(No Model.) 2 Sheets—Sheet 1.

M. J. NELLES.

CATCH BASIN.

No. 575,553. Patented Jan. 19, 1897.

Fig. 6.

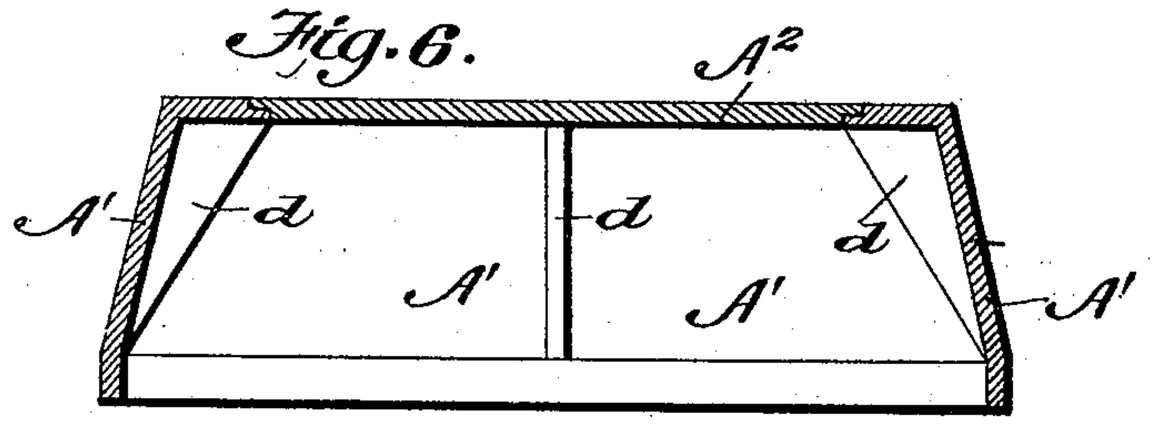


Fig. 5.

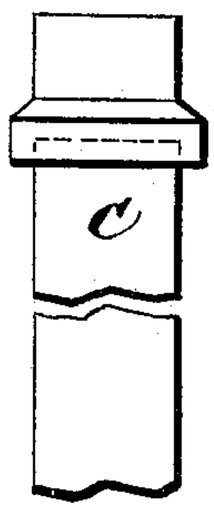


Fig. 2.

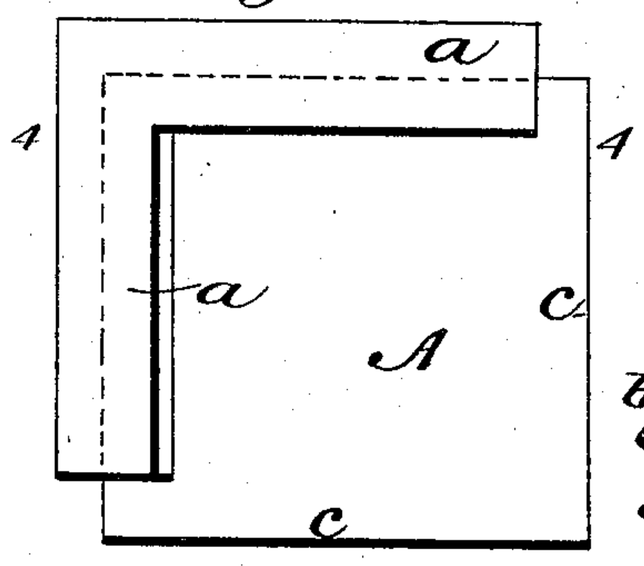


Fig. 4.

Fig. 3.

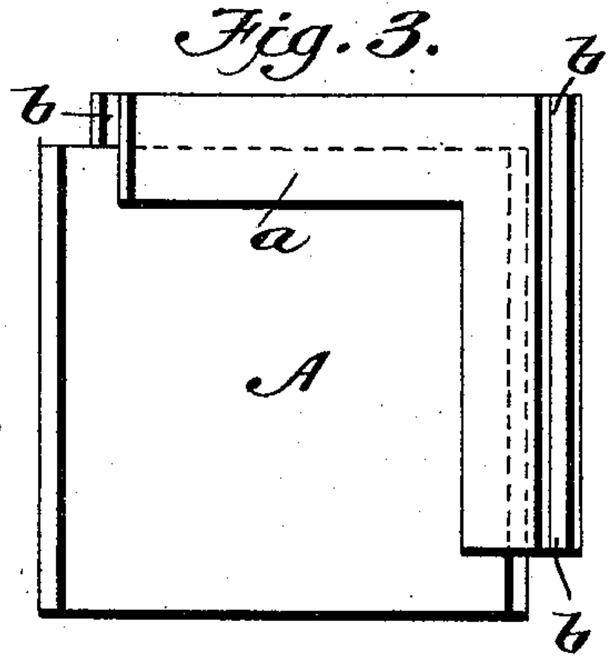
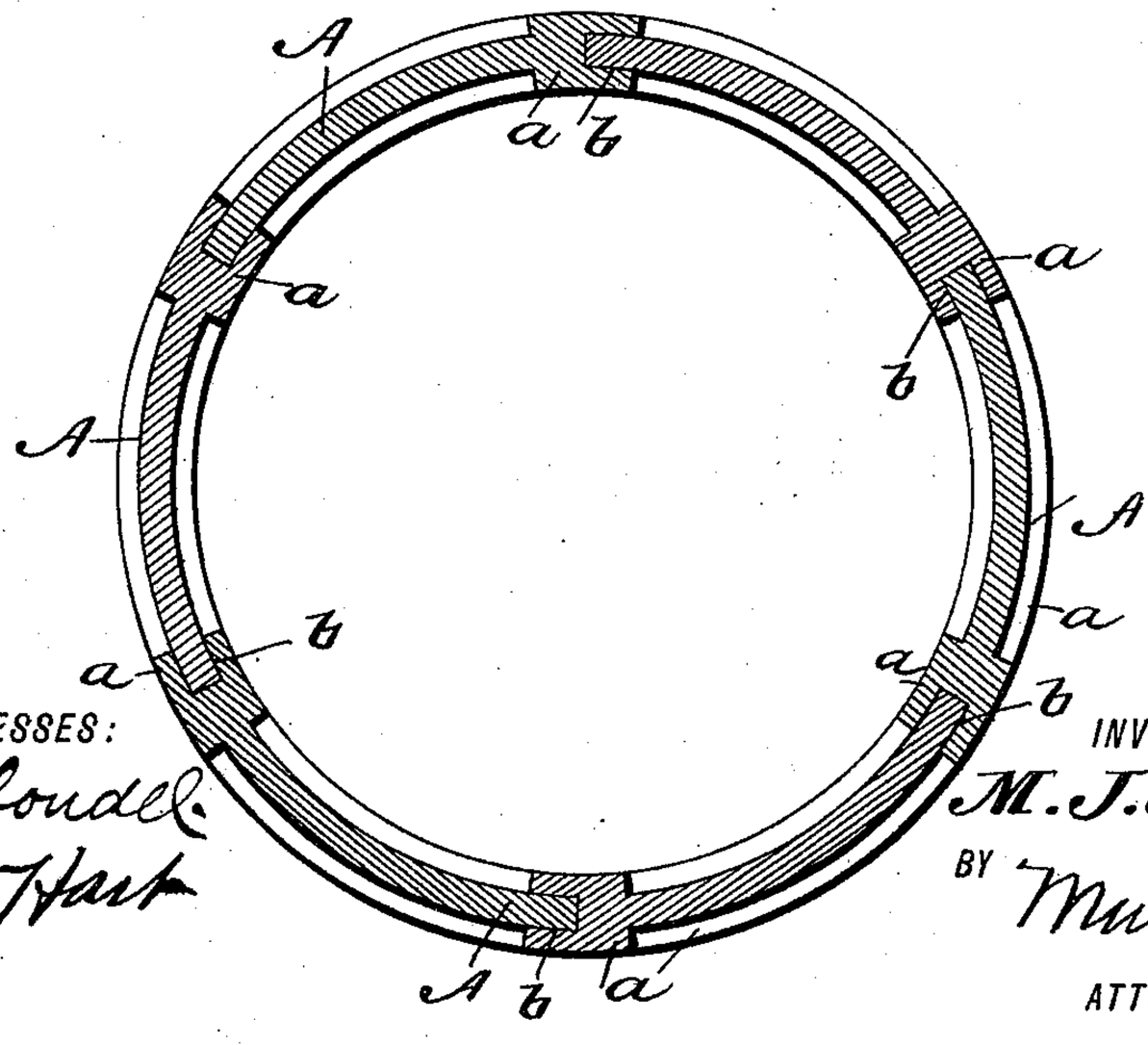


Fig. 1.



WITNESSES:

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(No Model.) 2 Sheets—Sheet 2.

M. J. NELLES.

CATCH BASIN.

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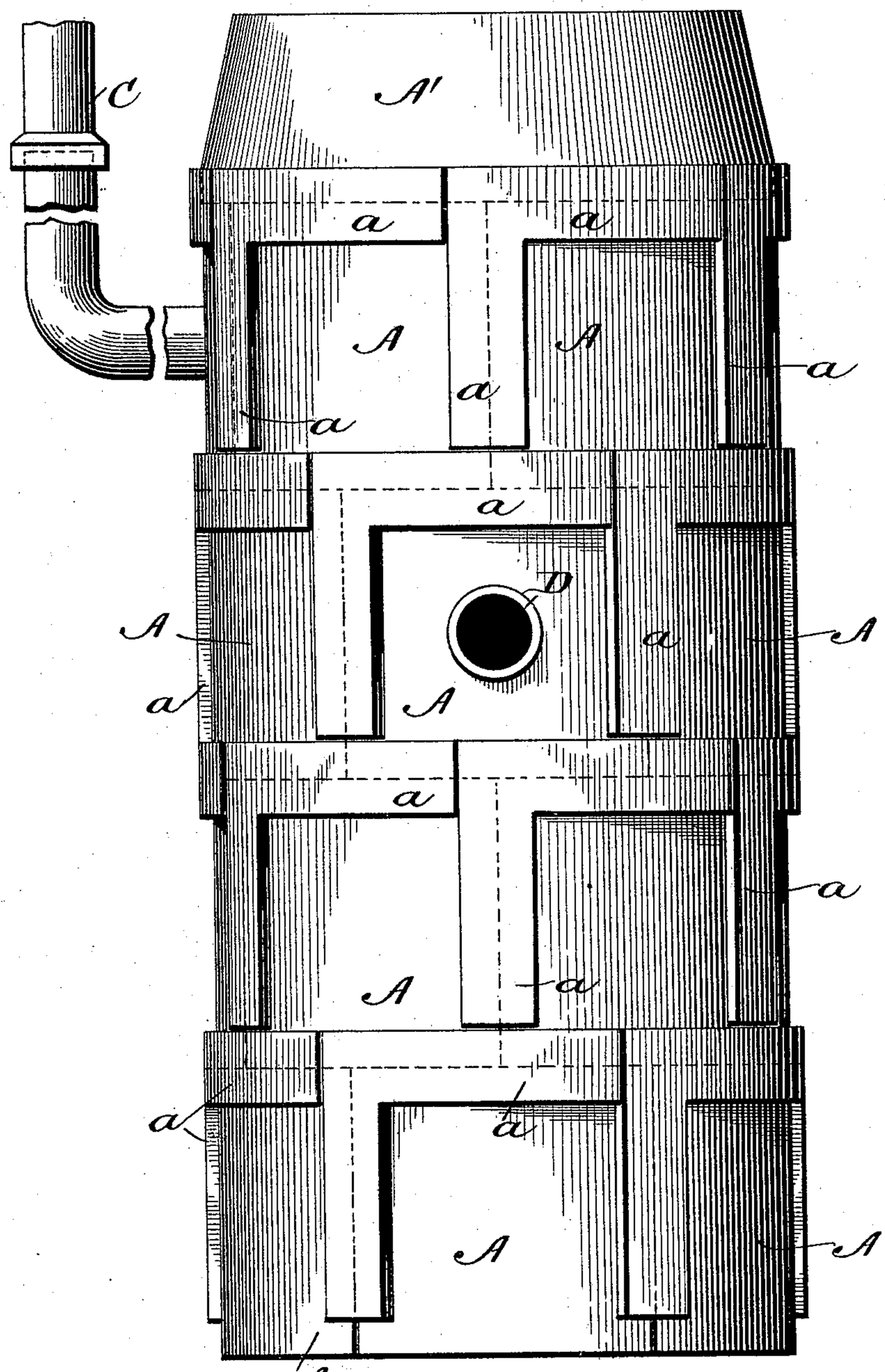
Fig. 7.



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UNITED STATES PATENT OFFICE.

MARTIN J. NELLES, OF CHICAGO, ILLINOIS.

CATCH-BASIN.

SPECIFICATION forming part of Letters Patent No. 575,553, dated January 19, 1897.

Application filed June 10, 1896. Serial No. 595,057. (No model.)

To all whom it may concern:

Be it known that I, MARTIN J. NELLES, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and Improved Catch-Basin, of which the following is a specification.

My catch-basin is intended for public and private use, and is constructed of tiles or burnt-clay sections, as hereinafter described.

In the accompanying drawings, two sheets, Figure 1 is a horizontal section of my improved catch-basin on line 1 1 of Fig. 7. Fig. 2 is an exterior side view of one of the curved and flanged plates of which my improved basin is constructed. Fig. 3 is an interior side view of one of such plates. Fig. 4 is a transverse section of one of said plates on line 4 4 of Fig. 2. Fig. 5 is a side view of the inlet-pipe for the basin. Fig. 6 is a vertical section of the top portion of the catch-basin. Fig. 7 is an elevation or side view of the basin.

The cylindrical body of the catch-basin, Fig. 7, is constructed of a series of flanged interlocking-plates A, which are arranged in tiers one above another. As best seen in Figs. 2 and 3, each plate is rectangular and provided at the top and one side with integral ribs *a*, having grooves *b* in their outer edges. It will be noted the said ribs *a* do not extend the entire length of the top and side of the plate proper. When the plates A are put together, the two free edges *c* of each plate enter and are cemented in the grooves *b* of adjacent plates below and at one side, so that all the plates are thus engaged or interlocked, as shown in Figs. 1 and 7. Thus each plate has a socket *b* on two sides and a tenon *c* on the opposite sides.

Each plate A is curved transversely, corresponding to the diameter of the body of the basin. Thus the basin is built up with a series of tiers or stories, and each tier is composed of a like number of similar plates. The number of plates in a single tier or story may vary, but in this instance six are shown. (See Fig. 1.)

The top of the basin, Figs. 1 and 6, has the form of a truncated cone, and is composed of an integral circular portion, having braces *d* and a removable lid or cover A^2. The lower edge of the body portion A′ of said top fits in a practically-continuous groove in the top edge of the body of the basin.

C indicates an inlet-pipe, (shown in Figs. 5 and 7,) and D an opening, Fig. 7, for an outlet-pipe, both of which are connected with the body of the basin.

A catch-basin thus constructed has the following points of superiority: The material of which the basin is composed is indestructible by sewer-gas or acid, and the basin may be constructed in less time and with less labor than the ordinary brick structure. The quantity of mortar or cement employed is very small, and it is possible to dispense with it altogether. Owing to the outward projection or curvature of the plates, they will resist a strong pressure, relative to their thickness and weight. It is also adapted to withstand heavy downward pressure.

In case a plate cracks or breaks, it can be replaced without much work or expense. The several plates being also of like size and form, any one can be used in any tier, which greatly facilitates the rapid and convenient construction of the basin.

In practice the catch-basin is set upon a suitable foundation of plank, brick, or stone.

What I claim is—

1. The improved catch-basin constructed in sections composed of tiles cemented together and arranged in horizontal tiers, or rows, each tile having communicating grooves in its top and one side edge, whereby the tiles are connected at their sides, and each tier or row has a continuous top groove and a continuous bottom tenon adapted to engage the grooves and tenons of tiles of adjacent tiers or rows, as shown and described.

2. The improved catch-basin constructed in cylindrical form, and composed of tiers of tiles of like construction, shape, and dimensions; the same being curved transversely and provided on two adjacent edges with ribs having grooves that communicate and form a continuous socket, the opposite edges being adapted to enter such grooves; and a top portion, whose lower edge fits in the annular groove formed by the connected tiles of the upper tier; as shown and described.

MARTIN J. NELLES.

Witnesses:
ALB. J. KAISER,
FRANCIS A. MEYER.