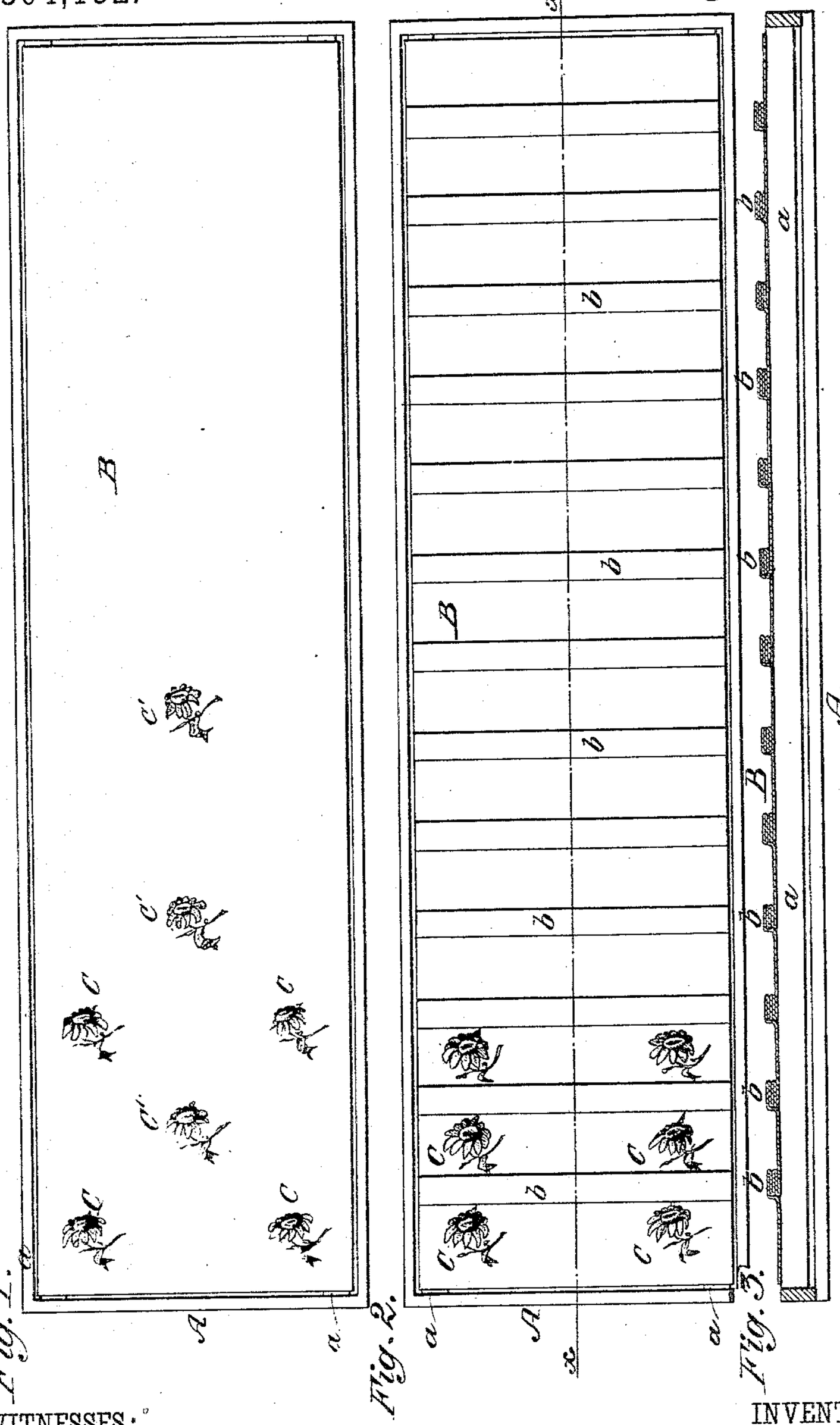
(No Model.)

B. F. ROBINSON.

METHOD OF SECURING GOODS IN THE FRAMES OF EMBROIDERY MACHINES.

No. 304,132. Patented Aug. 26, 1884.



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METHOD OF SECURING GOODS IN THE FRAMES OF EMBROIDERY-MACHINES.

SPECIFICATION forming part of Letters Patent No. 304,132, dated August 26, 1884.

Application filed December 17, 1883. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN F. ROBINSON, of the city, county, and State of New York, have invented a new and Improved Method of Securing Goods in the Frames of Embroidery-Machines, of which the following is a full, clear, and exact description.

This invention relates more particularly to that class of embroideries where the figures or patterns embroidered in the goods are separated some distance from each other.

Heretofore in making this class of embroideries the goods have been simply stretched across the embroidery-frame of the machine in the ordinary manner, as though a continuous pattern were to be embroidered, the needles in the space to be left plain being removed from the machine or thrown out of action.

My invention consists in plaiting the goods in the frame in such manner that nearly all of the needles in the machine may be worked, notwithstanding the fact that the figures or patterns to be formed are a considerable distance apart.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 illustrates in front elevation the old method of securing the goods in the embroidery-frame. Fig. 2 illustrates in similar view my new method of placing the goods in the frame; and Fig. 3 is a sectional plan view of the same, taken on the line *x x* of Fig. 2.

A represents the embroidery-frame, which is of ordinary form and adapted to be attached to the pantograph of the embroidery-machine in the ordinary way, and B represents the goods to be embroidered with the separated upper and lower rows of figures or patterns, C, and with the central separated patterns, C′, as illustrated in Fig. 1. By the old method of securing the goods in the frame A, a strip of goods is first cut of a length equal to the length of the frame A, and this strip is then stretched across the frame and attached to the rollers *a a* and ends of the frame by hooks or other means, and then each row of figures C C′ is embroidered separately and successively, a corresponding row being done in the lower frame of the embroidering-machine at the same time, one needle being used to each figure, all of the other needles being removed or thrown out of action. By my new method of securing the goods B in the frame A, the goods are cut in lengths much longer than the length of the frame A, and the surplus cloth is plaited, as shown at *b b*, the plaiting being done in such manner as to plait away the spaces where the central figures or patterns, C′, are to be worked, and so as to leave single thicknesses of goods at the spaces where the upper and lower patterns, C, are to be worked, thus bringing the spaces or surfaces to receive the upper and lower figures near together, enabling (in the example shown in the drawings) three needles to be worked where only two could be used by the old method of placing the goods in the frame—that is to say, by my method the goods are plaited so that three patterns or figures occupy the same space—that is, lengthwise—on the embroidering-frame that two figures occupy in the old method; hence three needles can be worked by the new method where only two could be used by the old. After embroidering the upper and lower rows of patterns, C, the goods B are removed from the frame A and replaited and replaced in the frame, the second plaiting being done in such manner as to plait away the embroidered portions, and so as to leave single thicknesses of cloth at the spaces or surfaces where the central row of patterns, C′, are to be embroidered, which, like the patterns C, will be embroidered in the ordinary way, using a single needle for each figure or pattern. By this system it will be seen that a great saving is effected in time and labor. In the example shown nearly one-third more goods can be finished in the same time and with the same labor than by the old method of securing the goods; and under certain circumstances a still greater advantage may be gained, as where the patterns are spread farther apart, or the patterns made small; and it will be understood that my method is not confined to any particular pattern, but is applicable to all styles and sizes of figures or patterns.

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

The method herein described of placing goods in the frames of embroidery-machines, to be embroidered with separated figures or patterns, which consists, first, in plaiting the goods and then securing them within frames, the plaiting being done in such manner as to bring vertically-corresponding spaces or surfaces having one pattern to be embroidered into close proximity to each other, and leaving alternate vertically-corresponding spaces or surfaces to be embroidered with another pattern, substantially as set forth.

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Witnesses:
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