

(No Model.)

T. W. LARRABEE.
UNDERGROUND DRAIN TILE.

No. 272,270.

Fig. 1. Patented Feb. 13, 1883.

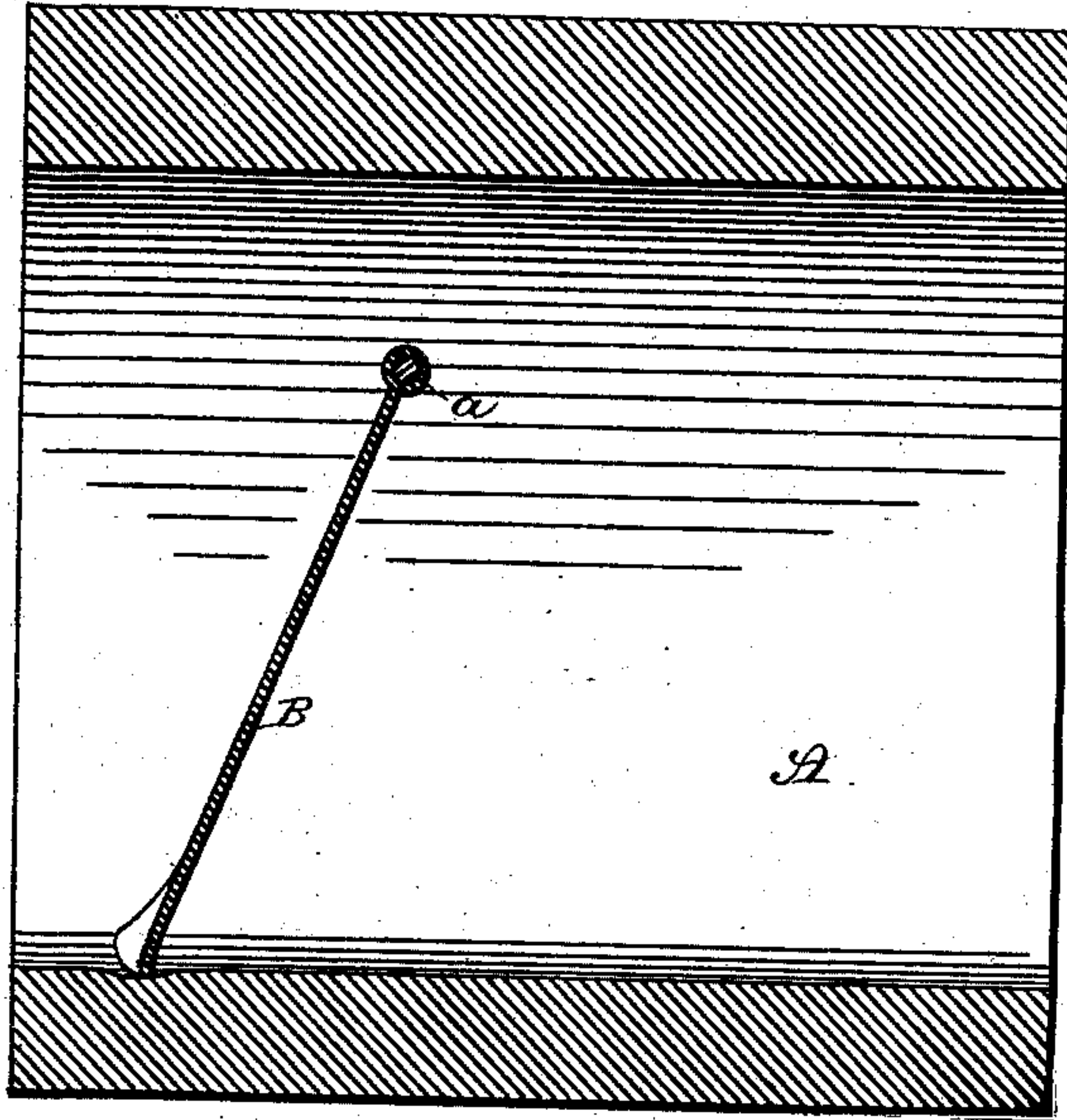


Fig. 2.

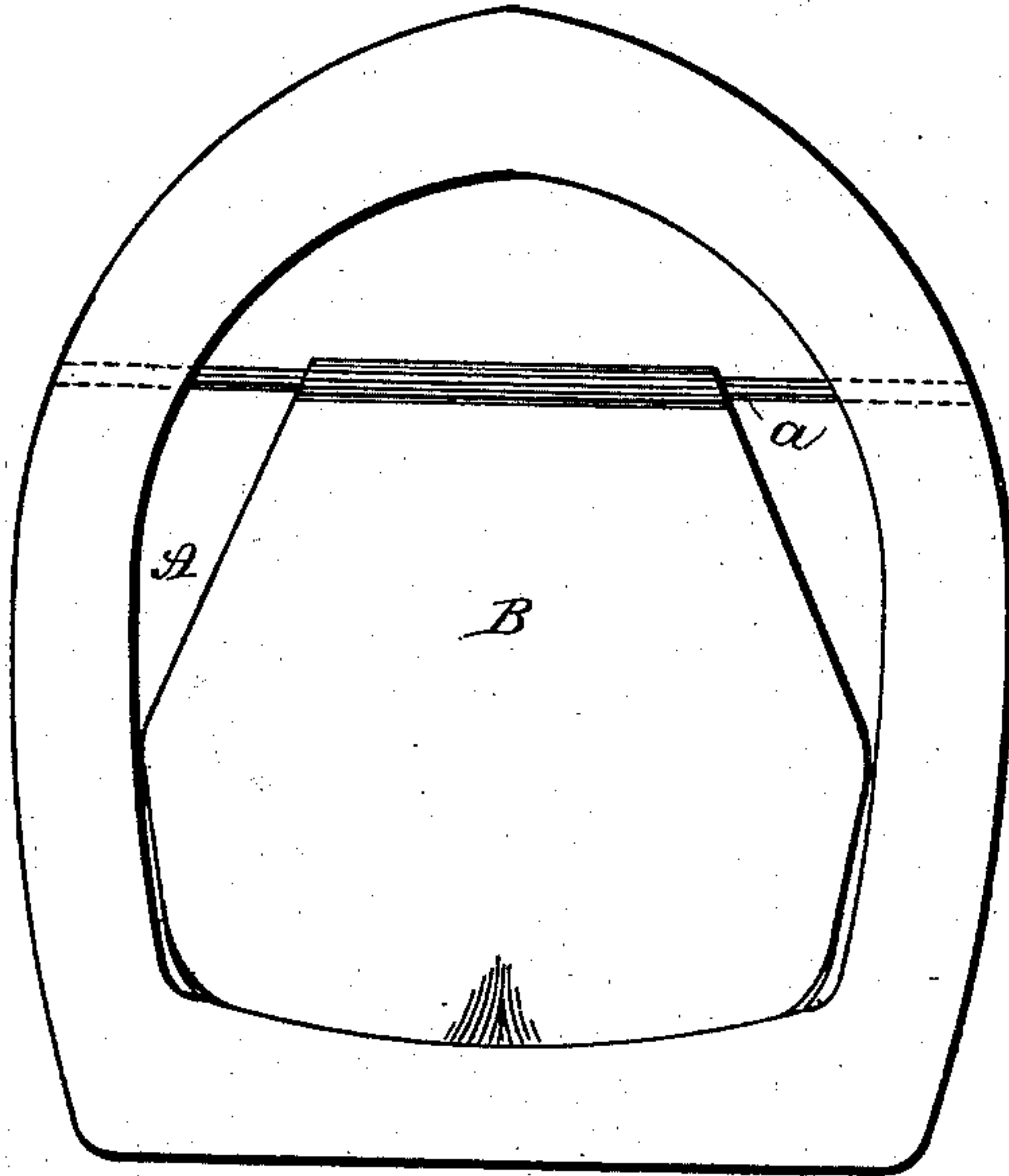
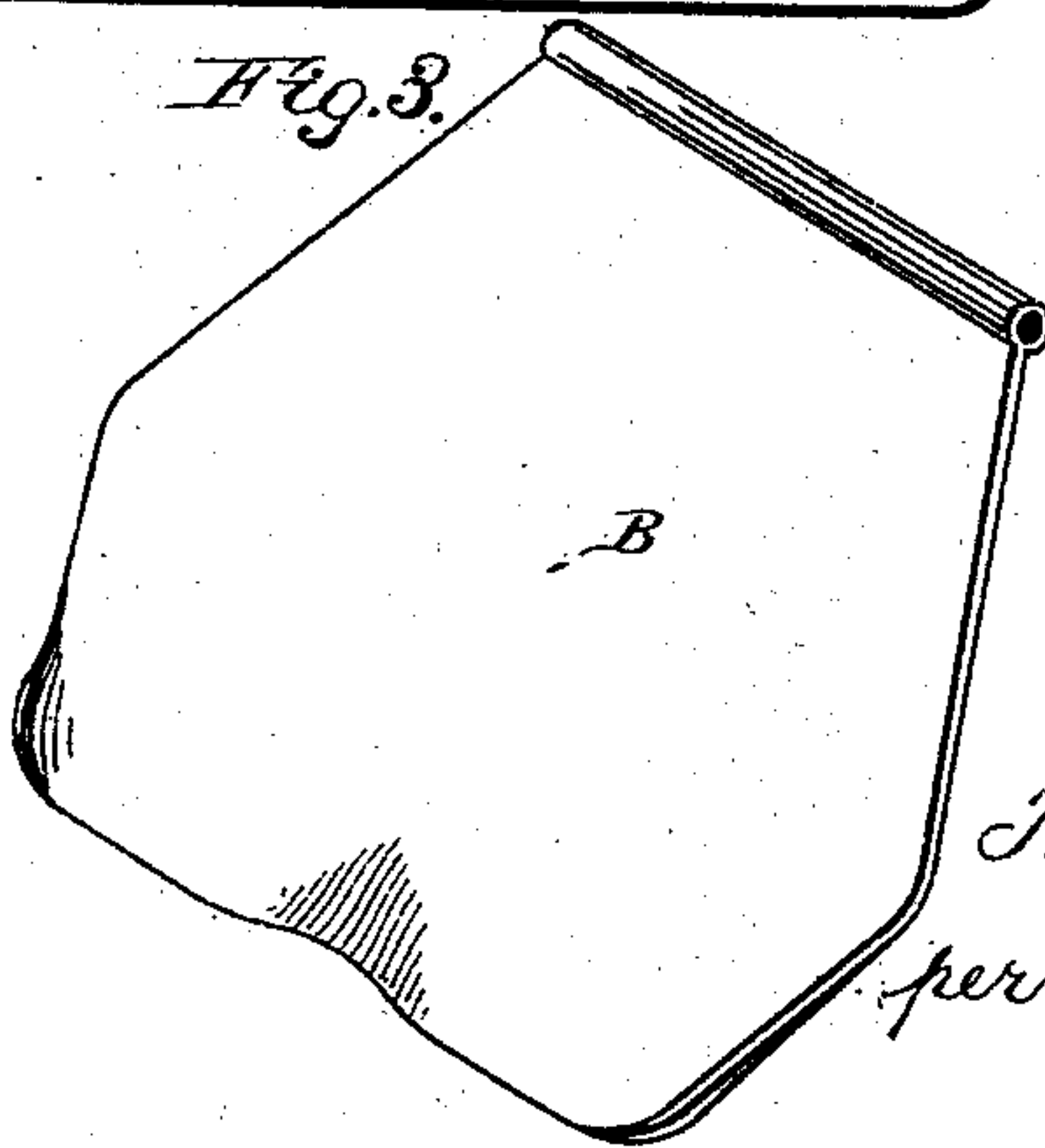


Fig. 3.



Witnesses:

J. W. Garner
H. J. Osgood

Inventor:

Thomas W. Larabee

per Edward A. Snow
Att'y

UNITED STATES PATENT OFFICE.

THOMAS W. LARRABEE, OF CARROLLTON, INDIANA.

UNDERGROUND-DRAIN TILE.

SPECIFICATION forming part of Letters Patent No. 272,270, dated February 13, 1883.

Application filed November 1, 1882. (No model.)

To all whom it may concern:

Be it known that I, THOMAS WILLFORD LARRABEE, a citizen of the United States, residing at Carrollton, in the county of Hancock and State of Indiana, have invented certain new and useful improvements in the invention known as a "Rake" or swinging device placed on the inside of underground tile to prevent any obstruction from going in, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to underground-drain tiles; and it consists in the construction of a swinging valve arranged within the pipe, as will be hereinafter fully set forth, and pointed out in the claims.

In the drawings, Figure 1 is a vertical longitudinal section; Fig. 2, an end view, showing the position of the valve; and Fig. 3 is a perspective view of the valve, showing its shape.

A represents a section of tile. Journaled across the upper portion of its interior on the pin *a* is the valve B, which swings downwardly at a suitable angle, and its central portion touches the bottom of the tile, which at this point is slightly depressed, as shown.

The valve is made preferably of the general shape shown. Its lower portion fits loosely the interior of the tile, and the sides of its upper portion converge toward the upper end, where the valve is bent around the pin *a*, as shown.

The portion of the valve which fits the sides of the tile is of special construction to prevent its becoming jammed by a backward flow of water. The central portion of its lower edge is bent slightly to the rear and enters the depression in the bottom of the tile. From this central point the lower edge upon each side is bent away from the bottom of the tile, so that the projection is the only point which touches.

By means of this valve musk-rats, moles, and vermin are prevented from traversing the tile-drains and clogging them up. The valves are placed preferably near both entrances to the drain.

By reason of the peculiar shape of the lower portion of the valve, where there is a backward pressure, or an animal attempts to enter the drain against the incline of the valve, it will be seen that the central point of the lever side of the valve will be the only portion which touches the bottom of the tile, and will be prevented from jamming by reason of its bearing against the rear walls of the depression in the bottom of the tile. The surface of the valve upon each side of the center, being free from actual contact with the tile, will act as a lever to release the bent portion of the valve should it perchance become jammed by unusual pressure.

What I claim is—

1. A valve for drains, consisting of a suitably-journaled valve-plate having its lower edge bent centrally toward the rear and entering a corresponding depression in the bottom of the drain, and being flared or bent away from the sides of the tile upon each side of the central bent portion, substantially as and for the purposes set forth.

2. The combination, with a drain-tile having a central depression, of a valve journaled in one of said tiles, having its lower edge bent centrally to the rear end entering the tile depression, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS W. LARRABEE.

Witnesses:

ASA HUTTON,
JOHN E. JOHNSON.