E. P. FARNUM.
Riveting Tool.

No. 229,688. Patented July 6, 1880.

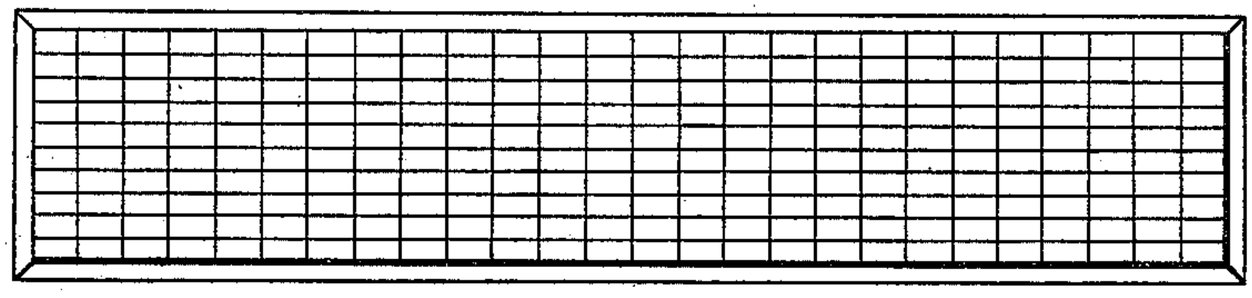


Fig. 1.

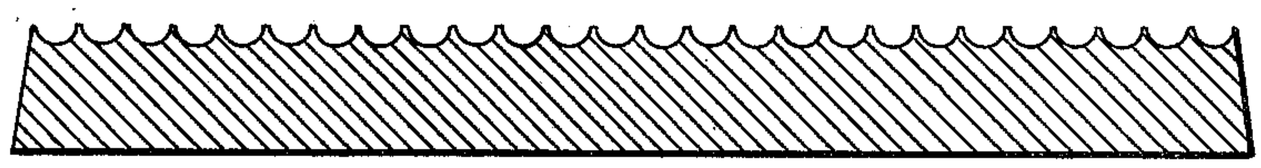


Fig. 2.

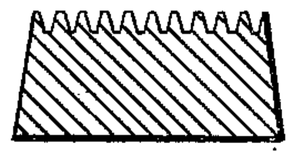
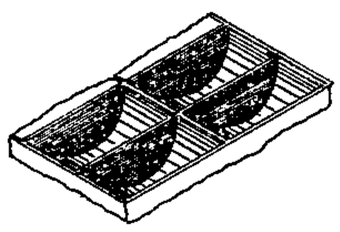


Fig. 3.

Fig. 4. 

Witnesses:

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UNITED STATES PATENT OFFICE.

EDWARD P. FARNUM, OF CONCORD, NEW HAMPSHIRE.

RIVETING-TOOL.

SPECIFICATION forming part of Letters Patent No. 229,688, dated July 6, 1880.

Application filed January 31, 1880.

To all whom it may concern:

Be it known that I, EDWARD P. FARNUM, of Concord, in the county of Merrimack and State of New Hampshire, have invented a new and Improved Rivet-Clincher; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—.

Figure 1 is a plan of a clincher now in use. Fig. 2 is a longitudinal section. Fig. 3 is a transverse section. Fig. 4 is a representation, in perspective, of four enlarged depressions in the same.

My invention is designed to furnish a new method and a new instrument for clinching nails, rivets, &c., and is intended (in a sense) as an accompaniment of said Farnum's new and improved rivet, for which an application for Letters Patent of the United States is now pending.

The nature of my invention consists in furnishing an indented surface instead of a plain surface, upon which to clinch a rivet or nail.

I am now using one made from cast-iron, which is about two and one-half inches wide, about one foot long, and one inch thick, the bottom or under surface of the same being in a plane; but they can be made of other hard and strong material, and be varied in size and shape to suit them to the uses required. The upper surface of the one now in use is indented by depressions that are rectangular at the surface, and are so constructed that the bottom of each indentation forms the arc of a circle, substantially as seen in Fig. 2, the sides of each depression being small inclined planes, substantially as represented in Fig. 3 and as seen again in Fig. 4.

In using, place the material to be joined in a proper relative position upon the clincher and drive the rivets or nails through, so far as may be, while upon the clincher. Then place the same upon the bottom of the clincher, being turned up, or upon some other hard plane surface, and drive again until all the rivets (heads and points) are embedded in the material joined, that the joints may be smooth.

In riveting hose the clincher is enveloped by the hose and the rivets passed through the same, as just described for other articles, and after the rivet-point has been turned and forced into the hose the clincher is turned so as to present the plane surface to the rivet, and then force applied to further embed the rivets in the hose. By this method the interior of the hose is reached and the rivet effectually and with certainty clinched or embedded in the hose, thereby rendering certain what heretofore was left in doubt, as the interior of the hose could not be seen to ascertain whether the rivets were effectually embedded in the material or not.

The special advantages of this instrument are—

First. It secures a uniform clinch, the point of each rivet or nail turning no more than the arc of the circle compels it to turn while being driven.

Second. It insures the strongest possible clinch. The point of the rivet or nail being turned back into the material through which it has been driven at a place somewhat removed from the place where it left the material in its passage down through, the clinch is hooked around and embedded in the material joined.

Third. It enables one to use small sharp-pointed iron rivets that cost less than rivets heretofore used, and which, by the aid of this clincher, make a much stronger and more durable joint than can possibly be made by means heretofore used.

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

The herein-described clinching device for rivets, consisting of a plate having a series of cells with sloping sides and concave bottom, substantially as set forth.

EDWARD P. FARNUM.

Witnesses:

S. G. LANE,

S. Y. WALLACE.