

H. Q. THOMPSON & E. R. THORN.
Leather-Crimping Mechanisms.

No. 146,213.

Patented Jan. 6, 1874.

Fig. 1.

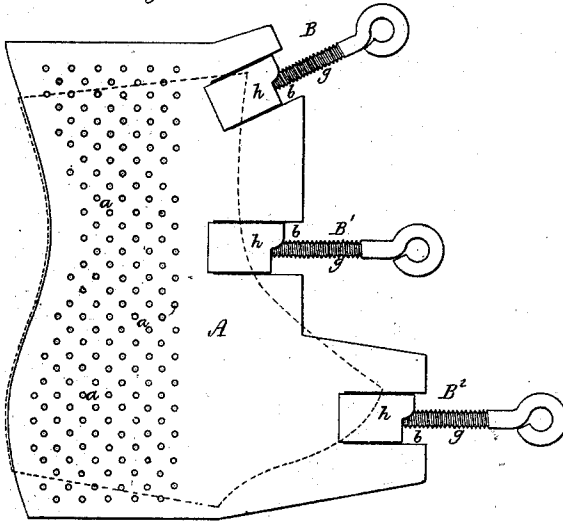


Fig. 6.

Fig. 4.



Fig. 5.



Fig. 2.

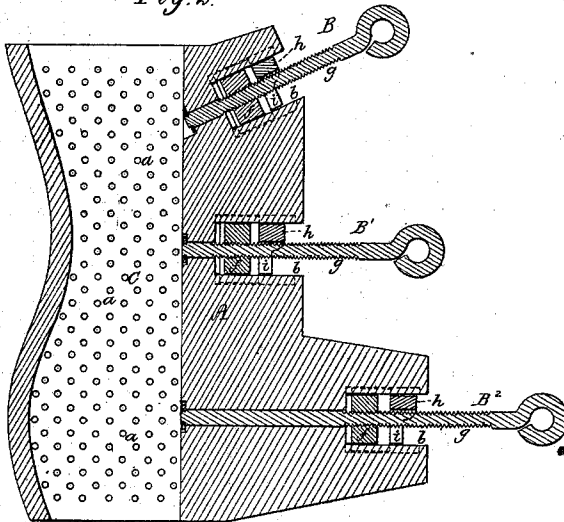


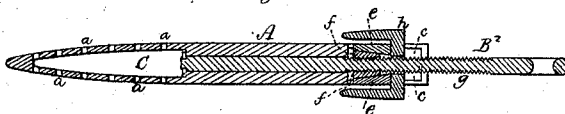
Fig. 7.



Fig. 8.



Fig. 3.



Witnesses

L. M. Ripley
J. R. Snow

Hosea Q. Thompson
Edmund R. Thorn

by their attorney

R. H. May

UNITED STATES PATENT OFFICE.

HOSEA Q. THOMPSON AND EDMUND R. THORN, OF STONEHAM, MASSACHUSETTS, ASSIGNORS TO THEMSELVES AND AI B. THOMPSON, OF CONCORD, NEW HAMPSHIRE.

IMPROVEMENT IN LEATHER-CRIMPING MECHANISMS.

Specification forming part of Letters Patent No. **146,213**, dated January 6, 1874; application filed December 11, 1873.

To all whom it may concern:

Be it known that we, HOSEA Q. THOMPSON and EDMUND R. THORN, of Stoneham, of the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Mechanism for Crimping Leather for Boots or Shoes; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 denotes a side elevation, Fig. 2 a longitudinal section, and Fig. 3 a transverse section, of a crimping mechanism as improved by us.

The nature of our invention consists in a former, hollow, or provided with a chamber in or passage through it, and having a foraminous side or sides; also, in the former as provided with grooves and slides in each of its clamp-notches, such being to operate with a screw or wedge and a spanner, all as hereinafter described; also, in the spanner provided with a notch in its head, as and for the purpose hereinafter explained.

In such drawings, A denotes a former of ordinary shape externally, and provided with three or any other suitable number of sets of straining-clamps, shown at B B¹ B². It is usual to construct such formers solid. As a consequence, the moisture of a piece of leather, while such piece is strained on such a former, has to escape through the leather from its inner to its outer surface during the process of drying the leather.

In carrying out our invention, we make the former A hollow, or with a passage or chamber, C, within it or leading through it, and one or both the sides of such chamber or passage we make foraminous, or with numerous fine or small holes, as shown at *a*. This enables air to circulate freely through the former A and come into contact with the inner surface of a piece of leather when strained on the former, thereby facilitating the evaporation of the moisture from and the consequent drying of the leather, especially when the former A is in a heated state. The chamber or passage C in the former A also enables heat to be applied to advantage to the former, as such may be done by a heated iron, or by a hollow column (containing steam) introduced into such passage or chamber in

the former. Furthermore, we provide the former with notches *b b b*, for the reception of the straining-clamps. Each notch we construct with two parallel grooves, *c c*, in each of its opposite sides, to receive tenons or tongues *d d* projecting from opposite ends of two slides, *e e*, disposed within each notch, in manner as shown.

Fig. 4 is a side view, and Fig. 5 an outer edge view, of one of said slides. Fig. 6 is a vertical section of the slides and grooves, each of the grooves being wider than the tongue within it. Between the two slides is a wedge or pyramidal frustum, *f*, which screws upon a long screw, *g*, arranged in the notch and pivoted to its bottom, as shown. A spanner, *h*, formed as seen in side view in Fig. 7, and in end view in Fig. 8, and notched as shown at *i*, straddles the screw and the two slides when such spanner is arranged within the notch *b*. By notching the spanner, as shown at *i*, it can easily be removed from or applied to the screw and to the leather. After the piece of leather may have been inserted between the jaws of the spanner and the two slides *e e* straddled by such spanner, we have only to revolve the screw, so as to cause the wedge to move outwardly upon the screw. In so moving, the wedge will press the slides toward the jaws of the spanner and clamp the leather, after which the farther movement of the wedge will cause the leather to be drawn and crimped upon the former A.

What we claim as our invention is as follows:

1. The former A, having the chamber or passage C, and one or both the sides of each chamber or passage foraminous, or perforated with numerous holes, all as and for the purpose set forth.

2. The former A, provided with the grooves *c c c c* and the slides *e e*, arranged in either of its clamp-recesses *b*, and to operate with the wedge frustum *f* and screw *g*, and a spanner, *h*, substantially as described.

3. The spanner *h*, provided with the notch *i*, to straddle the screw, all being essentially as specified.

HOSEA Q. THOMPSON.

Witnesses: EDMUND R. THORN.

R. H. EDDY,
J. R. SNOW.