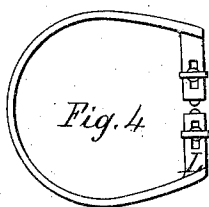
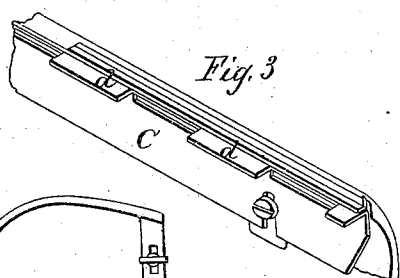
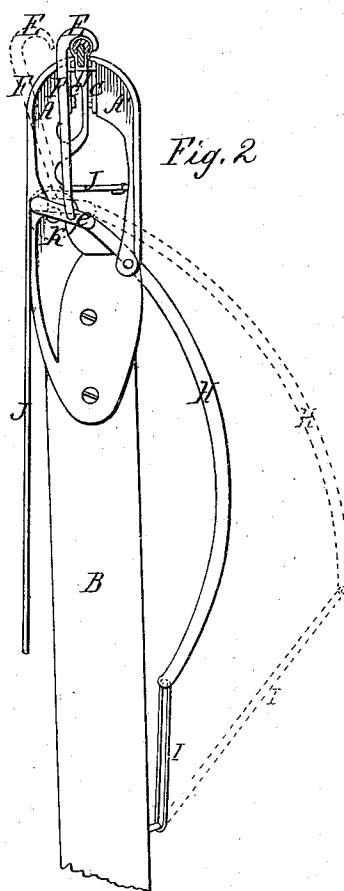
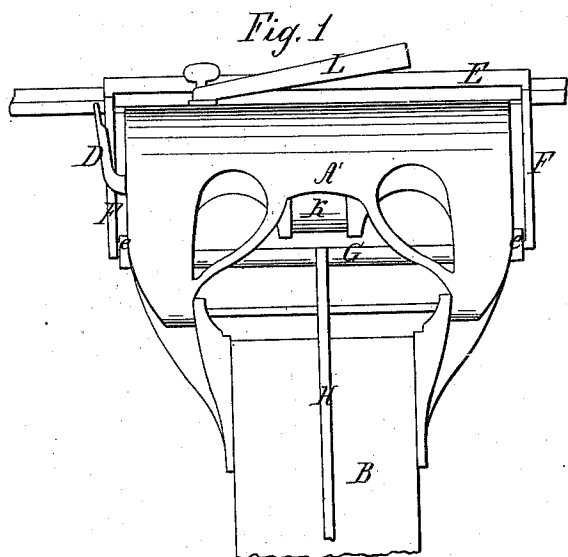


No. 81,787.

PATENTED SEPT. 1, 1868.

J. F. JOHNSON.
HARNESS MAKER'S CLAMP.



Witnesses
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JESSE F. JOHNSON, OF MONROVIA, INDIANA.

Letters Patent No. 81,787, dated September 1, 1868.

IMPROVEMENT IN HARNESS-MAKERS' CLAMP.

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, JESSE F. JOHNSON, of Monrovia, in the county of Morgan, and State of Indiana, have invented new and useful Improvements in Harness-Makers' Clamps; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon, making part of this specification.

My invention relates to construction of harness-makers' clamps adapted to hold reins, tugs, or other articles made of leather, having a round form while being sewed, and in connection therewith a channelling-tool, which is conveniently used to make the channel in the leather for the reception of the thread.

Figure 1 is a side view, and

Figure 2 an end view of the clamp.

Figure 3 is a detached view of a part of one of the jaws of the clamp, showing the guide for keeping the edges of the leather parallel, and for governing the distance of the seam from the edges, and which also holds the filling in the fold of the strap.

Figure 4 is a view of the channeller.

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

The following description will enable skilled artisans to make and use my invention.

The jaws A A' of the clamp are made of metal, and are attached to the stock B, as shown, the latter being fixed upright in the ordinary buck used by saddlers and harness-makers for similar purposes.

The inside of the jaws is furnished with adjustable notched guide-plates C, more clearly shown in fig. 3, which are attached to the jaws by means of screws through slots in the guides, so arranged that they may be adjusted vertically to regulate the distance of the seam from the edges of the leather. The notches in the two guide-plates C are so arranged that the projections *d* on one plate will shut into the notches of the opposite plate. The object of constructing the guide-plates in this manner is to allow the jaws to be opened as far as may be desired to put in the strap, or to admit of its being drawn through the jaws without separating the guides far enough to let the filling drop down between them.

An adjustable notched guide, D, is attached to the fixed jaw A, which projects a short distance to the rear of the clamp, and serves to hold and guide the filling as it is drawn with the strap into the jaws.

The device for holding the folded strap in the jaws, and keeping it firmly down, upon the guide-plate C, is composed of the horizontal bar E, with its arms, F; the horizontal bar G, with its arms, *e*, by which it is attached by means of pivot-screws to the fixed jaw A, as shown in fig. 2; the lever H attached to the bar G, and elastic strap or spring I. Bar G, lever H, and arms *e*, combined, form a lever by which to actuate the holding-bar E. The lower ends of arms F are pivoted in the arms *e*, near their junction with bar G, so that the bar E may be conveniently swung from over the jaws, when required, to put in the article to be sewed, as indicated by the red dotted lines, fig. 2, and be swung back again over the strap after it is adjusted in the jaws.

The hinged jaw A' is made to clamp the folded strap by means of the strap J, which is attached thereto, and passes over a roller, K, hung in the fixed jaw A to the treadle of the buck in the usual manner. Although not shown, I contemplate the use of a spring to open the jaws when the treadle is released.

In connection with the clamp, constructed and arranged as set forth, I have constructed a channelling-tool, L, figs. 1 and 4, which is made of steel in the form shown, furnished with knives, which may be adjusted and secured by thumb-screws in any position desired to regulate the depth of the channel.

The strap to be sewed is folded at one end, and, together with the filling, is placed in the jaws with the edges resting upon the guide-plates C, the filling in the rear resting in the notched-guide D. The holding-bar E is then brought over the folded strap, which, by the tension of the elastic strap I, is held securely in the jaws, and the edges of the strap kept pressed firmly down upon the guide-plates C. The channeller L is then sprung open and placed upon the folded strap, close to the end of the clamp opposite the operator, as shown in fig. 1, the knives resting upon the jaws of the clamp, so as to cut the channels as near the edges of the leather as practi-

cable. The channeller is then drawn back to the other end of the clamp, the knives cutting the channel for the thread. The operator commences sewing where the channeller started from, and sews up to it. The treadle is then released from pressure of the foot, which relaxes the clasp of the jaws upon the strap, when the latter may be drawn through the clamp until the channeller is brought forward to the opposite side, as in the first instance. The channeller is then drawn back, and the operator sews up to it as before, and so on for any length of strap. The holding-bar E keeps the strap in place as it is drawn through the jaws.

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

1. The guide-plates C attached to the jaws A A', substantially as and for the purpose set forth.
2. The holding-bar E, lever G H e, and elastic strap I, arranged substantially as and for the purpose set forth.
3. The channelling-tool L, constructed and applied substantially as set forth.

JESSE F. JOHNSON.

Witnesses:

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