

W. P. BREEDING.
Holder for Galvanizing Bolts.

No. 229,366.

Patented June 29, 1880.

Fig. 1.

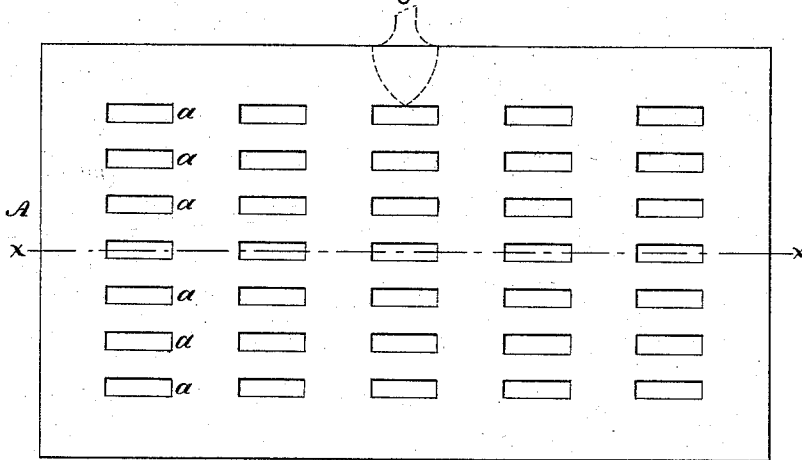


Fig. 2.

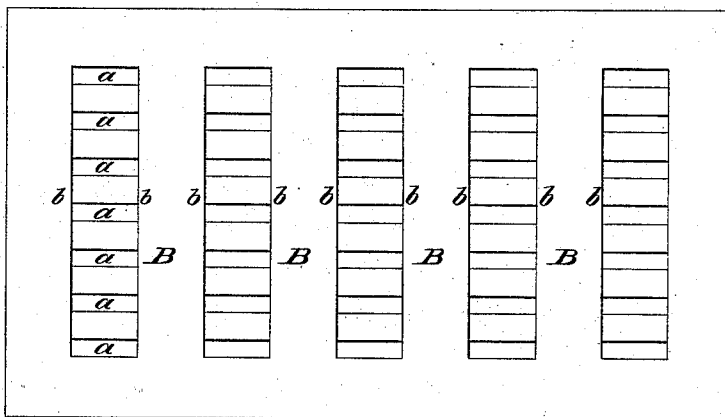
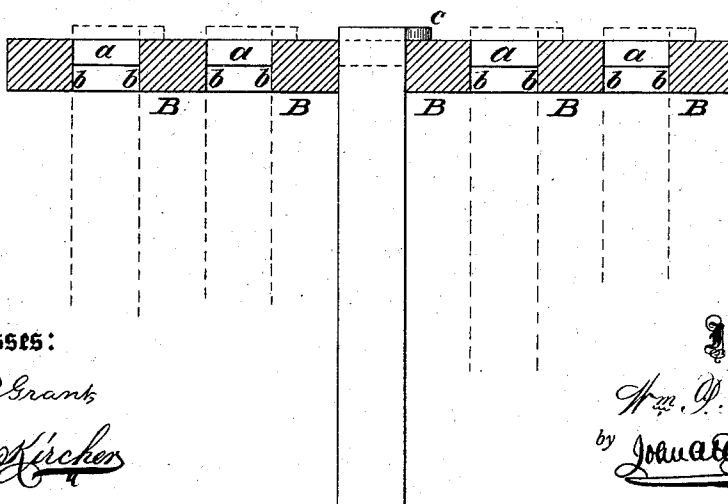


Fig. 3.



Witnesses:

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Inventor:

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UNITED STATES PATENT OFFICE.

WILLIAM P. BREEDING, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF
ONE-HALF OF HIS RIGHT TO C. H. HORNE, OF SAME PLACE.

HOLDER FOR GALVANIZING BOLTS.

SPECIFICATION forming part of Letters Patent No. 229,366, dated June 29, 1880.

Application filed January 15, 1880.

To all whom it may concern:

Be it known that I, WILLIAM P. BREEDING, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Holders for Galvanizing Bolts, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a top or plan view of the holder embodying my invention. Fig. 2 is a bottom view thereof. Fig. 3 is a vertical section in line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of a holder for bolts during the operation of galvanizing, whereby they are steadily supported and not liable to jam in the holder, and the operation of galvanizing is accomplished in a practical, expeditious, and convenient manner, said holder being formed of a rack with rigidly-connected ribs, as will be hereinafter set forth.

Referring to the drawings, A represents the bolt-holder, provided with a suitable handle, and consisting of a rack or plate, of suitable metal or material, with a series of vertical and longitudinal perforations, *a a*, for the reception of bolts to be galvanized. On the under face of the plate A, which is comparatively thin, are transverse ribs B, which are cast with the plate, and form abutments or shoulders *b b*.

The bolts are inserted in the openings *a* and suspended from the plate A by the contact of the thumb-pieces *c* of the bolts with the upper face of the plate. (See Fig. 3.)

While the walls of the openings *a* do not

materially cover the adjacent portions of the bolts and prevent galvanizing thereof, the shoulders *b*, formed by the cross-pieces B, prevent swinging of the bolts to any extent, which, if occasioned, would carry the corners of the bolts opposite to the thumb-pieces into the openings and cause them to bite the walls thereof, and thus by jamming create considerable difficulty in subsequently removing the bolts from the holder, all of which my construction avoids.

The holder as thus strung with bolts is dipped into the bath, and thus all of the bolts are simultaneously galvanized, after which it is removed and overturned at a proper place of collection or deposit, and the bolts fall out of the holder, and are thus discharged.

It will be seen that the work is accomplished with ease, rapidity, and uniformity, and in a practical manner, the bolts remaining seated on the rack-plate, and thus are within reach, and much work may be accomplished in a short space of time.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The holder for bolts, consisting of the perforated plate A and the rigidly-connected rib B B on the under side thereof, all constructed and operating substantially in the manner and for the purpose set forth.

WM. P. BREEDING.

Witnesses:

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A. P. GRANT.