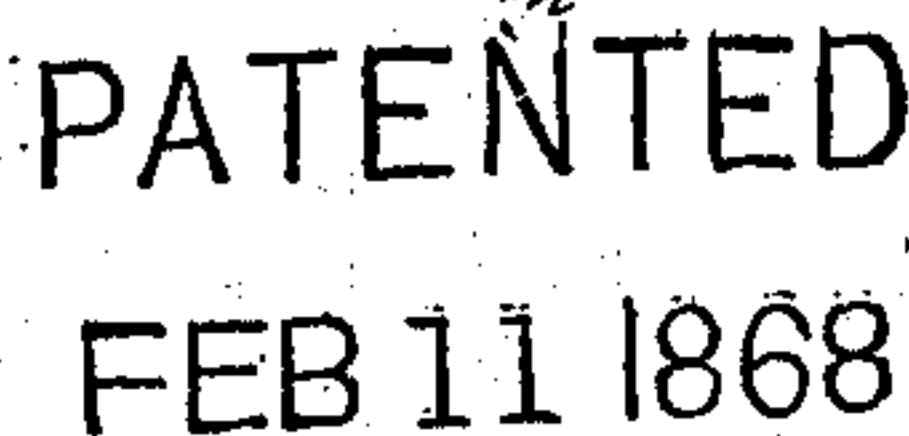
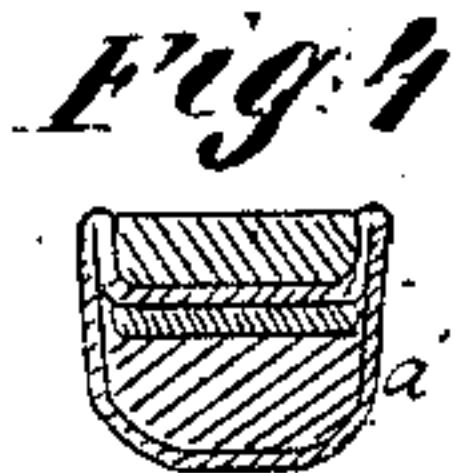
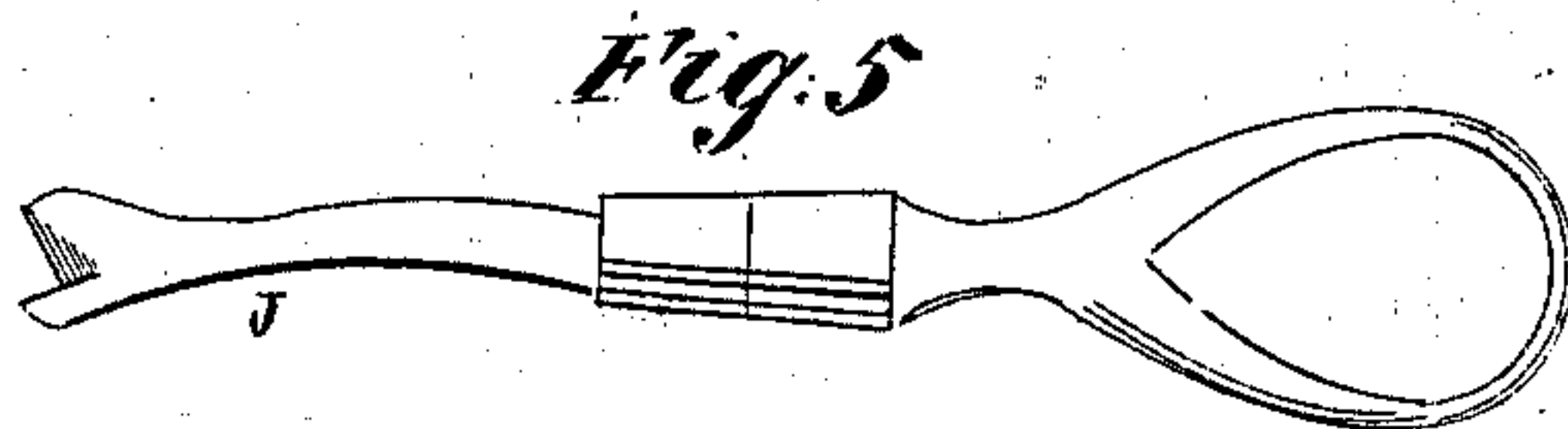


74390



witnesses:
Dr. C Ashkettle
J. A Fraser,

Inventor:
Jno: Machine
per Munsell
Attorneys



United States Patent Office.

JOHN MACLURE, OF NEWARK, NEW JERSEY.

Letters Patent No. 74,390, dated February 11, 1868.

IMPROVEMENT IN MANUFACTURING HARNESS-PADS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN MACLURE, of Newark, in the county of Essex, and State of New Jersey, have invented a new and useful Improvement in Manufacturing Harness-Pads; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to improvements in machinery and appurtenances for manufacturing harness-pads. And it consists in the arrangement for stuffing the pad by lever-pressure, and in the device for guiding the knife in trimming leather, and in the other parts, fixtures, and tools necessary to carry out my invention, whereby the invention is made to simplify and cheapen what has hitherto been complicated and expensive, requiring the most skilful workmen in the operation. By my method, both labor and material are saved, while the pads are superior in finish, and equal in durability.

Figure 1 represents a sectional top view of the table, with the fixtures thereon, for forming and stuffing the pads.

Figure 2 is a sectional side elevation of the same, through the line *xx* of fig. 1.

Figure 3 is a cross-section, through the line *yy*, showing the pad with the wooden former, to which the leather is secured.

Figure 4 is a cross-section, through the same line, showing the pad with the former removed, and the leather cut, and the pad filled and ready for binding.

Figure 5 is a longitudinal view of the tool used in cutting the leather, which tool is guided by the groove in the wooden former.

Similar letters of reference indicate corresponding parts.

A is a revolving table, upon which the dies are placed, in which the pads are formed. B is a vertical shaft, passing through the top of the table, with a projecting jaw, B', upon its upper end. Its lower end is supported by a foot-lever, marked C, as seen in the drawing. D is a spiral spring, around the shaft, which acts against the collar *e*, from the top of the table, which serves to keep the jaw up from the die when not pressed down by the foot on the lever B. E represent the dies, which may be more or less in number, or of different sizes, and either fast to the table or detached therefrom, as may be found most convenient. These dies may be lined with rubber or other elastic material, for more perfectly fitting and holding the pad while the same is being stuffed.

The mode of operation is as follows: Place the leather, *a'*, which has been already prepared, in the die E, then fill the cavity with hair or other material used for stuffing. The pad-plate F is then placed on top of the stuffing. Then a thin piece of leather, *c'*, corresponding in shape with the pad-plate, but somewhat wider all round, is pasted to the pad-plate. On the top of this the grooved former, G, is placed. This former is fitted so as to correspond with the upper surface of the pad-plate, but made a little longer and curved exactly like it. *h* is a groove, which runs all round the former, G, which groove is for guiding the knife or tool in cutting the leather. When the pad is thus prepared, it is passed under the projecting jaw B', which is pressed firmly down, and the jaw and lever C are held in place by the ratchet I. The edges of the thin piece of leather *c'*, which is pasted to the pad-plate, are covered with paste, and the edges of the leather *a'*, which was first put into the die, are drawn up and fastened, with tacks or otherwise, to the upper portion of the former, G, as seen in fig. 3. The pad is then taken from the die and left to get dry and firm. J is a tool of peculiar construction, which is inserted into the groove *h*, and passed all round the former, G, thus cutting off all the superfluous leather, leaving a rim or edge standing above the surface of the pad-plate, formed by the united edges of the leather *a'* and the piece *c'*, which is pasted to the pad-plate. The edge thus formed is required for binding and finishing the pad. The former, G, is of course removed, and the space it occupied in the pad is filled with leather, ready to receive the top finish or trimmings.

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

1. The revolving table A, with the adjustable shaft B and the projecting jaw B', substantially as and for the purposes herein shown and described.

2. The thin middle piece of leather *c'*, in combination with the pad-plate *F* and leather *a'*, substantially as and for the purposes described.
3. The former, *G*, with the groove *h*, whereby I am able to stuff the pad by pressure, and cut the leather evenly for binding, substantially as specified and shown.
4. Stuffing pads by pressure, whereby I am enabled to obtain an even surface and uniform density in the pad, substantially as described.
5. In combination with the grooved former, *G*, the tool *J*, substantially as and for the purposes set forth.
6. Lining the dies *E*, either in whole or in part, with India rubber, substantially as described.

JOHN MACLURE.

Witnesses:

WM. F. McNAMARA,

ALEX. F. ROBERTS.