2 Sheets--Sheet 1.

A. BOYER.

Broom-Press.

No. 162,997. Patented May 11, 1875.

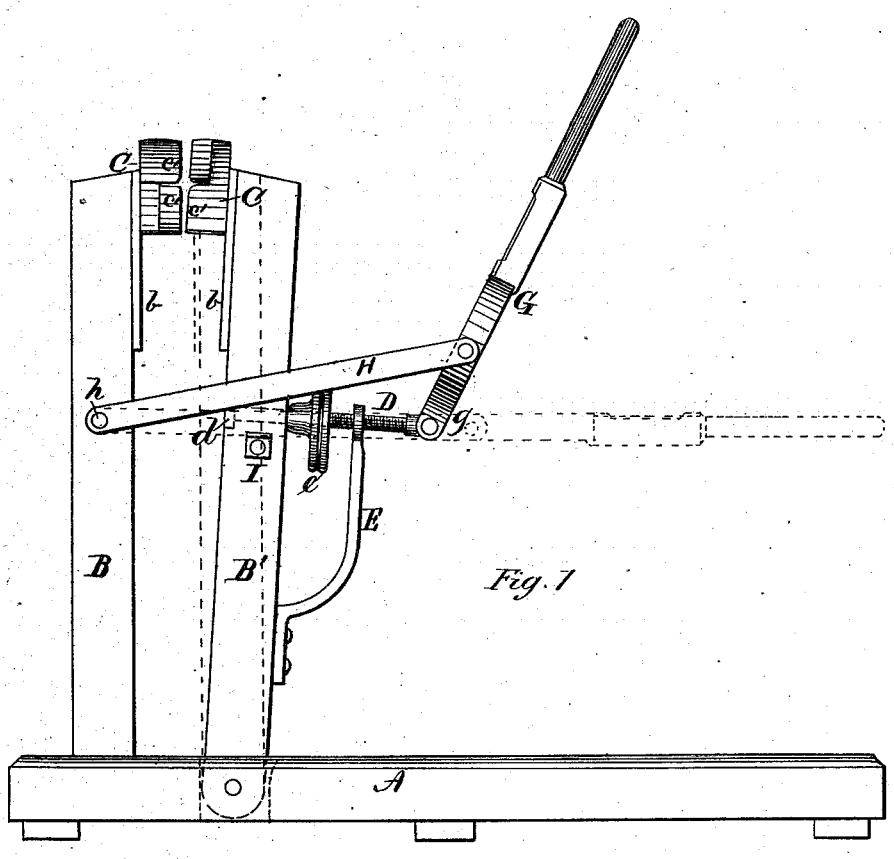

Fig. 1

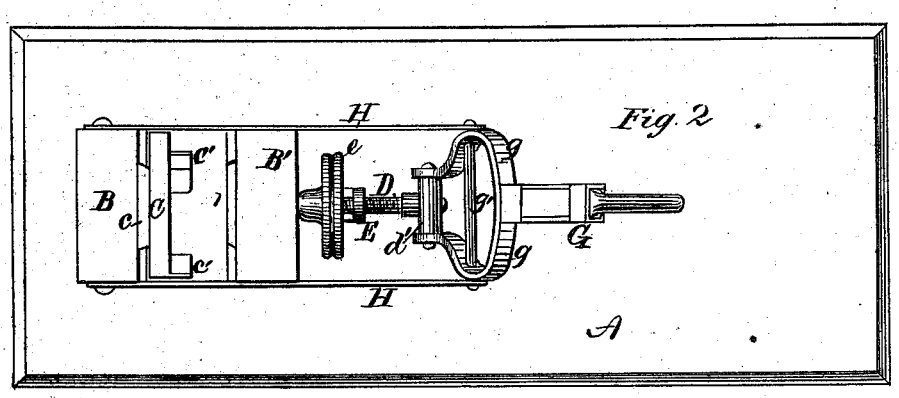

Fig. 2

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THE GRAPHIC CO. PHOTO-LITH. 39 & 41 PARK PLACE, N.Y.

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Fig. 3

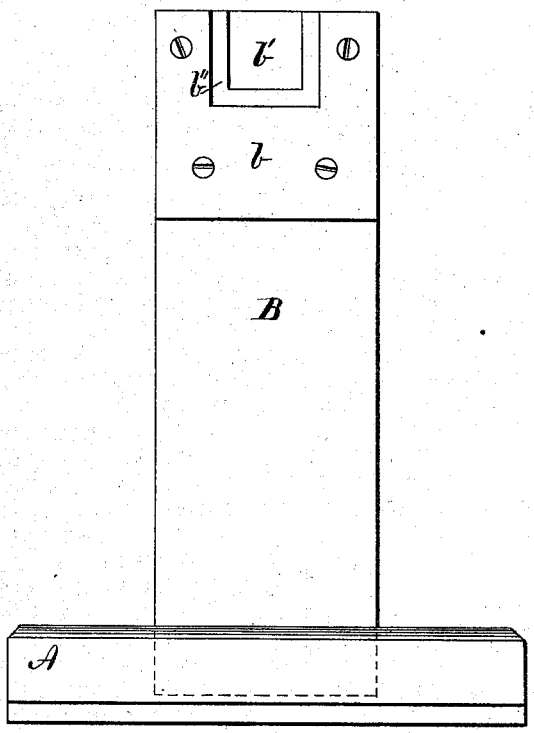


Fig. 4

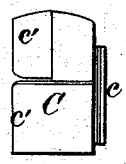


Fig. 5

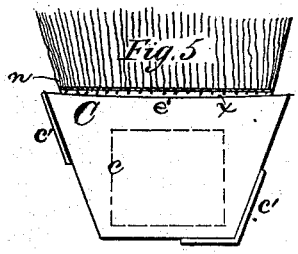
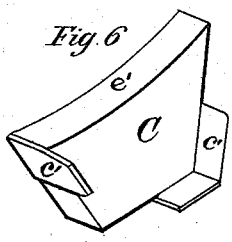


Fig. 6



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UNITED STATES PATENT OFFICE.

AARON BOYER, OF GALESBURG, ILLINOIS.

IMPROVEMENT IN BROOM-PRESSES.

Specification forming part of Letters Patent No. **162,997**, dated May 11, 1875; application filed January 2, 1875.

To all whom it may concern:

Be it known that I, AARON BOYER, of Galesburg, county of Knox and State of Illinois, have invented certain Improvements in Broom-Presses, of which the following is a specification:

The object of my invention is to furnish a press or clamp for holding brooms, brushes, &c., while being sewed, a press which can be readily and quickly operated, and which can be easily and quickly adjusted for brooms of different sizes, and also adjusted to press brooms of a uniform size; and the invention consists, first, in operating the jaws which carry the holding-clamps by means of a lever, the connection of which to the jaw is by means of a threaded bolt, carrying a set-nut for adjusting the throw of the jaw; second, it consists in improvements in the construction of the clamps of the jaws, all as hereinafter fully described.

In the accompanying drawing, Figure 1 represents a side elevation of a machine embodying my invention. Fig. 2 is a top plan view; Fig. 3, an elevation of one of the jaws. Figs. 4 and 5 are side elevations.

Referring to the parts by letters, letter A represents the base, on which is secured a standard, B, forming the fixed jaw. B′ is a movable jaw, pivoted or hinged at its lower end to the base A. The upper adjacent faces of the jaws B B′ are provided with fixed plates *b b*, having recesses *b′* cut in their upper parts, the edges of which are dovetailed to receive similar-shaped projections *c* on the backs of the clamps C. The adjacent faces of the clamps C have projecting side lugs *c′*, so that when brought near together the space between the plates will have the desired shape for the shoulders of a broom. *b″* are gib-plates, their outer edges coincident in form with the sides of the recesses *b′*, and their inner edges similarly shaped. D is a rod passing through a hole in the jaw B′, its inner end carrying a collar, *d*, its outer end supported by a standard, E, through the end of which it loosely passes, and its central part threaded and carrying a thumb-nut, *e*, and its outer end having a cross-head, *d′*, to the ends of which are journaled the bifurcated ends *g g* of a hand-lever, G. The central parts of the ends *g* are curved outward, as shown at Fig. 2, and carry a rod, *g′*, the ends of which project and form journals for the ends of bars H H, which extend from said journals to other journals *h* on the standard or jaw B. I I are stops on the jaw B′ to limit the downward movement of the bars H.

The operation of my invention is as follows: The broom being first prepared by wiring and tying to the handle, is then inserted in the press, the lever G being turned upward preparatory thereto, for the purpose of separating the jaws and allowing the broom to be so inserted. By turning down the lever G to the position shown by dotted lines at Fig. 1, the jaws will be brought toward each other, and the broom compressed and held in shape by the clamps C for sewing. The amount of pressure may be regulated by adjusting the nut *e* on the rod D, so as to press in a uniform manner. The horizontal position of the lever G serves as a sufficient lock for holding it in position. For brooms of ordinary variation in thickness the set-nut may be varied in position. Where very small clamps C are required—as for brushes, &c.—the plates *b″* may be inserted preparatory to inserting said clamps, the clamps C in each case being readily and easily inserted by sliding the ledges on their backs into the dovetail-shaped grooves *b′*. The broom being inserted as shown at Fig. 5, and as hereinbefore described, the end seam *x*, or seam nearest the brush end, may be sewed. The concave upper edge *e′* of the clamps C will allow the stitching-thread *n* to be sewed around the foundation-cord *n′* without raising said cord and producing a curved seam. For sewing other cross-seams the broom may be raised upward and again clamped, the first seam holding the material in shape without the aid of the clamps.

I claim—

1. The stationary upright B and pivoted upright B′, having clamps C, and operated by means of the screw-rod D and adjusting-nut *e*, attached to the pivoted upright, the lever G, and the connecting-rods H, the latter being pivoted to the lever and to the stationary upright, substantially as and for the purpose specified.

2. The clamps C, constructed as described, with an upper concave edge, c', to facilitate sewing, substantially as described, and for the purpose specified.

3. The clamps C, having the projecting side lugs c' and dovetailed projections c, in combination with the gib-plates b'' and fixed plates b, substantially as and for the purpose set forth.

AARON his + mark. BOYER.

Witnesses:
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THOS. MCKEE.