

H. C. MILLIGAN.
Plumber's Tack.

No. 201,697.

Patented March 26, 1878.

Fig. 1.

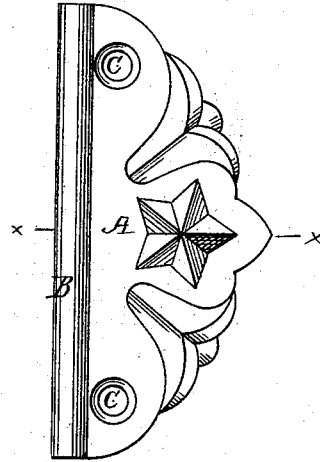
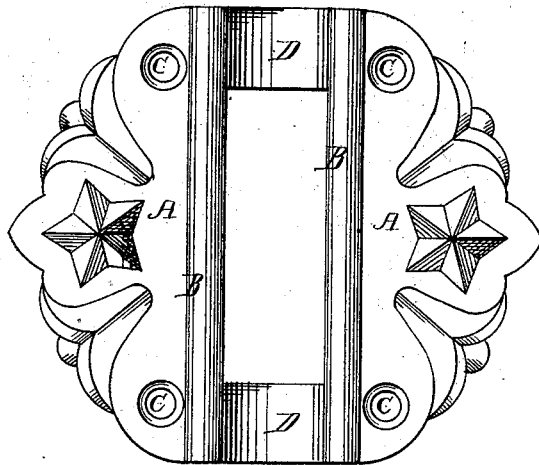


Fig. 2.



Fig. 3.



Witnesses,
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UNITED STATES PATENT OFFICE.

HENRY C. MILLIGAN, OF ELIZABETH, ASSIGNOR TO NEWARK STAMPING COMPANY, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN PLUMBERS' TACKS.

Specification forming part of Letters Patent No. **201,697**, dated March 26, 1878; application filed January 9, 1878.

To all whom it may concern:

Be it known that I, HENRY C. MILLIGAN, of Elizabeth, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Plumbers' Tacks; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification.

My invention relates to certain new and useful improvements in plumbers' tacks. It has for its object to produce them rapidly and at but a slight cost as compared with the present tacks, and of light and substantial character.

With these objects in view, my invention consists of a plumber's tack stamped up from tin or other sheet metal, as a new article of manufacture.

Previous to my invention the plumbers' tacks in use for fastening pipes to walls, &c., have been composed of lead, and formed by casting them in molds, which form a part of the plumbers' supplies, and from which the tacks are usually made at such times and in such quantities as the requirements of individual plumbers may dictate. These tacks require care and attention in their production, and are heavy and expensive, and easily distorted or twisted out of shape.

My invention overcomes all these disadvantages, and its character is such that it can be produced very rapidly, of any ornamental design, and at comparatively slight cost. Its character is such, also, that it may be plated with nickel or other metal, so that it may always present a clean appearance.

To enable others to make and understand my invention, I will describe the same more in detail, referring by letters to the accompanying drawing, in which—

Figure 1 is a top or plan view of a single tack stamped up from sheet metal; Fig. 3, a similar view of a double tack, and Fig. 2 a cross-section at the line *xx* of Fig. 1.

Similar letters indicate the like parts in the several views.

A is the ornamental or exposed portion of the tack, which may be denominated the "wing." This is embossed in any design to make it

ornamental, and at the same time to give stiffness and rigidity to the article. B is a fluted edge adapted to lie against and be soldered to the leader-pipe, and C C are holes in the wing A, to allow the passage of securing-screws, by which the wing is fastened to the wall, &c.

At Fig. 3, I have shown two wings, A A, with their ribs or edge flutings B connected by a strap, D, at each end, which strap is bent during or after the process of striking up the wings to conform to the pipe to which the tack is to be secured. The connecting solder in this case is placed along the ribs B, or between the pipe and the straps D, or both.

It will be observed, by reference to the cross-section shown at Fig. 2, that the metal may be very considerably raised, and that the exterior or superficial design may be varied according to taste, the ribs B and wing-embossed ornamentation serving to preserve the shape of the tack, and give it the necessary amount of rigidity. The turned-over edges, when the tack is secured in place by screws, become embedded in the upright or support, and produce a tight joint, and prevent bugs and dirt from finding a lodgment, and also serve as an additional support, relieving the screws very considerably from weight of the pipe.

The sheet-metal tacks thus formed may be nickel-plated, or otherwise finished, to give them a neat and cleanly appearance, and, by reason of their embossed or hollowed form, may be "nested," or packed one within another, and thus take up but little room, comparatively, for transportation.

What I claim as new, and desire to secure by Letters Patent, is—

A plumber's tack, single or double, struck up from sheet metal so as to embody an embossed face and hollow back, and with embedding edges, as an improved article of manufacture.

In witness whereof I have hereunto set my hand and seal.

HENRY C. MILLIGAN. [L. s.]

In presence of—

REUNE J. D. DUNN,
F. A. BROWER.