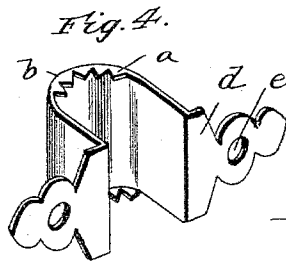
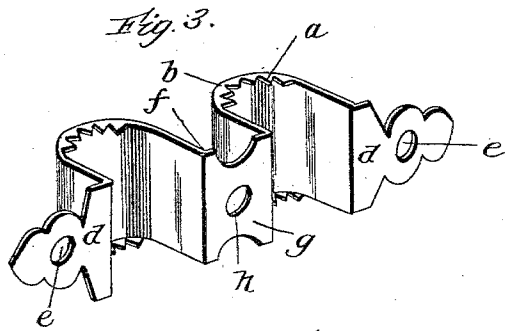
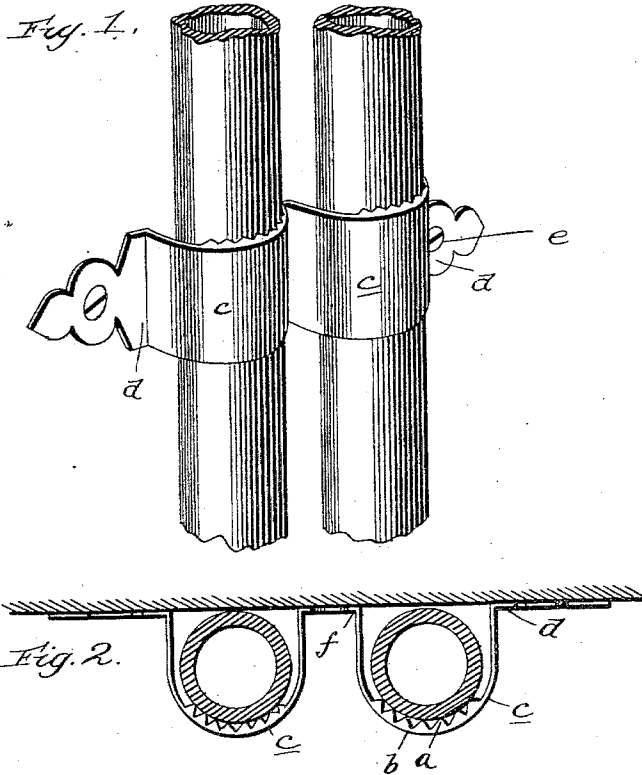


(No Model.)

N. E. SMITH.
PLUMBER'S TACK.

No. 566,544.

Patented Aug. 25, 1896.



Witnesses:
W. A. James.

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UNITED STATES PATENT OFFICE.

NATHANIEL E. SMITH, OF JERSEY CITY, NEW JERSEY.

PLUMBER'S TACK.

SPECIFICATION forming part of Letters Patent No. 566,544, dated August 25, 1896.

Application filed June 2, 1896. Serial No. 594,015. (No model.)

To all whom it may concern:

Be it known that I, NATHANIEL E. SMITH, a citizen of the United States, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Plumbers' Tacks; and I do 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.

This invention relates to improvements in plumbers' tacks for securing lead pipes in position against a suitable support, and it has for its object to produce such a device at a minimum expense, which will be very effective for the purposes designed, and may be quickly applied to a pipe or a series of pipes regardless of the positions or locations of the latter.

The invention will be fully understood from the following description and claim, when taken in connection with the annexed drawings, in which—

Figure 1 is a perspective view of my improved device shown as a double clamp and applied to two pipes. Fig. 2 is a cross-sectional view of the pipes with my improved device applied. Fig. 3 is a perspective view of the device removed from the pipes; and Fig. 4 is a perspective view of my improved device, showing the same as a single clamp.

Before describing the details of my invention I desire to say that I am well aware of the patent granted one Murdock and numbered 470,698, which shows a metallic fastening-strap for lead pipes, consisting of a U-shaped metal fastening-strap having laterally-projecting fastening-lugs and also having inwardly-directed flanges on its edges, and an elastic or yielding cushion arranged within the flanges of the strap and adapted to embrace a pipe and hold it with elastic pressure.

I am also aware of the patent granted one Schmitt and numbered 553,021, which discloses a plumber's tack comprising a pair of cast-metal jaws having serrated or roughened portions to engage a pipe and a bar adjustably connecting the said jaws, and I therefore make no claim to such constructions.

In carrying out my invention I make the device of a single piece of brass or other sheet

metal which will afford a certain amount of give or resiliency, and in doing so I take a strap of the metal and strike up the same of the outline desired. The ends of the strap can of course be cut or formed into any ornamental design, according to the fancy or dictation of the manufacturer, and thereby enhance the beauty of the article. Teeth *a* are formed at opposite points in the longitudinal edges of the strip, and such toothed portions are turned inwardly, forming flanges *b*. The teeth are preferably in the shape of saw-teeth; but I do not wish to be understood as limiting myself to such shape. In making a double tack or clamp I bend the strap transversely at the points where the teeth are formed, so as to produce loops *c* to clamp the pipes. The ends of the strap are turned outwardly, as shown at *d*, and are pierced transversely, as at *e*, to receive screws or other fastening devices, which are designed to take into a wall or other support. The central portion of the strap is bent in an angular manner, as shown at *f*, preserving a flat portion *g* in the same longitudinal plane as the flanges or lug-eyes *d*, and this central portion is also pierced, as shown at *h*, to receive a screw or the like.

A single clamp, as shown in Fig. 4 of the drawings, is formed in substantially the same manner as the double clamp, the angular portion *f* being, of course, omitted in the single clamp and the portion *g* terminating in the lug-eye.

A tack such as I have shown can be very cheaply manufactured. It consists of a single piece of material, whether designed as a double or single clamp, so there is nothing about it to become misplaced or lost. The whole can be struck up in one operation, and while there will be sufficient give for the natural contraction and expansion of the pipes, yet the teeth will absolutely prevent the slipping or displacement of the pipes incident to the water-hammer and other causes. In making the teeth of saw shape, as I have shown, they will more effectively engage the lead pipes, and while I have found in practice that to form such teeth on the upper and lower longitudinal edges of the strap in the loops or clamps they will prevent any slipping of the pipes, yet it may be desirable to extend

such teeth entirely around the inner edges of the clamps.

Having described my invention, what I claim is—

5 The plumber's tack described formed from a single piece of material, and consisting essentially of a strap of metal having one or more bends or loops *c*, to clamp a pipe or series of pipes, and each loop having teeth *a*,
10 formed on their longitudinal edges and turned

inwardly at right angles to the loops *c* as shown at *b*, to penetrate the pipe, and the ends of the strap terminating in lug-eyes *d*, substantially as specified.

In testimony whereof I affix my signature : 5
in presence of two witnesses.

NATHANIEL E. SMITH.

Witnesses:

ROBERT P. SMITH,

ARTHUR A. SMITH.