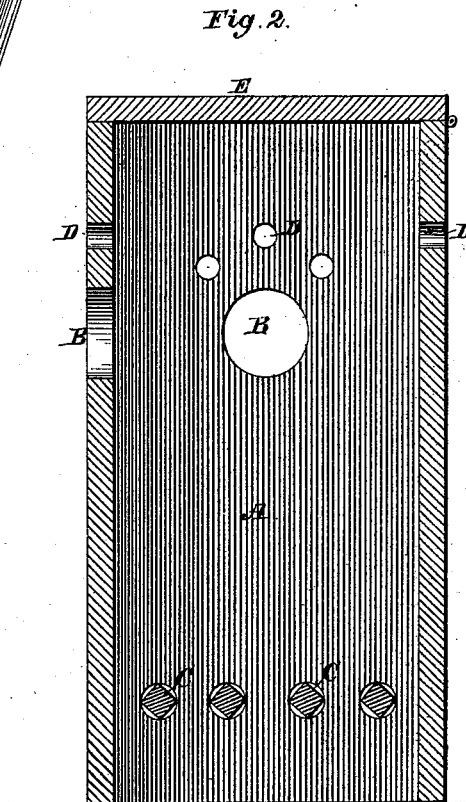
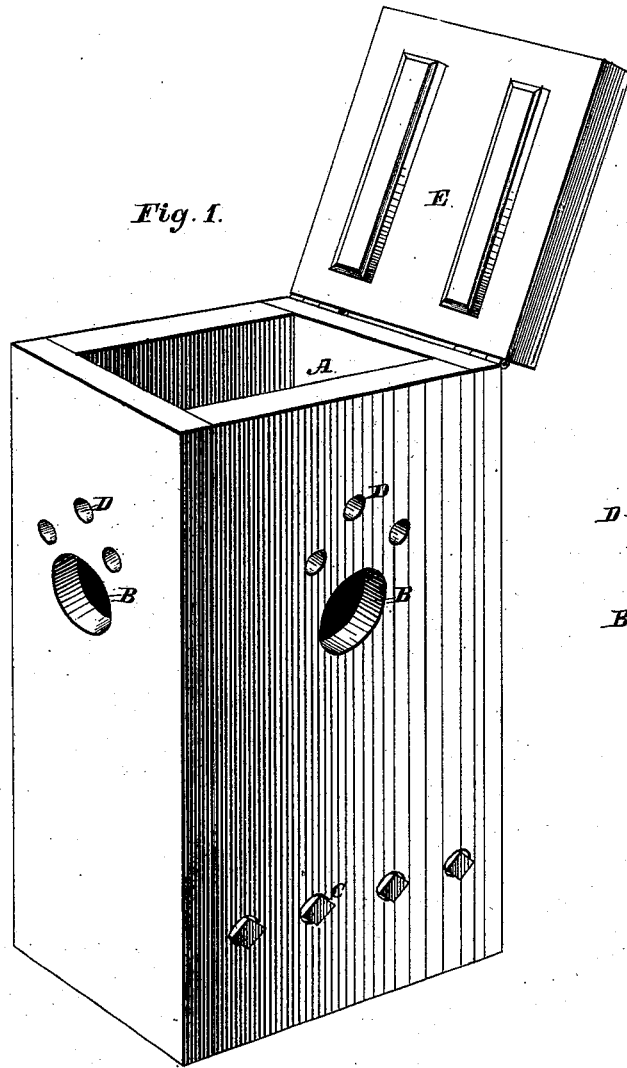


W. B. HENNING.
Underdrain.

No. 204,038

Patented May 21, 1878.



Attest.

Louis A. Henning.
J. D. McAmally.

Inventor.

Wm B. Henning.

UNITED STATES PATENT OFFICE.

WILLIAM B. HENNING, OF WATERLOO, INDIANA.

IMPROVEMENT IN UNDER-DRAINS.

Specification forming part of Letters Patent No. **204,038**, dated May 21, 1878; application filed November 27, 1877.

To all whom it may concern:

Be it known that I, WM. B. HENNING, of Waterloo, in the county of DeKalb and State of Indiana, have invented a new and useful Device to be Applied in the Construction of Under-Drains, of which the following is a specification:

The invention relates to a device for the removal of sediment from tile and other drain-pipe, and for the purpose of a turn-chamber and branch connection; and it consists in a chamber or box made of wood or other durable material, and receives the tile or other drain-pipe through apertures in its sides, thereby forming a sediment-deposit, turn-chamber, and branch connection, the device being such in its construction that the several purposes are dependent upon each other, and mutually contribute to produce the desired results.

The object of my invention is to prevent obstructions to the passage of water in under-drains, to facilitate the turning of angles, and the connecting of branch drains.

When the apparatus is connected with the under-drain at regular intervals it allows of an immediate inspection of the working and condition of the entire line of drainage, by showing a flow of water when the drain is in working order; and when the drain is obstructed or clogged, it will show that the flow is checked or stopped.

The accompanying drawing, in which similar letters of reference indicate like parts, is a perspective of a device embodying my invention.

In the chamber A are apertures B, shaped so as to admit the end of the tile or pipe, thereby depositing the sediment in the chamber A. The grate C allows the sediment to fall to the bottom, and also admits a current of water from below, thereby being of much advantage in spouty lands, while it also prevents moles, crabs, muskrats, &c., from getting into the drain or in any way obstructing it. A movable lid or top, E, enables a quick examination of the drain and an easy and speedy removal of deposit to be made.

A number of small holes, D, near the top of the chamber will facilitate surface-drainage when the chamber is placed below the surface; and when the chamber extends above ground air is admitted into the drain, thereby speeding and increasing the flow of water by preventing a vacuum.

I claim as my invention—

1. The box A, having perforations B in its sides, near the top, for connection with tile-drains, and adapted to serve as a sediment-chamber or branch or turn chamber, as specified.

2. The box A, having perforations B in its sides, near the top, for connection with tile-drains, and provided with grate C, lid E, and inlets D for air or surface-water, according as the device may be placed, as and for the purposes specified.

WM. B. HENNING.

Witnesses:

LOUIS A. HENNING,
J. D. McANALLY.