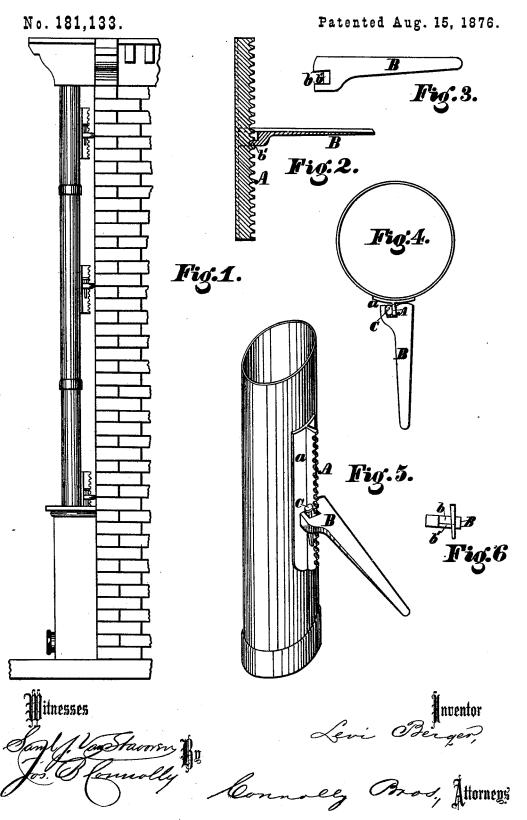
L. BERGER.

ADJUSTABLE FASTENERS FOR WATER CONDUCTORS.



## UNITED STATES PATENT OFFICE.

LEVI BERGER, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN ADJUSTABLE FASTENERS FOR WATER-CONDUCTORS.

Specification forming part of Letters Patent No. 181,133, dated August 15, 1876; application filed February 12, 1876.

To all whom it may concern:

Be it known that I, LEVI BERGER, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a certain new and useful Adjustable Fastener for Water Conductors; and 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of

this specification, in which—
Figure 1 is a broken side elevation of a house, and shows the application of my invention thereto. Fig. 2 is a vertical longitudinal section of my invention. Fig. 3 is a plan view of the driver. Fig. 6 is a front-end view of the same. Fig. 4 is a plan, and Fig. 5 is a perspective, of my invention attached

to the conductor.

The object of my invention is to provide means whereby conductors may be easily and securely attached to walls without soldering at the time of making the attachment.

My invention consists of an improved driver, formed with a dovetailed or beveled notch or groove, and used in combination with a beveled rack or dovetailed serrated tongue, said driver and rack being secured together by

means of a wedge-pin.

Referring to the accompanying drawing, A shows a rack or serrated tongue, having a wide base, a, by which the rack is to be soldered on the conductor, this operation being done in the shop. B represents a driver or spike, having an enlarged head, in which is formed a notch, b, one side of which is straight, the other being beveled to form a dovetail. At the bottom of this notch is a sharp-edged projection or shoulder, b'.

The operation is as follows: The rack being soldered on the conductor, one or more racks being employed for each section, the same is carried off to the place where it is required to be attached to a wall. The keeper is now driven into the wall between two layers of bricks or other convenient holding point.

The section of conductor is now placed against the wall in such manner that the tongue A will pass into the groove in the keeper B. The conductor is then adjusted up or down, as may be required, and made fast by the wedge-pin C, (which may be a common nail,) which is driven into the groove between the straight side of the latter and that of the rack, the sharp shoulder or projection b' entering between two of the teeth of the latter, and thereby preventing the vertical movement of the conductor. To remove the conductor it is only necessary to withdraw the wedge-pin C, when the rack and driver may be readily separated.

In order to insure the driver's being inserted properly it may be made with an indentation (indicating down) on its under side. To prevent water running on the driver to the wall the upper surface of said driver should be beveled or sloping, as shown plainly in

Figs. 2 and 6.

I claim-

1. The driver B, formed with a beveled or dovetailed groove, substantially as shown and described.

2. The beveled tongue or rack A, for attachment to water-conductors, substantially

as shown and described.

3. The combination of the beveled rack A, driver B, having the beveled or dovetailed groove or notch b and shoulder b', and wedgepin or nail C, the whole forming means for attaching water-conductors to walls without soldering at the time of attachment, substantially as set forth.

4. The driver B, beveled or sloping on its upper surface, to prevent water being conducted to the wall.

In testimony that I claim the foregoing I have hereunto set my hand this 10th day of February, 1876.

LEVI BERGER.

Witnesses:

M. DANL. CONNOLLY, CHAS. F. VAN HORN.