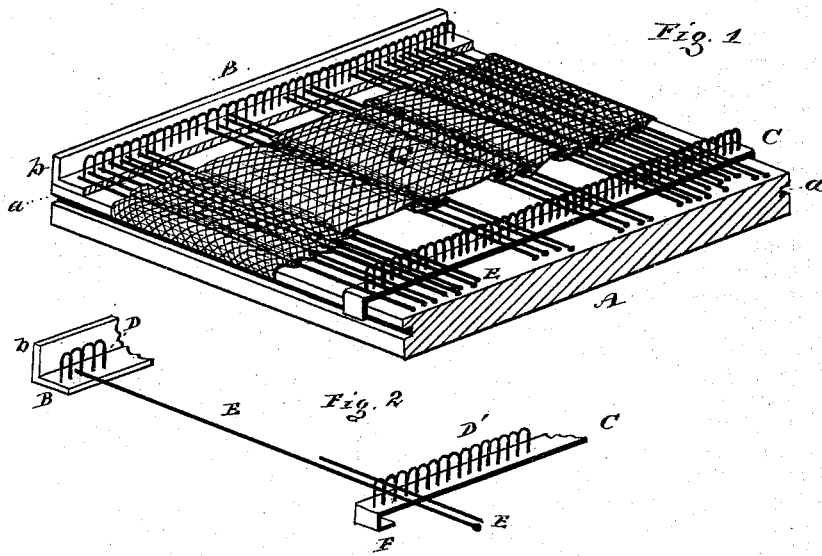


LIZZIE J. BOYD.
PLAITING MACHINE.

No. 182,636.

Patented Sept. 26, 1876.



WITNESSES:
Samuel S. Wood
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INVENTOR
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UNITED STATES PATENT OFFICE.

LIZZIE J. BOYD, OF COATESVILLE, PENNSYLVANIA.

IMPROVEMENT IN PLAITING-MACHINES.

Specification forming part of Letters Patent No. 182,636, dated September 26, 1876; application filed March 15, 1876.

To all whom it may concern:

Be it known that I, LIZZIE J. BOYD, of Coatesville, in the county of Chester and the State of Pennsylvania, have invented certain Improvements in Machines for Plaiting Fibrous Materials, of which the following is a specification:

The nature of my improvement consists in the arrangement of two series of wire-loops, firmly secured to metallic plates, one of which series is affixed along one edge of a smooth board or table. The other series is on a shifting or adjustable plate, held in side grooves, made in opposite edges of said table, and is parallel to the fixed series. Round wires are passed through the folds of textile fabrics, their ends held in place by the said series of loops, for the purpose of plaiting the fabric, which is pressed with a hot smoothing-iron while on the board or table, as a foundation.

The accompanying drawing, with the letters of reference marked thereon, and a brief explanation, will enable those skilled in the art to make and use my invention.

Figure 1 is a perspective view of the table and two series of loops, with the needles and fabric in place. Fig. 2 is a detached portion of the two series of loops on their respective plates.

This board or table A may be hinged or otherwise attached to the table of sewing-machines. The table A, of any desired length and width, made smooth on top, has two opposite edges grooved, as shown by *a*. A plate, B, with a vertical flange, *b*, to confine the ends of the needles on one side, is firmly attached to the top along the rear edge of said table A. A series of wire loops, D, as close together as desirable, extending from one end of said plate to the other, constitutes the fixed series of loops. The plate C has each end bent down

and in at right angles at F, so as to slide back and forth in the side grooves in the table, to adjust the same on the table, with its series of wire loops D', affixed to said plate. Stout round wires E, or knitting-needles, of any desired number, are employed in combination with the wire loops. The fabric to be plaited is passed around these needles, by which various plaits are easily made—such as knife-blade plaits, single or double box-plaits, or side plaits of any desired width—and ironed down, and, if need be, basted, on the same board or table, as a foundation.

I am aware of Patent No. 173,674, of February 15, 1876, for a plaiting-frame having fixed pins and adjustable slats or tines, with elongated openings. Such an arrangement I do not use nor claim. My adjustment is made by means of the series of loops on a sliding or shifting plate. The solid board or table constitutes an ironing-board, and is far more advantageous than an open frame, as is also my mode of adjustment, and the use of loops and needles, as a combination of parts.

I do not claim a plaiting-machine consisting of a bed-plate having two rows of staples and on one side an upright flange, in combination with plaiting strips or needles, which are held in the staples, and whose ends abut against said upright flange, as these are not of my invention; but

What I claim as my invention in plaiting-machines is—

The combination of the shifting loop-plate C and the flanged fixed loop-plate B and table A, arranged to operate substantially in the manner and for the purpose specified.

LIZZIE J. BOYD.

Witnesses:

SAMUEL S. WOOD,
M. E. WOOD.