

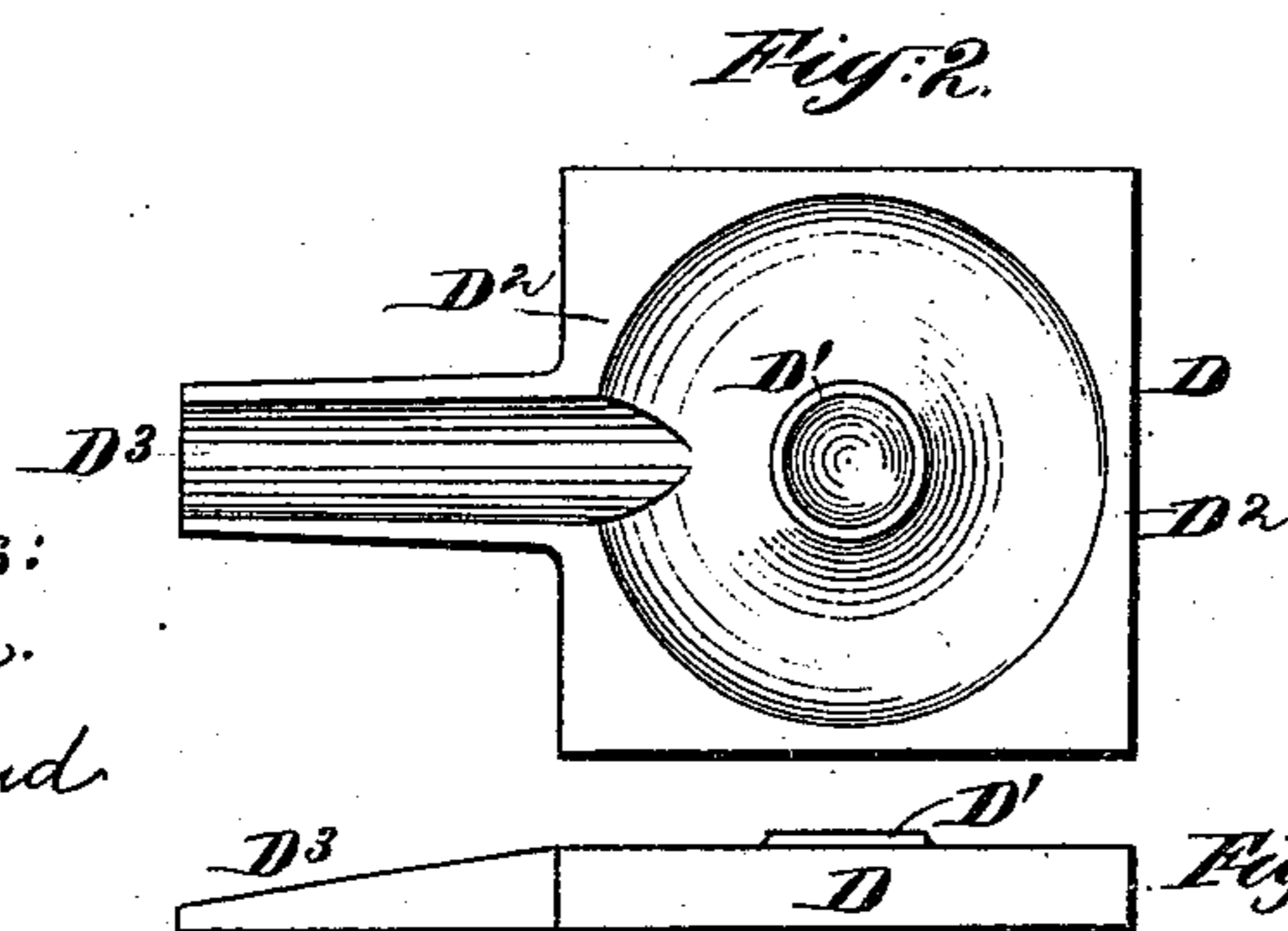
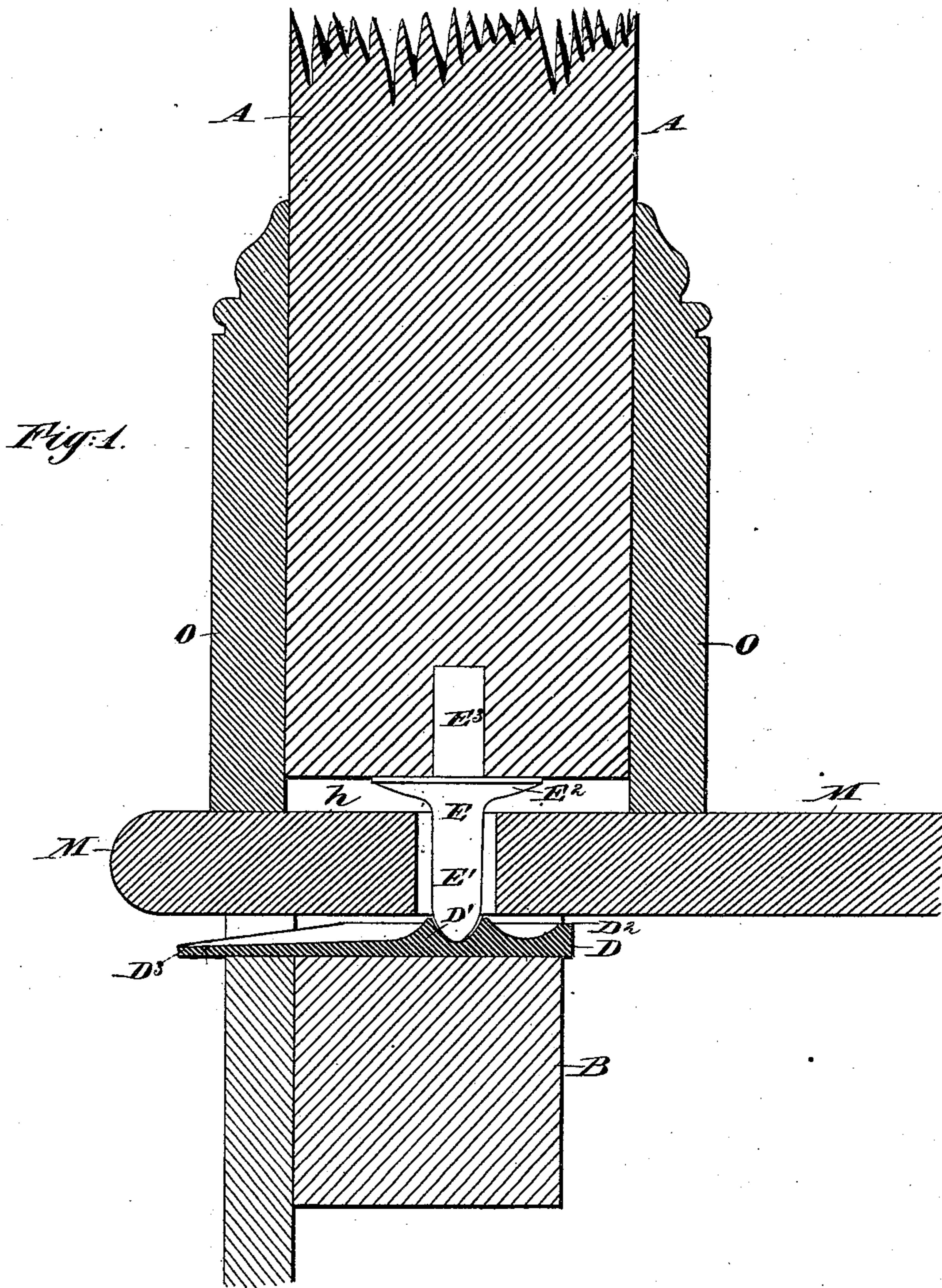
(No Model.)

C. E. MILLER.

PILLAR STEP.

No. 355,701.

Patented Jan. 11, 1887.



Witnesses:
H. A. Johnston.
T. B. Richmond.

Inventor:
C. E. Miller
by his attorney
Shuman, Dress, & Stetson

UNITED STATES PATENT OFFICE.

CHARLES E. MILLER, OF SCRANTON, ASSIGNOR TO HIMSELF AND EDWIN J. MACDONALD, OF MOOSIC, PENNSYLVANIA.

PILLAR-STEP.

SPECIFICATION forming part of Letters Patent No. 355,701, dated January 11, 1887.

Application filed August 10, 1886. Serial No. 210,497. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. MILLER, of Scranton, Lackawanna county, in the State of Pennsylvania, have invented a certain new and useful Improvement in Pillar-Steps for Wooden Buildings, of which the following is a specification.

The invention is adapted to apply to buildings of various sizes and for various purposes in which wooden pillars are employed. I will describe it as applied to the piazza columns of an ordinary dwelling-house.

I support the wooden pillar on a strong, short metallic step, with provisions for leaving a cavity between the other portions of the base of the post and the supporting material below. I also provide for leading away any water which may be received in this cavity. It affords a strong and reliable support, with the wood portion of the pillar held up out of contact with the wet. The invention also facilitates relaying the floor without disturbing the column whenever such shall become necessary. I propose in all ordinary cases to make the step of cast-iron in two pieces, the lowermost being equipped to center the standard and also to receive and conduct away any water which may reach this point. The upper and main portion engages in a hole bored upward in about the center line of the pillar. The casting is formed with a corresponding pivot-tenon, which engages in this hole and with a broad flange, which affords a firm bearing for the base of the pillar.

The following is a description of what I consider the best means of carrying out the invention.

The accompanying drawings form a part of this specification.

Figure 1 is a vertical section illustrating the invention. Fig. 2 is a duplex view showing the shoe in top plan and side elevation, respectively.

Similar letters of reference indicate corresponding parts in both the figures where they occur.

A is the pillar, which may be of Georgia pine or any other suitable wood, round, square, octagonal, or of any other suitable section, finished plainly or elaborately.

B indicates the sills or supporting-timbers, which may rest on an underpinning of stone, or any other substantial support. (Not shown.)

I recess into or otherwise firmly support upon the timbers B a shoe, D, certain portions of which are indicated by additional marks, as D' D² D³. This shoe is preferably of cast-iron. It is of sufficient area to properly distribute the load upon a sufficient portion of the sill. D' is a conical elevation in the center; D², a rim around the edge, and D³ a spout adapted to lead away water. I rest the pillar A and its superincumbent load upon this shoe D, through the medium of a metallic step, E, which is of smaller diameter, and affords a clear space or cavity, *h*. Specific portions of the step E will be designated, when necessary, by additional marks, as E' E². The lower end, E', is pointed, to aid in centering it upon the recess-cone D'. Above this is an extended horizontal flange, E². The upper face is flat and of sufficient area to afford a firm bearing for the wood, which it is understood has been sawed off square.

E³ is a long tenon, slightly tapered, as shown. It is matched in a hole bored to a slightly greater length in the line of the axis of the column A.

M M, &c., are the boards which form the upper surface of the floor. They should match as closely as may be against the base of the post A, but they should not extend under.

O are ornamental pieces of wood, applied to form an ornamental base for the pillar.

The weight supported on the pillar is transmitted directly from the ends of the grain of the wood to the stout flange E². Through this and the metal E' the strain is transmitted to the center of the base-casting D. Any water arriving at this point, either by coming down the pillar within or without the base-pieces O or traversing along on the floor-boards M, can escape freely from the cavity *h*. In case the floor-timber B, which supports the casting D, is narrower than the cavity *h*, the water may escape, and air may circulate through the aperture thus provided. However that may be, D³ serves to lead away any water which may tend to remain near the central portion of the cavity.

The casting E holds the base of the wooden pillar A at such an elevation that no water can be absorbed by capillary attraction.

The invention provides for a free circulation 5 of air and the nearly absolute exclusion of water from the timber.

Modifications may be made in the forms and proportions within wide limits. The part E³ may be made longer, care being taken to bore 10 the holes of a corresponding and slightly greater length; or the part E³ may be shortened considerably.

I claim as my invention—

1. The wood pillar A, in combination with 15 the flooring M, and with a metallic step, as E, and with a suitable support below, arranged to provide a cavity, h, under the base of A, as and for the purposes herein specified.

2. The shoe D, having a central conical recess, D', and provisions, as the rim D² and 20 spout D³, for leading away water, in combination with the metallic step E, having conical point E', wooden pillar A, and floor-boards M, arranged to serve substantially as and for the purpose herein specified. 25

In testimony whereof I have hereunto set my hand, at Scranton, Pennsylvania, this 26th day of July, 1886, in the presence of two subscribing witnesses.

C. E. MILLER.

Witnesses:

JOHN G. McASKIE,
W. W. LATHROPE.