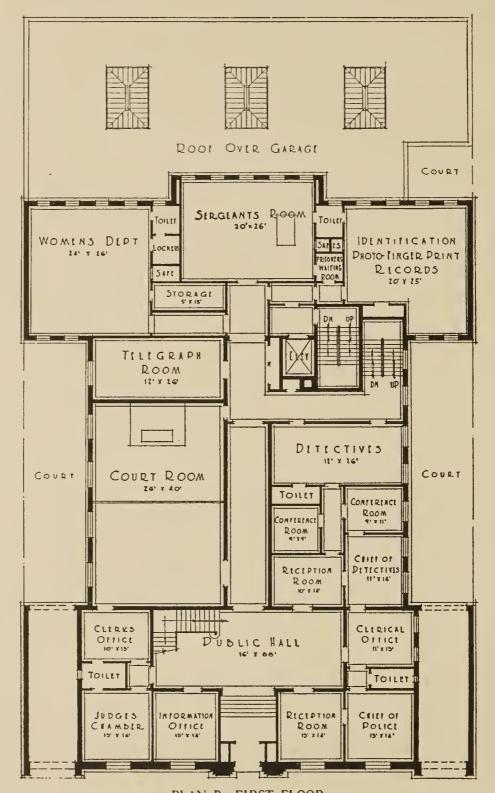
0 5 10 16 10

venient side street where land can be secured at a moderate cost, with a lot about 80 by 120 feet, fronting east or west and running back preferably to a 10 or 15 foot alley.

ramp on each side leading down to a large garage on the basement level.

Third, by providing abundant storage, filing vaults, and shooting gallery in the basement.

Fourth, by locating the courtrooms on the first and second floors, away from street noises, with abundant light and air from a court and a skylight. ting room, bedroom (having two beds), and bath, for the police matrons who go on and off duty at midnight. Provision is made also for an enclosed exercise yard on the roof of the building



PLAN B-FIRST FLOOR

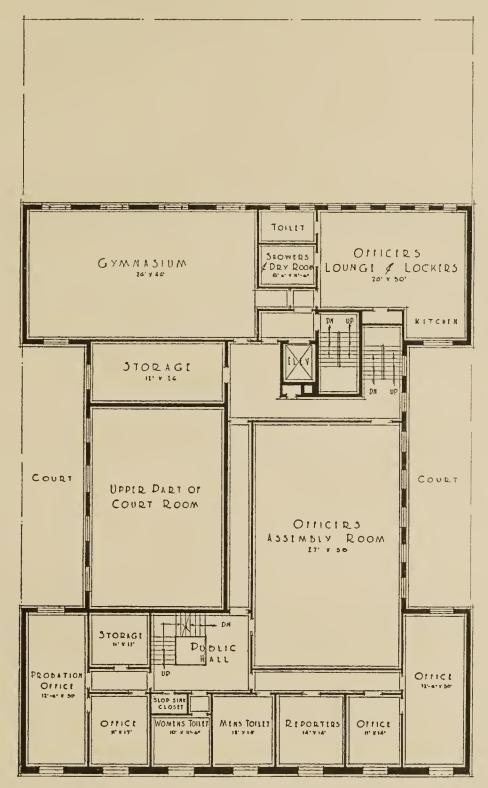
Public hall, offices of chief of police and chief of detectives, sergeant's room, identification bureau, women's department with special exit, courtroom, judge's chamber, and clerk's office.

Fifth, by devoting a large space on the second floor to members of the police force, for their assembly room, gymnasium, lounge, lockers, toilets, and baths. Provision is made for a sitwhich may be used by exceptional prisoners who may have to be detained longer than the usual day or two.

Sixth, by locating the physician's office, clinic,

and emergency hospital on the third floor of the police station, conveniently accessible to the jail on one side and the public entrance on the other.

floor as needed for classification; the number of cells to be proportioned to the anticipated needs of ten or fifteen years, with provision for adding more cell floors whenever needed with-



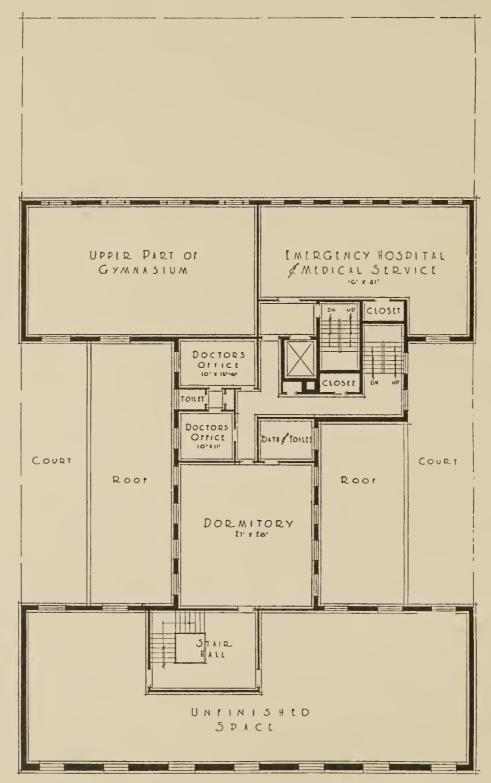
PLAN B-SECOND FLOOR

Officers' assembly room, lounge and lockers, toilet, showers, gymnasium, upper part of courtroom, probation office, and miscellaneous offices.

third (top) floor of the police station proper, each floor of the jail to have cells which are 7 by 10 by 8 feet, with two or three divisions on each

Seventh, by locating the police jail above the out altering the building underneath. Each story of the jail to be separate and distinct, with cells placed in two rows, fronting east and west, and looking out over the roof of the building; the cell windows being 60 to 70 feet distant from the nearest building, and so protected as to prevent signaling. The women's department to be located on the top floor or floors of the jail; the

The most important thought in designing modern buildings for special use is that they be elastic. The methods used in design and construction of the building are extremely impor-



PLAN B-THIRD FLOOR

Upper part of gymnasium, doctors' offices, emergency hospital, special dormitory for officers, and unfinished space.

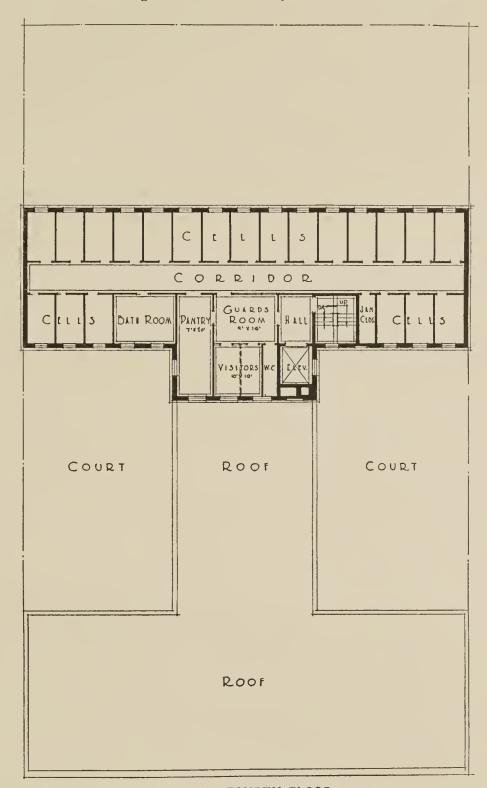
cell floors to be reached by automatic electric tant, as they contribute greatly to economy in elevators, controlled by the jailer and matron; access to the jail elevators to be had from police it become necessary. vans at basement entrance.

cost and make possible easy expansion should

This building should be of skeleton steel frame

built strong enough to permit adding five or and all partitions made of that material, glazed more additional stories on the wing without interfering with the occupancy of the building during the work. The floors throughout should

both sides, with sanitary base and cap and corners; reinforced both horizontally and vertically. Such blocks are now available at mod-



PLAN B-FOURTH FLOOR

Men's department (two or more floors). The jail cells will be separated from the front of the police station building by a distance of 60 feet, and from the alley in the rear by a distance of 24 feet.

be of reinforced concrete, using such material for the interior finish of the police jail section ing, strong enough to give adequate security; as may be expedient. This section, however, should be lined with glazed terra-cotta blocks,

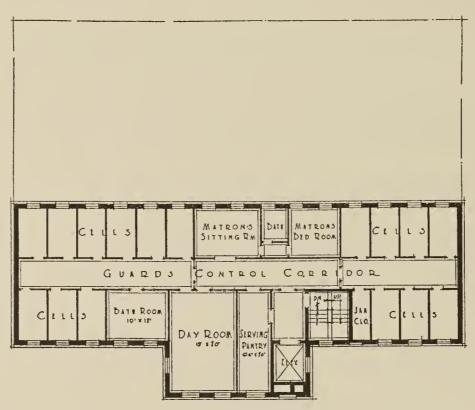
erate cost, so designed as to be, first, tool-resistand, second, but of equal importance, absolutely sanitary, impervious to vermin, and requiring practically no maintenance cost. They require no painting and are easily kept clean.

This construction is pleasing in appearance and does not require a structure of extreme weight to carry it, such as is necessary in steel cells.

A careful estimate of the cost of this building complete, police headquarters, municipal court, two jail floors for men and one for women, has been made by responsible builders and confirmed by the architect. The cost is estimated between PLAN C.—POLICE STATION FOR A SMALL CITY

This plan, designed by Louis E. Jallade and Alan B. Mills, architects, is based upon suggestions made by the writer. It is designed to meet the needs of small cities with a population of from 2,500 to 25,000. It follows the same general scheme as Plan B for a medium sized city, but is abridged so as to meet the minimum requirements of a small city.

This police station is intended to be located on an inside lot which should be about 60 to 80



PLAN B-FIFTH FLOOR

Women's department, with three divisions for classification, also day room, matrons' sitting room, and matrons' bedroom with two cots.

The second section of the women's department, placed on the floor above, will be similar to this Fifth Floor Plan, with a separate division for juveniles and complete separation of boys and girls.

\$250,000 and \$300,000, depending upon the location and treatment of the police station and court wing. This is approximately the actual cost of the new police station of Springfield, Illinois, which is similar in accommodations and cubical contents. It is an amount similar to the cost of a public school building for a city of corresponding size.

In the plan submitted we have adopted some important features from the Springfield plan, for which acknowledgments are hereby made to S. J. Hanes & Son, architects, of that city.

feet in width and 100 feet in depth in order that it may be set far enough back from the street to separate it from the public and in order that there may be sufficient light and ventilation on each side of the building. The building is about 30 feet square.

In the basement are a garage for automobiles and motorcycles, a boiler room and store rooms. On the first floor are offices of the police chief and sergeant, a squad room, a small hospital room for emergencies, a record room, a small courtroom, with clerk's office and judge's chamber.

Conceived by Hastings II. Hart, consultant in delinquency and penology, Plan C.

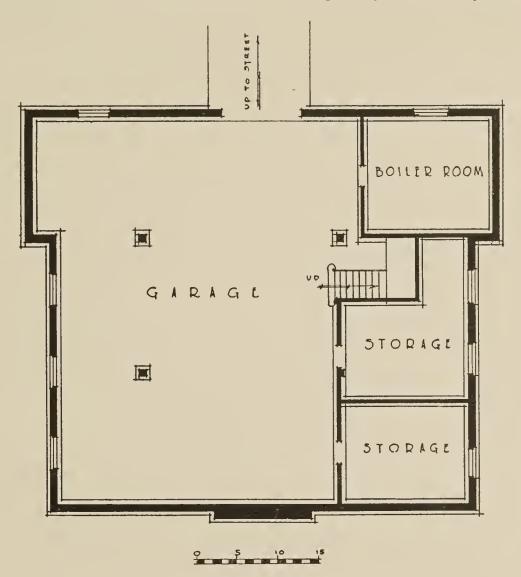
PLAN C—POLICE STATION FOR A SMALL CITY

Designed by Louis E. Jallale and Alan B. Mills, architects.



On the second floor is located the cell block, with six cells for men, two for women, and two for juveniles in three separate and distinct divisions. There are also a bath and a guard's space. The cells are arranged with outside windows, good ventilation, and heating facilities. They should be lined with glazed material so that they can be kept absolutely clean with a minimum amount of labor. The cell room is so planned

lumber; all of them fire traps. In eight years seven prisoners were burned to death. The State Board of Corrections and Charities, of which the writer was secretary, had authority to condemn lockups and close them, but could not dictate fireproof construction. The villages of the state were small and poor and could not afford to build such fireproof buildings as would be designed by the ordinary architect.



PLAN C-BASEMENT PLAN Garage, storage, and boiler room.

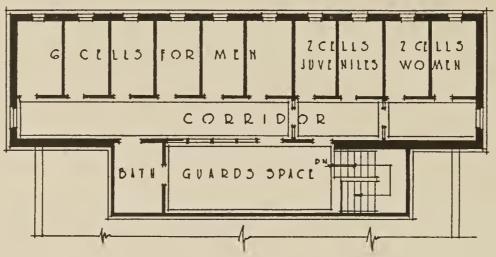
that a second story can be imposed upon it when demanded by the growth of the city, without disturbing the rest of the building.

A study of the plan submitted will indicate details which need not be mentioned here.

Plan D.—Fireproof Lockup for a Small Village

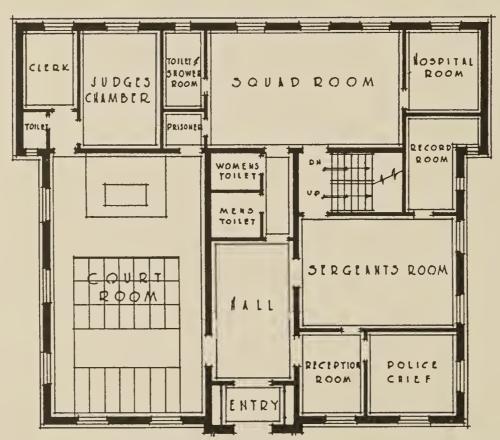
In 1894 there were in the state of Minnesota more than two hundred lockups built of pine

The writer made rough sketches for an inexpensive fireproof lockup and submitted them to George C. Pass, an architect of Mankato, who made a drawing, specifications, and estimates which provided for a fireproof and sanitary lockup with two cells in separate rooms estimated to cost \$696, and one with four separate cells estimated to cost \$1,200. One of the smaller lockups was immediately built in the village of Newport at a cost of \$700.



PLAN C-SECOND FLOOR

Cell block—six cells for men, two for juveniles, and two or more for women; also guards' space.



PLAN C-FIRST FLOOR

Police chief's room, sergeant's room, squad room, hospital room, courtroom, judge's chamber, and clerk's office.

The lockup was a one-story building, without a basement. The floor was concrete underlaid with boulders. The walls were of brick with a hollow air space and the ceiling of sheet steel. The wooden roof was covered with tin, outside and inside, so that fire could not run. Inasmuch as the lockup was a separate building, either on the same lot or on premises adjacent to the village hall, it was not necessary to build fireproof offices.

The original plans and specifications have been revised by Alan B. Mills, architect, of New York City, to bring them up to modern needs and are

ORIGINAL SPECIFICATIONS FOR VILLAGE LOCK-UPS IN MINNESOTA¹—PREPARED BY GEORGE PASS, ARCHITECT, MANKATO, 1894

SPECIFICATIONS FOR A TWO-CELL LOCKUP BUILDING TO BE BUILT ACCORDING TO THE PLANS, ELEVATIONS, SECTIONS, DETAILS, AND THIS SPECIFICATION, IN A THOROUGHLY GOOD AND WORKMANLIKE MANNER, USING GOOD MATERIALS OF SUITABLE KIND AND SUCH AS SHALL HEREAFTER BE MORE FULLY DESCRIBED.

Excavations. Excavate for the foundation walls around the outside and for the masonry in the cell-rooms. Stone walls must not be less than four feet in the ground after earth is graded up. Grade earth around walls.

Stone Work. Build foundation walls around outside, eighteen inches thick, of rubble stone or prairie boulders. Must be laid to lines on both sides, well bedded and bonded. All crevices filled with mortar and stone chips. All to be neatly pointed on the outside. Build two feet deep of solid masonry, all laid in mortar, under the cell room; or it may consist of rubble stone, boulders, riprap or brick, or it may be made of cement concrete rammed down solid. Over the above masonry shall be laid, in good half sand and half cement mortar, a floor of square or hexagon Portland cement sidewalk tile laid with close joints and all cracks filled with neat, dry cement. All must be laid level and straight. The tile floor to be laid after cages are in place. The tile to have been seasoned at least three months before laying and to have at least one-half inch deep of top surface of best

submitted herewith. The writer believes that the reader will be interested to see what few changes would be necessary to make Mr. Pass's specifications of 1894 usable in 1931 and has therefore printed herein both sets of specifications. See frontispiece for original plans.

The Minnesota Lockup Law of 1895 has been appended. It will be seen that this law provides for buildings conforming closely to the original plans of Mr. Pass. With slight modifications to take care of modern needs this law remains the same today as it did when enacted in 1895.

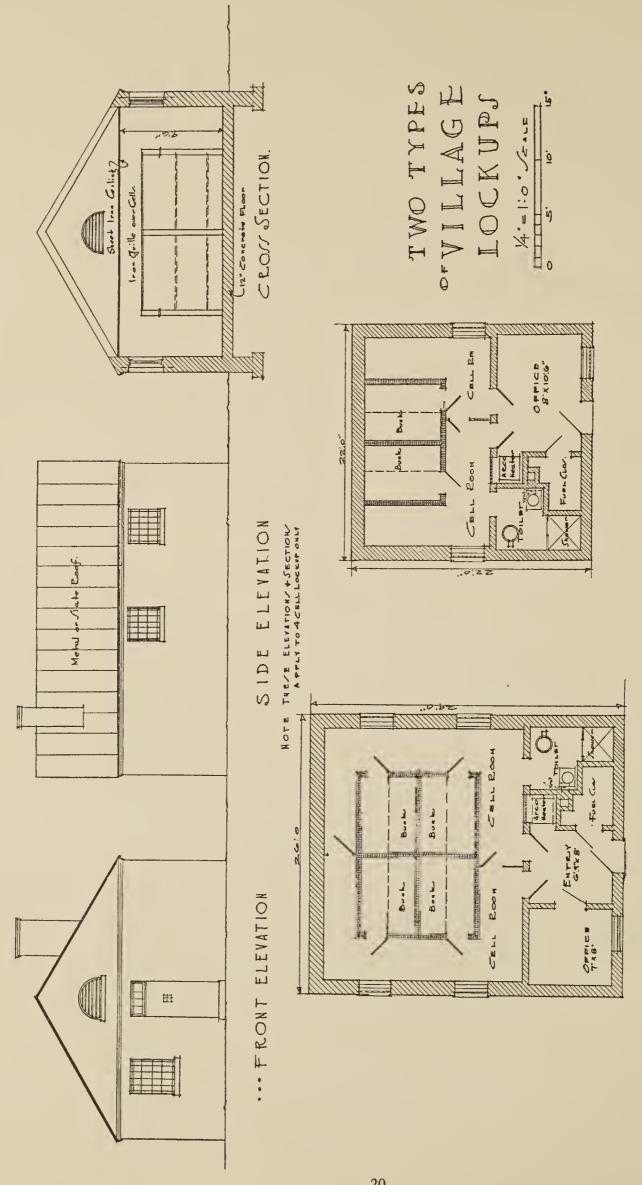
Revised Specifications for Village Lockups in Minnesota—Revised by Hastings H. Hart and Alan B. Mills, 1931

SPECIFICATIONS FOR A TWO-CELL OR FOUR-CELL LOCKUP BUILDING TO BE BUILT ACCORDING TO THE PLANS, ELEVATIONS, SECTIONS, DETAILS, IN A THOROUGHLY GOOD AND WORKMANLIKE MANNER, USING GOOD MATERIALS OF SUITABLE KIND AND SUCH AS SHALL HEREAFTER BE MORE FULLY DESCRIBED.

Excavations. Excavate for the foundation walls around the outside and for the masonry in the cell-rooms. Stone walls must not be less than four feet in the ground after earth is graded up. Grade earth around walls.

Stone Work. Build foundation walls of rubble stone, prairie boulders, or cement concrete. All must be laid to lines well bedded, bonded or tamped. Have stone neatly pointed on the outside. Build under the surface of entire floor area masonry of stone two feet thick or of concrete reinforced with three-quarters inch reinforcing rods set five inches center to center running both ways; concrete to be one foot thick. Over and above masonry floor lay on four inch by four inch or six inch by six inch clay tile floor with joints of not over threequarters of an inch in thickness, laid in cement mortar composed of one part Portland cement and two parts clean sharp sand. Cement tile may be substituted for the clay tile if desirable of same size and same thickness but same must have been seasoned for a period of three months before setting.

¹ Sixth Biennial Report of the State Board of Corrections and Charities to the Legislature of Minnesota, 1894, pp. 81-83.



PLAN D-FIREPROOF LOCKUP FOR A SMALL VILLAGE

PLANOF IWO CELL IOCKUP

Original plans designed by George G. Pass, architect, 1894. Revised, 1931, by Hasting, H. Hart, consultant in delinquency and penology, Russell Sage Foundation: and Louis E. Jallade and Alan B. Mills, architects. For original plans see frontispiece..

Conceived by Hastings II. Hart, 1894.

TLAN OF FOUR CELL LOCKUP

1894 Specifications (Continued)

Portland cement and to be warranted to wear five years with proper use. Door sill to be made of cut stone, eight inches thick, seventeen inches wide and three feet eight inches long. Window sills to be cut stone five by ten inches and three feet eight inches long.

Brick Work. Build brick walls of sizes, height and design shown by plans and elevations, of good hard burnt brick, even colored selected for outside, to be laid to lines on both sides perfectly level and straight, leaving a two-inch hollow space, this space to be plastered up on the outside in neat manner, and also tied across with anchors made of galvanized strap iron or galvanized wire every sixteen inches in every seventh course of brick. Two by twelve inch wall plate to be bedded down straight and walls laid tight up to roof boards.

Outside joints to be neatly struck with trowel usual way. Chimney to be neatly topped out and plastered up inside. Vent flue to have a partition of No. 18 galvanized iron so as to make two vent flues. The chimney smoke flue to have six-inch thimbles for stoves, with caps and openings for two registers in vent flues. The inside brick wall must also be run up to roof boards.

Plastering. Plaster the brick walls and ceilings with lime mortar, put on straight and true, floated down to a smooth and even surface.

Steel T Beams. The ceilings to be supported in T beams made of sheet steel, of sufficient strength to carry the weight. These beams to be made of two thicknesses of metal riveted together according to the system used by the Crittenden Roofing Company of Minneapolis, Minnesota. Steel metal lathing must be nailed to the under side of the beams.

Roof. Rafters to be of two by four-inch wood, with two six-inch hips. The rafters must be covered with a cheap grade of tin on lower edge and two sides, with the edges turned over and nailed on top. When rafters are put in place, twenty-inch centers, the whole surface will be covered with a cheap grade of roofing tin. This tin must be in strips, ends soldered together, nailed on top of the rafters. Over this to be laid

1931 Specifications (Continued)

Brick Work. Build brick walls of sizes, height and design shown by plans and elevations, of good hard burnt brick, even colored selected for outside, to be laid to lines on both sides perfectly level and straight, leaving a two-inch hollow space, this space to be plastered up on the outside in neat manner, and also tied across with anchors made of galvanized strap iron or galvanized wire every sixteen inches in every seventh course of brick. Two by twelve inch wall plate to be bedded down straight and walls laid tight up to roof boards.

Outside joints to be neatly struck with trowel usual way. Chimney to be neatly topped out and plastered up inside. Vent flue to have a partition of No. 18 galvanized iron so as to make two vent flues. The chimney smoke flue to have six-inch thimbles for stoves, with caps and openings for two registers in vent flues. The inside brick wall must also be run up to roof boards.

Plastering. Plaster the inside of all brick walls with Portland cement mortar put on true and straight, rodded and troweled down to a smooth and even surface. Ceilings shall be plastered with cement plaster set or applied on expanded metal lath.

Steel Work. Provide and install truss beams or junior beams similar to those manufactured by the Trus Con Steel Company, solidly bedded in brick walls at the ceiling level. Place Trus Con roof plates over these securely fastened to trusses or beams.

Fasten expanded metal lath on bottom of same made ready to receive plaster.

Roof. Rafters to be of two by four-inch wood, with two six-inch hips. The rafters must be covered with cheap grade of tin on lower edge and two sides, with the edges turned over and nailed on top. When rafters are put in place, twenty-inch centers, the whole surface will be covered with a cheap grade of roofing tin. This tin must be in strips, ends soldered together, nailed on top of the rafters. Over this to be laid

1894 Specifications (Continued)

cheap matched flooring and over the flooring lay standing seam tin roof made of a good grade of roofing tin, well cleated and turned one-quarter inch below bottom of wall plate to form drip. Flush chimneys well and make water-tight job.

If four cells are built, put up also through the roof and down to the ceiling a vent pipe, as shown by plans, made of galvanized iron, and properly secured.

Partition. The partition dividing cell-rooms to be made of dry oak boards, laminated in three thicknesses, as follows: The inner thickness to stand vertical and the two outer thicknesses placed at right angles with each other on each side of the inner at an angle of forty-five degrees.

Doors and Windows. The door must be made at same time with a rabbet. The outside door will also be made, same as inner door, of laminated oak boards. Outside frame to be made almost width of wall. Window frames to be made of two-inch plank in usual way. There will be no finish to windows or door (plaster to finish against jambs) and no base.

Paint all the exposed woodwork three coats white lead and linseed oil paint.

Paint the roof two coats graphite paint.

General Specifications for Iron or Jail Work Proper

(Leaving those who contract for same to fill in the details, dimensions, etc.)

Cover laminated partitions and doors with iron on both sides. Build jail cages. The laminated partitions and jail cages to be built on top of the rough masonry before the tile floors are laid.

Provide patent odorless night buckets for each cell.

Provide each cell with two bunks, the lower to be a shelf of oak plank twenty-four inches wide and the upper hung on hinges and chains, or other approved way, and made of iron.

Provide jail windows with iron guards.

1931 Specifications (Continued)

cheap matched flooring and over the flooring lay standing seam tin roof made of good grade of roofing tin, well cleated and turned one-quarter inch below bottom of wall plate to form drip. Flush chimneys well and make water-tight job.

If four cells are built, put up also through the roof and down to the ceiling a vent pipe, as shown by plans, made of galvanized iron, and properly secured.

Partitions. The partitions dividing the cellrooms to be laid up with four-inch thick cement block or glazed terra cotta block, with the cells set vertical and to have reinforcing rods threequarters inch in diameter placed in each of the cells of the blocks running into the floor construction and carried to the ceiling after which all of the cells in the block shall be grouted with cement mortar. If the cement blocks are used, these partitions shall be plastered both sides with cement plaster as described for plastering walls.

Doors and Windows. The door must be made at same time with a rabbet. The outer door will also be made, same as inner door, of laminated oak boards. Outside frame to be made almost width of wall. Window frames to be made of two-inch plank in usual way. There will be no finish to windows or doors (plaster to finish against jamb) and no base.

Paint all the exposed wood work three coats white lead and linseed oil paint.

Paint the roof two coats graphite paint.

Iron and Miscellaneous Construction. Provide jail windows with iron guards. Provide a grated door with peak on outside frame. Provide all doors with strong hinges and suitable locks. Provide also two vent registers for vent flues.

Plumbing. Provide where indicated on the drawings all the necessary pipe, fittings, fixtures, and do all the necessary labor to install same to provide for the toilet rooms, lavatories to be iron entirely, approximately twenty-two inches wide by twenty inches deep, the closets to be wall type, to be thoroughly hung on the walls with cast iron brackets.

Build in ceiling where shower is indicated a shower head of the prison type as manufactured

1894 Specifications (Concluded)

Provide a grated door with peak on outside frame.

Provide all doors with strong hinges and suitable locks.

Provide also two vent registers for vent flues. Build in the corner of each cell a small flue to the ceiling, connected with the vent flue, which is to be put in by the builders. Provide at bottom of each of these flues a small closet for night buckets, with proper door and vent opening. Provide each closet with a patent odorless night soil bucket of approved make.

1931 Specifications (Concluded)

by the Standard Sanitary Manufacturing Company or equal. All plumbing to be carried off to the sewer, or to cesspool if no sewer is available.

Electric Wiring. Install BX flexible cable with proper size wire to all electric light outlets indicated and supply and install drop cord lights where indicated.

(Editor's Note.—The last section of the 1894 specifications for village lockups in Minnesota entitled "changes for wood construction" is printed here in two columns, inasmuch as there were no parallel recommendations on this subject for 1931.)

Changes for Wood Construction

If wood is used instead of brick, the following changes will be required in the foregoing specifications:

The building is to be built of such dimensions that the inside measurement shall be the same as for the brick building.

Water Table. The top course of the stone foundation is to be finished off with a drip to form water table of two inches projection outside of body of building.

Outside and Inside Walls. The walls throughout to be built of wood, laminated, using for the purpose a cheap grade of pine lumber. For outside walls, place first two-inch planks, not over eight inches wide, upright, on the outside of which put one thickness of asbestos paper. Put against that two-inch planks, not over eight inches wide, horizontal, well spiked and clinched to the uprights. After that, cover the inside with one thickness of asbestos paper and put on one thickness of matched flooring, horizontal. Wherever any inside partitions join these outside walls or join each other there must first be a strip of sheet iron put on.

The partition walls must be made of three thicknesses of cheap, dry pine inch boards, laminated; the inner thickness placed upright; the other thicknesses, on each side of the upright, diagonal and at right angles with each other. Whatever doors occur in these inside

partitions must be cut out and framed at the same time with a proper rabbet. The ceilings throughout are to be supported on steel T irons, as previously specified.

Tin Covering. All outside and inside walls (except the cell division walls) shall be covered with No. 28 sheet steel, painted before putting up. It must all be neatly put up, well nailed on with flat-headed nails, and must have a thickness of asbestos paper behind it at all points. (The cell division walls are to be put up by the jail builders—wood covered with heavier iron or steel.)

The doors also are to be covered neatly with No. 28 sheet steel; the edges of jambs and doors to be neatly covered. The cell doors must be hung by the jail builders and provided with suitable locks. The other inside doors must be hung on suitable heavy T or strap hinges and secured with rim knob locks; the outer door to have besides a Yale lock with corrugated key.

The window frames must be made to details; also the outer door frames. Windows to be size and thickness marked on elevations, properly fitted and secured with spring bolts.

If the four-cell plan is built, the office, vestibule and store room will have two by six-inch joists and ordinary matched pine floor put down in the usual way.

Chimneys must be built after the steel inside sheathing has been put on.

Architect's Estimate of the Cost of These Architect's Estimate Revised in October, LOCKUPS IN 1894

	Two Cells		Four Cells	
	Quantity	Amount	Quantity	Amount
Excavating Stone foundation Stone, boulders brick or concrete under cell	20 yds. 510 ft.	\$3.00 40.80	30 yds. 680 ft.	\$4.00 54.40
room Cement sidewalk tile Door sills	540 ft. 270 ft. 1	37.80 54.00 2.00	704 ft. 352 ft. 1	49.28 70.40 2.00
Window sills Brick in wall Metal lathing Plastering, brown coat	4 16,744 30 yds. 96 yds.	6.00 134.19 6.60 9.60	6 29,674 44 yds. 210 yds.	9.00 237.40 9.68 21.00
Doors Windows Tin roofing standing	1 4	4.00 16.00	4 6	16.00 24.00
seam Tin fireproofing for rafters and roof boards	440 ft.	30.80	625 ft.	43.75
T beams, sheet steel Wall plates, 2 by 12 Rafters, 2 by 4	400 ft. 144 ft. 160 ft. 165 ft.	35.00 10.08 2.72 2.80	600 ft. 304 ft. 240 ft. 364 ft.	52,50 21.28 4.08 6.19
Rafters, 2 by 6 Oak boards, dressed Matched roof boards	48 ft. 150 ft. 600 ft.	.86 4.50 6.20	212 ft. 400 ft. 900 ft.	3.60 12.00 9.30
Flooring Wood lathing Carpenter work		15.00	168 ft. 28 yds.	5.04 2.24 25.00
Painting Hardware, nails, scaffolding and sundries	••	10.00	••	15.00 34.54
Total Six window guards and	••	\$456.95	•••	\$731.68
1 grated door with basket peep	• •		••	50.00
Totals Iron cells, complete with		\$456.95	••	\$781.68
fixtures Grand Totals	• • • • • • • • • • • • • • • • • • • •	\$696.95		\$1,231.68

1931

	Two Cells		Four Cells	
	Quantity	Amount	Quantity	Amount
Excavating	20 yds.	\$20.00	30 yds.	\$30.00
Stone foundation	510 ft.	306.00		408.00
Concrete under cell	540 ft.	70.00	704 ft.	85.00
Floor tile	270 ft.	189.00	352 ft.	246.40
Door sill	1	5.00	1	5.00
Window sill	4	16.00	6	24.00
Brick walls	16,744	835.00	29,674	1,500.00
Lath	30 yds.	24.00	44 yds.	35.30
Cement plaster	96 yds.	86.40	210 yds.	189.00
Windows	3	45.00	5	75.00
Doors	7	210.00	9	270.00
Tin roofing	440 ft.	85.00	625 ft.	125.00
T beams		35.00		50.00
Wall plates	160 ft.	16.00	240 ft.	24.00
Tin fireproofing	400 ft.	80.00	600 ft.	120.00
Rafters, 2" x 4"	165 ft.	16.50	364 ft.	36.40
Rafters, 2" x 6"	48 ft.	6.00	212 ft.	20.00
T. C. partitions	150 ft.	35.00	400 ft.	90.00
Wood flooring			168 ft.	16.80
Painting		50.50		75.00
Hardware, etc.		35.00		50.00
Plumbing		200.00		200.00
Electric lighting		15.00		15.00
Window guards and				
gate		60.00		80.00
Glazed T. C. partitions		815.00	• •	1,280.00
Total		\$3,255.40		\$5,049.90
Alternate for steel cells instead of glazed T. C. partitions		\$350.00		\$600.00

The architect estimates that lockups of the same size, built of wood, with five-inch walls, covered within and without with tin, would cost in Mankato just about the same as the above; but in localities where brick is expensive and lumber cheap, the wooden building would be cheaper.

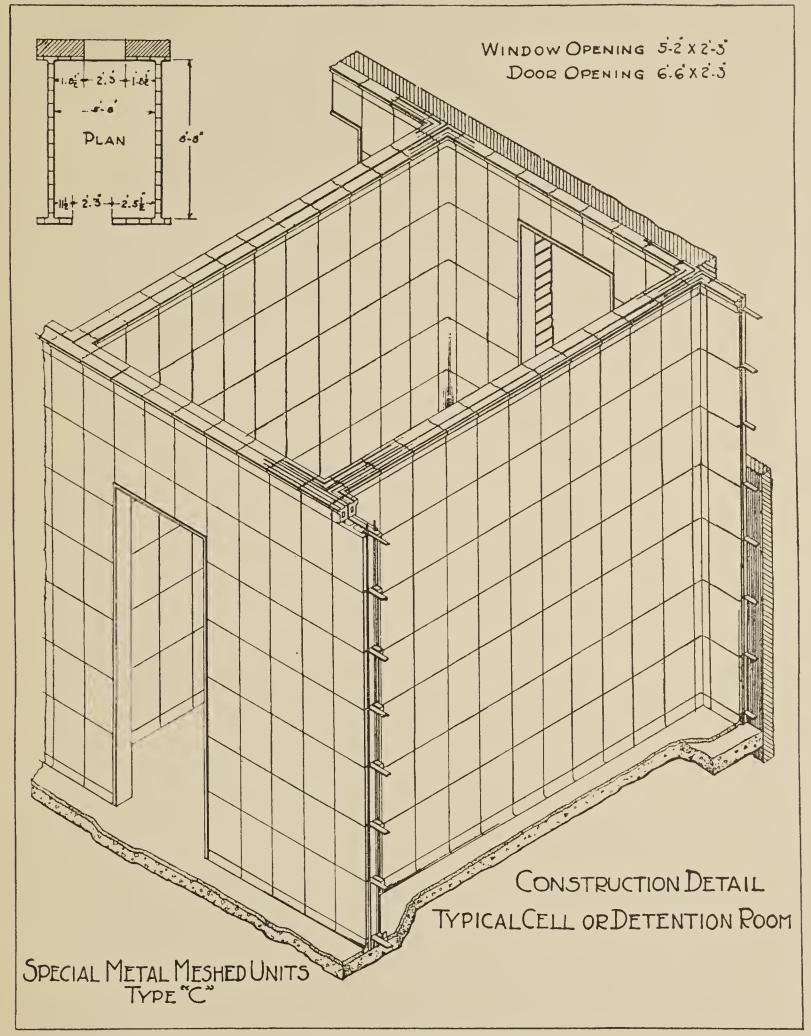
This estimate has been prepared by A. B. Mills and certified to by Charles J. Smith, Construction Company of Trenton, New Jersey, and Joseph Corbett, builder, Madison, New Jersey.

It is to be noted that the revised specifications for this village lockup call for the use of cement block or glazed terra cotta partition block.

For the last few decades prison construction has been designed with the belief that security is paramount to every other consideration. Cells have been built of heavy thick masonry, either of reinforced concrete or brick, or of toolproof steel. The initial cost of construction, therefore, has been high and the character of the finish has made it difficult, if not impossible, to include other desirable features.

It is only recently that economy in cost both of construction and maintenance, light, cheerfulness, cleanliness, and sanitation have been given any place in the planning of prison and jail buildings. There is now almost universal agreement that it is important to construct welllighted, cheerful, sanitary, as well as safe, quarters for prisoners rather than cells of the bastille type.

We have therefore given considerable study to the development of a material which seems to meet all these requirements. This material



is a glazed terra cotta block with hollow compartments adequately locked and bonded. Only seven forms of blocks are necessary to complete a cell. The joints are so constructed as to make it practically impossible to break through a partition, thereby assuring complete security. The initial construction cost is low and there is scarcely any maintenance cost.

Other essential requirements mentioned above are also assured.

The construction of a typical cell built with a terra cotta block, which is manufactured by the Atlantic Terra Cotta Company, is shown on the preceding page. Similar blocks are also manufactured by all the standard architectural terra cotta manufacturers.

THE MINNESOTA LOCKUP LAW OF 1895

The legislature of 1895 passed the following act, General Laws of 1895, chapter 263:

TO REGULATE THE CONSTRUCTION AND MANAGE-MENT OF CITY AND VILLAGE LOCKUPS

Be it enacted by the Legislature of the State of Minnesota:

Section 1. The common council of any incorporated city or legally organized village in the State of Minnesota is hereby authorized and empowered to purchase, build or lease and maintain and regulate one or more lockups for the detention of persons charged with offenses against the ordinances or by-laws of said city or village, or for the confinement of persons sentenced to imprisonment for the violation of such ordinances and by-laws. It shall also be lawful, under such regulations as such council may prescribe, to use such lockup for the temporary detention of any prisoner arrested under due process of law.

Sec. 2. It shall be unlawful for any city or village council to lease or purchase or to make final adoption of plans for the building of any lockup or for repairs costing more than one hundred (\$100) dollars, until the plans of said lockup or said repairs shall have been approved by the State Board of Corrections and Charities; and no contract for the purchase or lease or erection of any city or village lockup shall be valid or of binding effect unless the suggestions and criticisms of the said Board of Corrections and Charities shall have been placed on file in the office of the city clerk or the village recorder, as the case may be, before the execution of said contract.

Sec. 3. It shall be unlawful for the State Board of Corrections and Charities to approve any

plan for a village lockup unless the said lockup shall contain at least two separate rooms and unless it is to be constructed of fireproof material, or is to have all woodwork, within and without the building, except window frames and window sash, thoroughly covered with tin, sheet iron or other fireproof material.

Sec. 4. It shall be the duty of the chief of police or the village marshal, as the case may be, to see that the lockup and the bedding therein is kept at all times clean, wholesome and free from vermin. It shall be his duty to cause the lockup to be swept daily and thoroughly cleansed with water at least once in two weeks, unless it is unoccupied.

Sec. 5. It shall be unlawful to keep male and female prisoners in the same room, or to keep insane persons or children under sixteen (16) years of age in the same room with other prisoners. So far as practicable, each prisoner in the lockup shall be kept in a separate cell.

Sec. 6. It shall be the duty of the chief of police or the village marshal, as the case may be, to keep a true and exact register of all prisoners committed to the lockup, and all persons admitted to the lockup as lodgers, in such form as the State Board of Corrections and Charities may prescribe; and the same shall be kept in a book to be provided by the city or village.

Sec. 7. It shall be the duty of the mayor of every city or village in which such lockup is located to appoint some discreet and competent woman of good character as matron for each lockup located in said city or village, who shall have exclusive charge of all women committed to such lockup, and shall receive such compensation as the said common council from time to time determine, not less than fifty (50) cents for

each day when there are female prisoners confined in the lockup.

- Sec. 8. No officer in charge of any lockup shall deliver or permit any other person to deliver to any inmate of such lockup any spirituous liquor, or any mixed liquor, part of which is spirituous, or any wine, cider, or beer, unless a physician shall certify in writing that the health of such prisoner requires it, in which case he may be allowed the quantity prescribed and no more.
- Sec. 9. It shall be the duty of the health officer of every city and village to inspect the lockup once in each year of his official term with reference to its sanitary condition, to make a written report of his inspection to the State
- Board of Corrections and Charities on such blanks as said board shall prescribe and to present a copy of said report to the city or village council; and said health officer shall receive from the treasury of said city or village the sum of two (\$2) dollars for every such annual inspection; provided, that the said fee shall not be paid until he shall have first filed his report as aforesaid.
- Sec. 10. Any officer neglecting the duties prescribed in sections four (4), five (5), six (6), eight (8) and nine (9) of this act shall be guilty of a misdemeanor.
- Sec. 11. All acts and parts of acts inconsistent with this act are hereby repealed.
- Sec. 12. This act shall take effect and be in force from and after its passage.