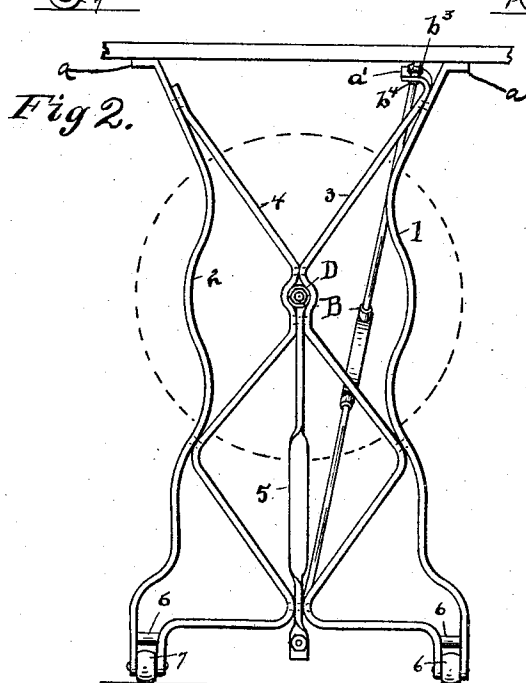
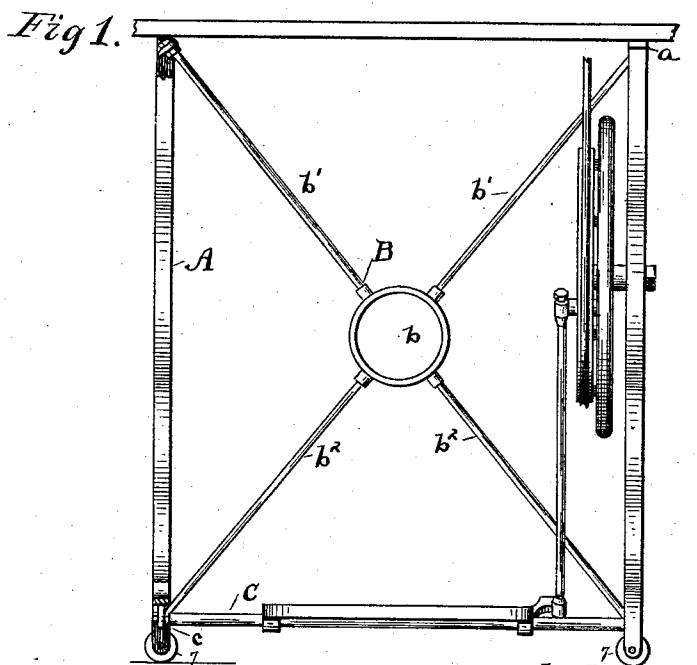


(No Model.)

B. F. BELLOWS.
SEWING MACHINE FRAME.

No. 482,958.

Patented Sept. 20, 1892.



WITNESSES.

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SEWING-MACHINE FRAME.

SPECIFICATION forming part of Letters Patent No. 482,958, dated September 20, 1892.

Application filed February 27, 1892. Serial No. 423,092. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN F. BELLOWS, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Sewing - Machine Frames, of which the following is a specification.

The object of my invention is to provide a light though strong sewing-machine frame.

It relates to the construction of the middle brace, to the construction of the sides, and to the combination of the parts, as hereinafter described, all of which will be definitely pointed out in the claims.

In the drawings, Figure 1 is a front elevation, and Fig. 2 a side elevation, of my improved frame.

In common with most sewing - machine frames my frame consists of two sides A A, on one of which the driving-wheel is hung, a treadle-rod C extending from one side to the other and suitably connected with both, and a brace B extending between the two sides and connected at two points with both.

All sewing-machine frames with which I am acquainted have had cast sides and a cast middle brace. My frame differs generally from prior sewing-machine frames in this, that I use only one casting in the entire frame, and that is the center piece *b* of the brace B.

The sides A A are made of rolled-steel bars, preferably flat, oval in cross-section. Each side consists of five pieces 1, 2, 3, 4, and 5. The outside pieces 1 and 2 have their upper ends bent over into substantially horizontal position, and the ears *a* thus formed afford means for attaching the top or table to the frame. The lower ends of the pieces serve as legs or as parts of the legs on which the frame rests. The lower ends of the pieces 3 and 4 are vertical and parallel with the lower ends of the pieces 1 and 2, to which they are connected to form the legs of the frame. The lower ends of the pieces 1 and 2 are separated from the lower ends of the pieces 3 and 4 by a distance-sleeve 6, through which passes a rivet by which said pieces are connected. Rollers 7 and 8 may be mounted in the legs, as shown.

From the points of connection with the

lower ends of the outside pieces, as above described, the pieces 3 and 4 are bent into horizontal position toward each other, and are connected by a rivet with each other and with an interposed piece 5 at or near the vertical central line of the sides. From this point the pieces are bent outward into engagement with the outside pieces 1 and 2, to which they are riveted. They are again bent toward each other and the interposed vertical piece 5, and said three pieces are connected by a rivet. From this point the pieces 3 and 4 are bent outward into contact with the pieces 1 and 2 near their upper ends, to which they are riveted. The upper ends of the pieces 3 are bent over to form the ears *a' a'*, to which the upper arms of the brace B are connected. The lower end of each of the pieces 5 is given a quarter-twist, and the treadle-rod C passes through holes in these lower ends.

The bearing D for the driving-wheel is secured in a cylindrical space between the pieces 3 and 4, which is formed by bending the said piece into semicircular form and then into contact with each other just above their upper connection with the piece 5, and again riveting them together.

The brace B consists of a center piece *b*, having four tapped openings and four rods *b' b'* and *b² b²*, which are screwed into said openings. The lower ends of the rods *b² b²* are flattened and punctured, and the treadle-rod C passes through the orifices thus formed. The treadle-rod also passes through holes in the lower ends of the pieces 5, and is held in place by nuts which screw onto its ends. The lower ends of the rods *b² b²* lie between the adjacent pieces 5 and a shoulder *c* on the treadle-rod.

The upper ends of the upper rods *b' b'* pass through the ears *a' a'*, and are held in place by the nuts *b³ b⁴*, which screw onto the threaded ends of said rods and lie one on one side and one on the other side of said ears. By means of this adjustable connection between the brace and sides the frame may be straightened and stiffened.

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

1. In a sewing-machine frame, a side piece

A, made up of the bent bars 1, 2, 3, and 4 and the vertical middle bar 5, the bars 3 and 4 being connected with the bars 1 and 2, respectively, at three points by means of rivets 5 and with each other and the middle bar at two points by means of rivets, substantially as set forth.

2. In a sewing-machine frame, the sides made up of the bent bars 1, 2, 3, and 4 and the vertical bar 5, all riveted together, as described, the lower end of the bar 5 being provided with orifices, a treadle-rod passing through said orifices, and shoulders on said

treadle-rod, combined with a brace consisting of the center piece b , two arms $b^2 b^2$, the lower end of each of which surrounds the treadle-rod and lies between one of the shoulders thereon and the adjacent piece 5, and two arms $b' b'$, which pass through and are adjustably connected with ears formed by bending over the upper ends of the bars 3, substantially as set forth.

BENJAMIN F. BELLOWS.

Witnesses:

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