

D. BARD.
Broom-Press.

No. 207.839.

Patented Sept. 10, 1878.

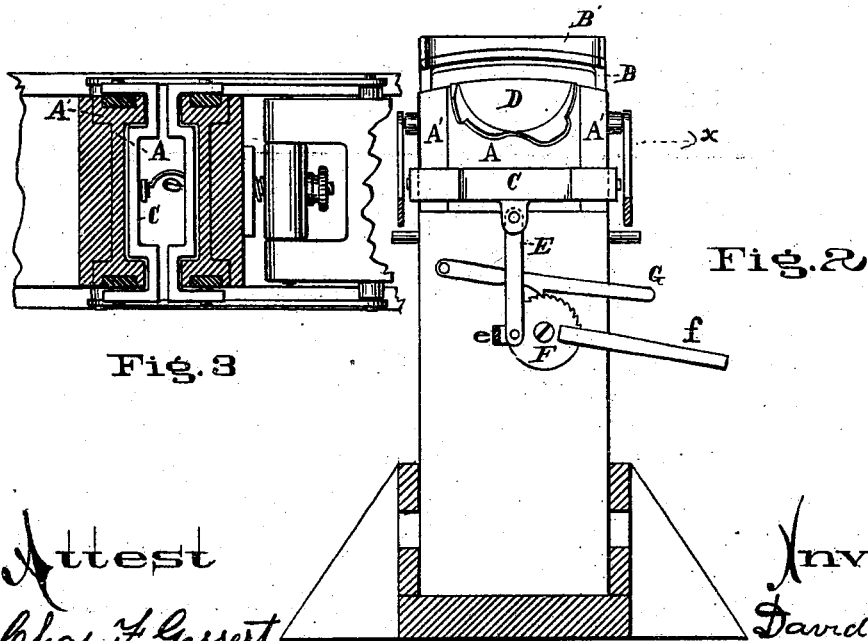
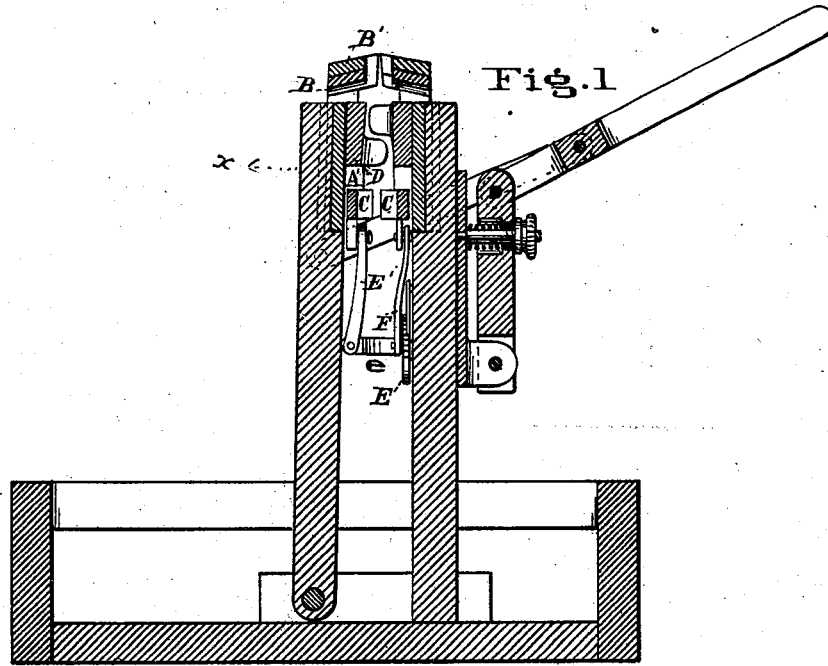


Fig. 3

Attest
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UNITED STATES PATENT OFFICE.

DAVID BARD, OF CINCINNATI, OHIO, ASSIGNOR OF ONE-HALF HIS RIGHT
TO GEORGE FLAGG, OF SAME PLACE.

IMPROVEMENT IN BROOM-PRESSES.

Specification forming part of Letters Patent No. 207,839, dated September 10, 1878; application filed
June 7, 1878.

To all whom it may concern:

Be it known that I, DAVID BARD, of Cincinnati, county of Hamilton, State of Ohio, have invented a new and useful Improvement in Broom-Presses, of which the following is a specification:

The invention relates to devices for compressing brooms to the proper shape and holding them so compressed for sewing after the material has been properly secured to the handle by any well-known process.

Heretofore such presses have either been constructed with a series of jaws adapted to be thrown up into position successively, the one set overlapping the other, to compress and hold the broom-head at the different points where the seams were to be formed, or with one set of jaws to sew the seam near the end of the broom first, the broom being raised and a new "bite" taken to sew each successive seam, the seam nearest the handle being sewed last. The first mode is objectionable on account of the time required to adjust the separate jaws, and the fact that the unused jaws are in the way of the operator, and also owing to the difficulty of varying at will the distance between the seams. The second mode is objectionable because of the difficulty in making the seams uniform, and because in this mode it is necessary to sew the outer seam first, which does not make so compact and even work. A defect common to both modes is, that a separate press is required for each kind of seam.

The object of my invention is a broom-press with removable jaws, to adapt it for sewing either a straight or curved seam, said jaws being vertically adjustable, to enable the operator to readily form his seams at any required distance apart.

The invention consists in providing a press of ordinary construction with a pair of jaws yoked together, to be simultaneously elevated and depressed; in a convenient means of adjusting said jaws to the desired position, retaining them in such position when elevated, and lowering them when desired; and, finally, in providing jaws of different shapes or sizes from the jaws proper, which may readily be attached to or detached from said jaws, to form the different seams required.

In the accompanying drawing, in which similar letters of reference indicate like parts, Figure 1 is a central longitudinal vertical section of a broom-press embodying my improvements. Fig. 2 is a transverse vertical section in front of the stationary jaw, showing, in plan view, the devices for elevating and releasing the sliding jaws and retaining them in the desired position; and Fig. 3 is a horizontal sectional plan taken in line *x* of Figs. 1 and 2.

As the lower stand, the movable and stationary jaws which it supports, the actuating-lever, and links for operating the pivoted jaw are substantially the same as are now commonly used, except the changes in the upper ends of the jaws, which adapt them to receive my improvements, a full description of these is not deemed necessary here; and as the devices secured in the top of these jaws are exactly alike in construction, a description of one will answer for both.

A is a metal plate let into and properly secured to the face of the jaw, near the top, upon each of its vertical sides; and forming part of it are guides to receive the shanks of jaw B, which are made to fit these guides and slide vertically within them. A yoke-piece, C, which conforms in shape to the plate A, extends at each side in front of the guides, and is secured to the shanks of jaws B by a pivot-pin passing through the ends of yoke and permanently secured in the shanks.

E is a link, connecting the yoke C to the crank-pin of a ratchet, F. Rigidly secured to and forming part of link E is a yoke, *e*. This is curved to allow the broom-handle to pass without striking it, and is connected to yoke C upon the opposite side by a link, E', which is pivoted, the one end to yoke *e*, and the other to the yoke C.

G is a pawl, pivoted at one end to the stationary jaw. Its detent enters between the teeth of ratchet F, with which it is held in contact by the weight of its handle, which passes out from between the jaws in a position to be operated to depress the jaws after the sewing has been completed.

The jaws B, which consist of curved plates, connecting the two shanks, have jaws B' fitted upon them, and held in place by steady-pins, secured in the under side of the removable

jaws, entering corresponding depressions cut from the top of the jaws B.

The removable jaws B' are for sewing a straight seam, as shown. These may be made of any shape or size, depending upon the curve of seam or the size of broom to be made.

D is the ordinary head-clamp now commonly used. *f* is a handle, rigidly secured to ratchet F, and passing out to be operated to elevate the jaws.

To use my press, the jaws being in the lowest position, and a broom clamped between jaws of the proper shape or size, the first seam is made across the top of the jaws. They are then opened, and the handle *f* pressed down until the ratchet is turned one or more notches, depending on the space required between seams, the jaws again closed, and this operation continued until the desired number of seams are made, when the broom is removed, the handle G thrown up, when the jaws descend of their own weight preparatory to beginning the operation anew.

If desired, a scale may be marked upon the edge of the guides A' and the shank in front of the operator, to insure exact accuracy in making the seams; but generally the teeth of the ratchet may be made to gage the distance accurately enough for all purposes.

Of course, instead of the handle *f*, a treadle or other suitable means may be used to elevate the jaws; but as these handles *f* and G are convenient to the operator, the mode shown of elevating and depressing the jaws is deemed the best.

I claim—

1. In combination with a broom-press, the jaws B, simultaneously adjustable in vertical guides A' by suitable means, substantially as described.

2. In a broom-press having vertically-adjustable jaws, as shown, the combination, substantially as specified, of yokes C and *e*, links E and E', and eccentric F, for operating the same by means of lever *f*.

3. In a broom-press having vertically-adjustable jaws, as shown, the combination, substantially as specified, of yokes C and *e*, links E and E', eccentric F, for operating the same by means of lever *f*, and the lever-pawl G, for locking the adjustable jaws and releasing them.

4. In combination with the described broom-press, the removable jaws B, for the purpose specified.

DAVID BARD.

Witnesses:

GEO. J. MURRAY,
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