

(No Model.)

J. W. ABRAHAMMS.

WATER CONDUCTOR.

No. 381,664.

Patented Apr. 24, 1888.

Fig. 1.

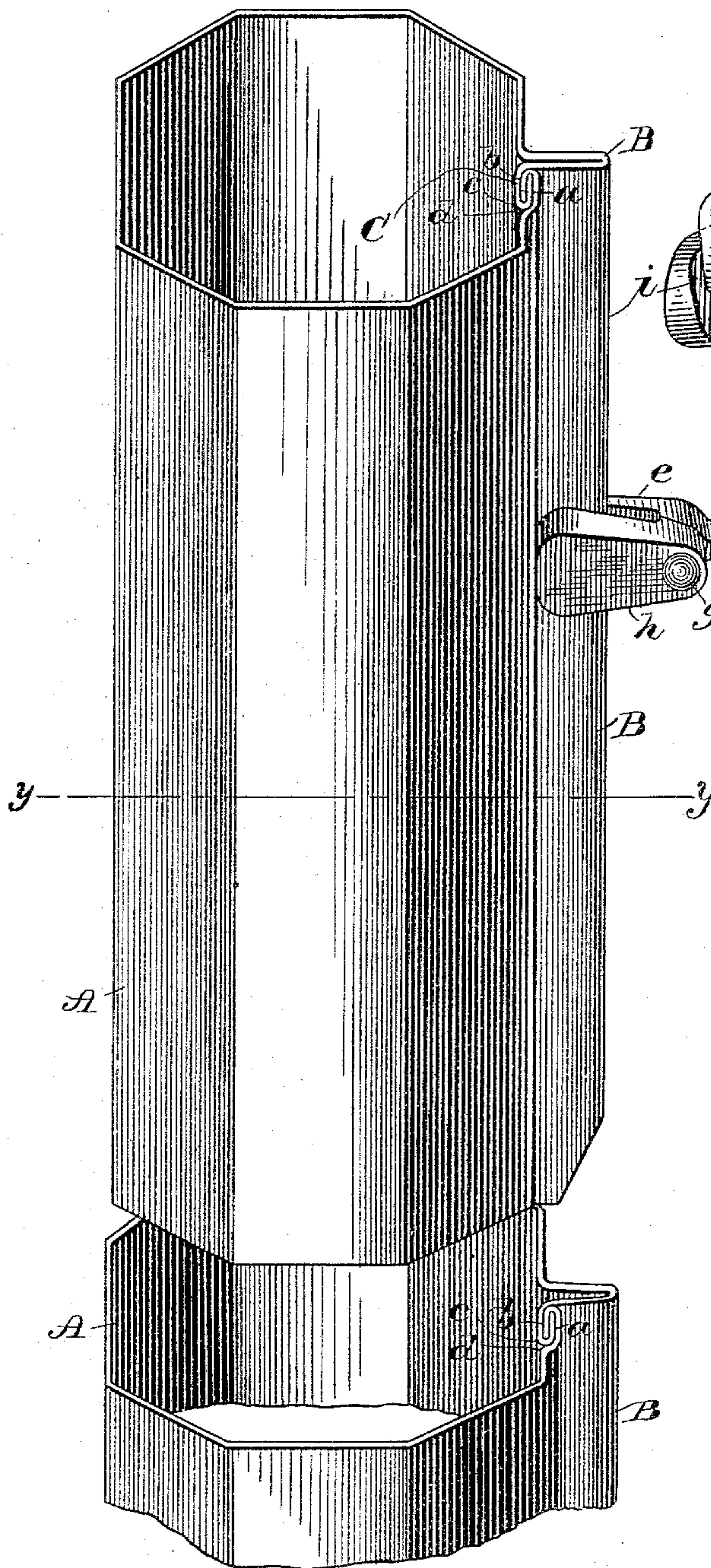


Fig. 3.

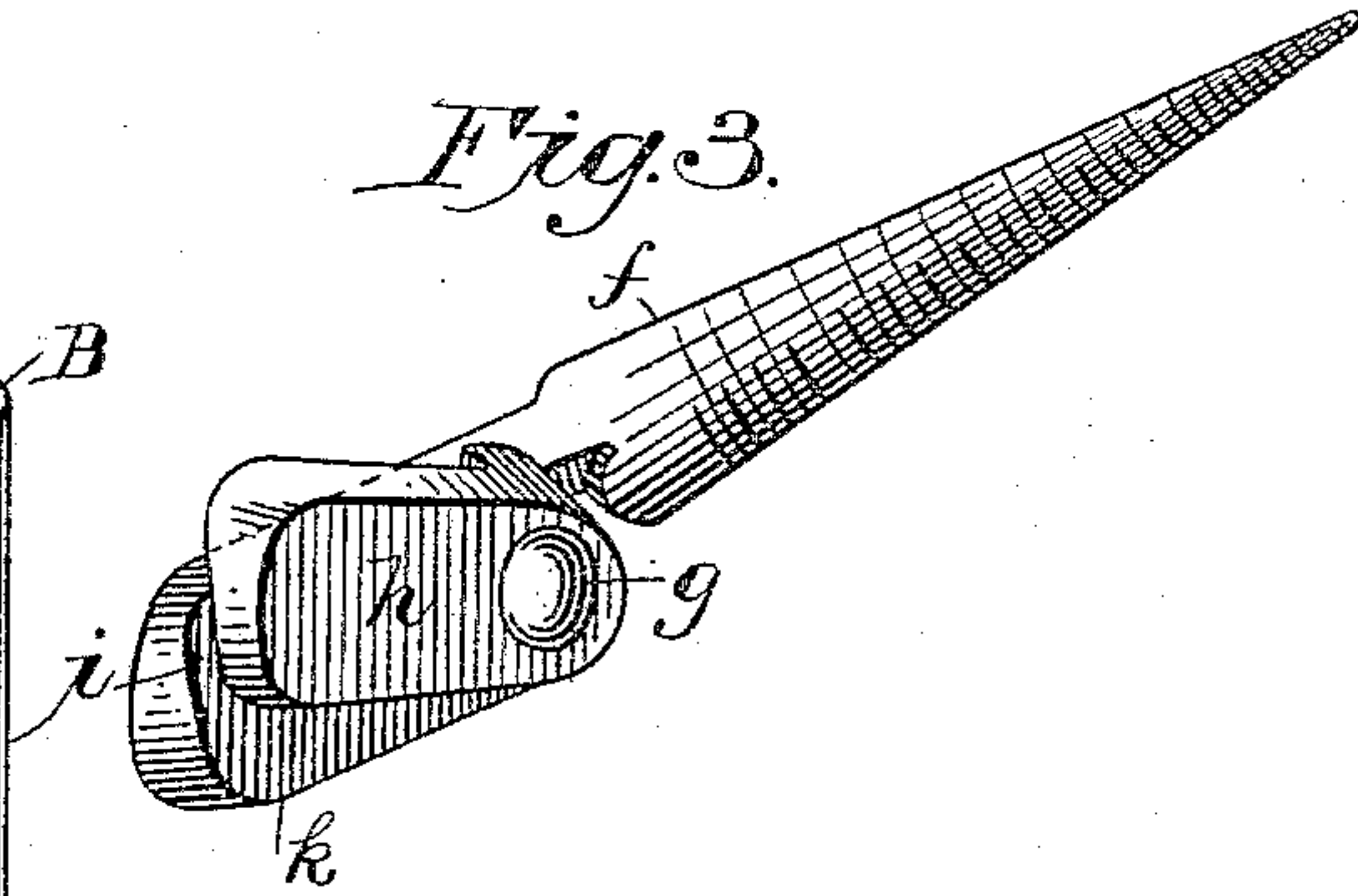
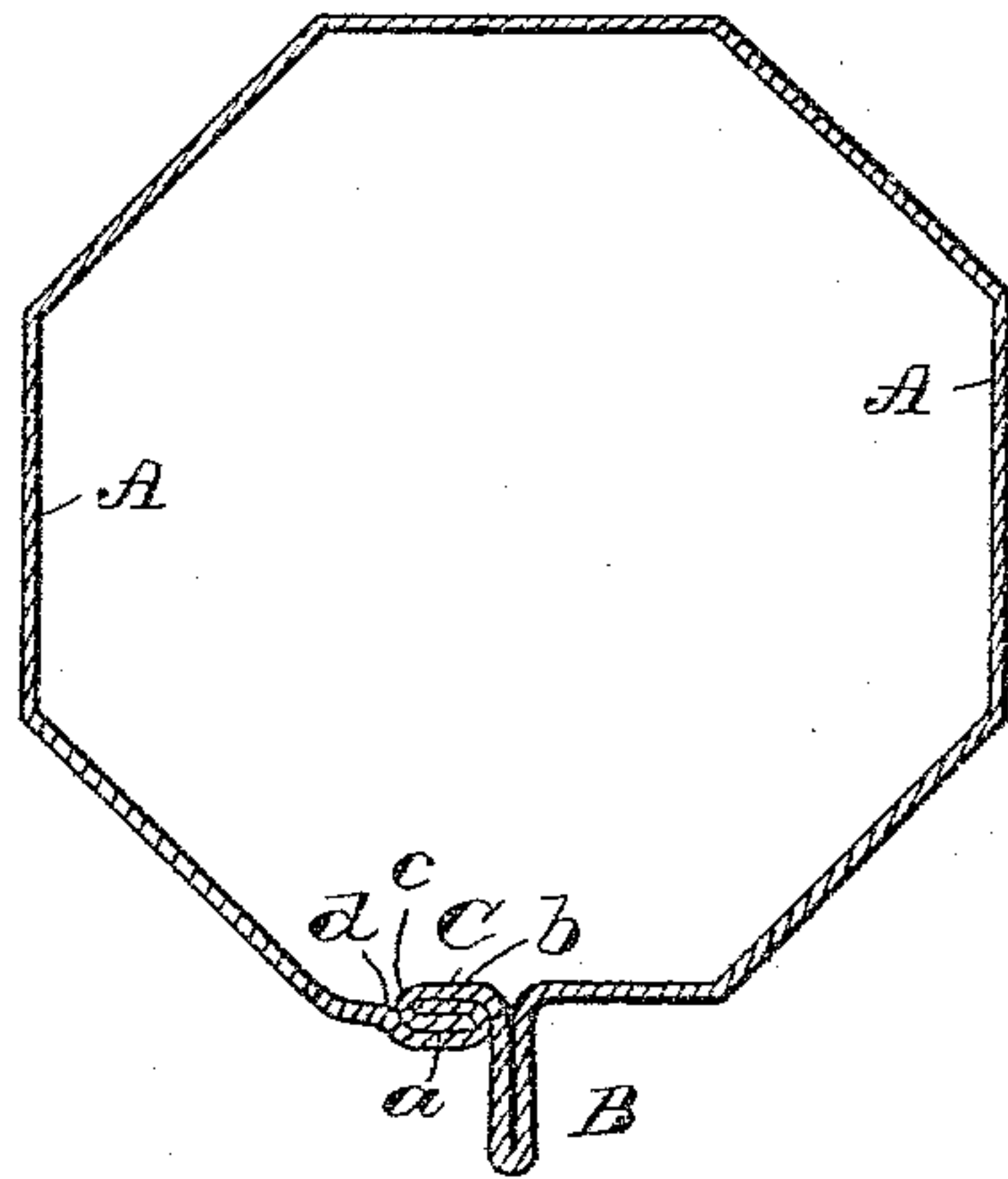


Fig. 2.



Witnesses.
Wm. J. Danner.
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By his Attorneys

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UNITED STATES PATENT OFFICE.

JOHN WM. ABRAHAMS, OF ALLEGHENY, PENNSYLVANIA, ASSIGNOR TO
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WATER-CONDUCTOR.

SPECIFICATION forming part of Letters Patent No. 381,664, dated April 24, 1888.

Application filed June 23, 1887. Serial No. 242,260. (No model.)

To all whom it may concern:

Be it known that I, JOHN WM. ABRAHAMS, a citizen of the United States, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Water-Conductors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to water-conductors designed for use in conducting water from houses and other buildings to the ground or into cisterns and which are applied to the exterior of the walls of the building.

Water-conductors as ordinarily constructed lie against the surface of the walls of the building, and as a consequence any leak or overflow of water is conducted down the wall, or in brick buildings is frequently absorbed by the brick, which stains and disfigures the wall. To overcome this difficulty, a water-conductor has been proposed in which there is a standing seam on one side. In practice this seam has been found objectionable, for the reason that the expansion and contraction of the conductor soon open the seam and cause it to leak, and the amount of metal in the seam (four or five thicknesses, according to the style of seam used) makes a very thick and clumsy joint of from eight to ten thicknesses of metal at the point of their intersection, and, there being no corresponding recess in the side of the opened seam to receive the projection on the side of the entering standing seam caused by the lap of the metal, the joints are very difficult to intersect, and frequently leak. By reason of this objectionable seam it requires two workmen to attach a conductor to a building.

By my improved construction no seam is formed in the projection on the conductor. The sides of the projection are both plain surfaces, and consequently they intersect each other easily, and when intersected to form a conductor of any considerable length they form practically tight joints. The expansion and contraction of the conductor cannot affect the seam and one workman can apply it to a building.

The invention will be hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, which form a part of this specification, Figure 1 is a side elevation in perspective of one section and part of another. Fig. 2 is a cross-section on the line *yy*, Fig. 1; and Fig. 3 is a perspective of a fastener or clamp for securing the conductor to a building.

Reference being had to the drawings and the letters marked thereon, A represents a section of a conductor, which is provided with a break or projection, B, for keeping the body of the conductor away from the wall and for allowing for expansion and contraction caused by water freezing therein.

C is the seam, which is formed on one side of the break B, is folded against the projection, and is constructed in the form of an ordinary flat lock-seam or groove-joint, the intersecting members *a b* being pressed down hard upon each other and back from the inner face of the conductor, leaving only the thickness of a single sheet of metal to project at *c* and forming a projection on the outer surface at *d* equal to one thickness of the metal. By this construction the amount of opening at the point of intersection of the seam is reduced to the minimum and the seam protected by the projection in handling or transportation.

The two sides of the break or projection B having plain surfaces, one will enter the other readily, and the lapping portion of the seam being turned on the inside of the conductor and presenting a projecting surface at *c* equal to only one thickness of metal, the joint formed by the intersecting ends of the sections is practically tight.

The fastening device consists of a clamp having one jaw, *e*, formed integral with the body or shank *f*, which may be flat for driving into the seam of a brick wall, as shown in Fig. 1, or it may be screw-threaded, as shown in Fig. 3. To the fixed jaw *e* is pivotally secured at *g* a movable jaw, *h*, and both jaws are slightly inclined in opposite directions on their adjacent surfaces, as at *i k*, to clamp the projection B between them. To apply the fastening device, it is first driven into a wall and the loose jaw *h* raised, as shown in Fig. 3,

when the projection B is pushed into the space formed between the jaws by their oppositely-inclined surfaces. The workman then holds a hammer or other equally heavy instrument
5 under the fixed jaw *e* and strikes on the top of the loose jaw *h*, which drives the latter down into the plane of the fixed jaw and clamps the projection between the two jaws and holds the conductor securely.

10 To release the conductor, the loose jaw is driven up out of contact with the projection B in the reverse manner from that in which it was driven down.

Having thus fully described my invention,
15 what I claim is—

1. A water-conductor having an expansible projection, in combination with a seam adjacent to and folded against one side of said projection, whereby the seam is protected, sub-
20 stantially as described.

2. A support for water-conductors, provided with a fixed jaw and a pivoted movable jaw, the adjacent surfaces of said jaws being inclined in opposite directions, substantially as described. 25

3. A support for water-conductors, provided with a fixed jaw, a pivoted movable jaw, and a body portion or shank, in combination with a water-conductor having a projection thereon with which the support engages, substantially as described. 30

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

JOHN WM. ABRAHAMS.

Witnesses:

THOS. M. TATEM,
WM. H. STERRITT.