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LAY FOR NARROW WARE LOOMS.

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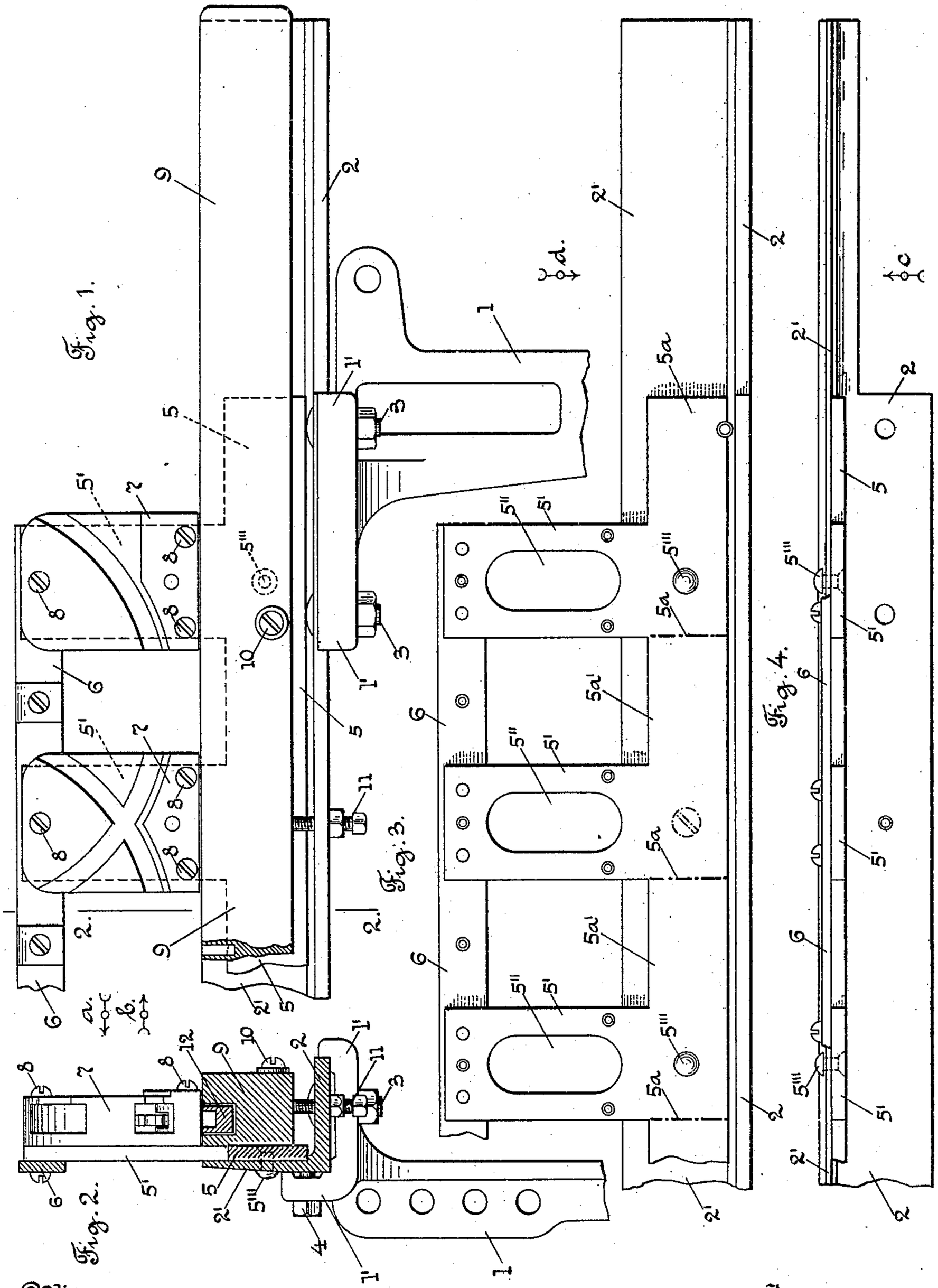

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UNITED STATES PATENT OFFICE.

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LAY FOR NARROW-WARE LOOMS.

946,295. Specification of Letters Patent. **Patented Jan. 11, 1910.**

Application filed April 2, 1908. Serial No. 424,797.

To all whom it may concern:

Be it known that I, WILLIAM WATTIE, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Lays for Narrow-Ware Looms, of which the following is a specification.

My invention relates to improvements in the lay of a narrow ware or ribbon loom, and particularly to improvements in the class of lays which have a metal bar in place of the wood beam ordinarily used.

In my improved construction of the lay, I preferably use a metal bar of angle shape in cross section, and combine with said bar, a second metal bar, preferably made in one piece, extending upon the front side of the vertically extending portion of the angle metal bar and secured thereto, and having extending up therefrom at regular intervals and integral therewith, extensions forming stands for the shuttle blocks, and the hand rail, as will be hereinafter fully described.

I have only shown in the drawing a detached portion of one end of a lay embodying my improvements, sufficient to enable those skilled in the art to understand the construction thereof.

Referring to the drawing:—Figure 1 is a front view of the right hand end of a lay, and the upper part of a lay sword, embodying my improvements, and looking in the direction of arrow *a*, Fig. 2. Fig. 2 is a section, on line 2, 2, Fig. 1, looking in the direction of arrow *b*, same figure. Fig. 3 shows the angle metal bar, and the bar secured upon the front side thereof, and the rail shown in Fig. 1, detached, looking in the direction of arrow *c*, Fig. 4. Fig. 4 is a plan view of the parts shown in Fig. 3, looking in the direction of arrow *d*, same figure.

In the accompanying drawing, 1 is the upper part of a lay sword, having upon its upper end an extension 1′ forming a support or bracket to receive and support one end of the metal bar 2, which in this instance is of angle shape in cross section, and which extends for the full width of the lay, and forms the lay beam of the loom. The angle metal bar 2 is rigidly secured to the bracket 1′, in this instance by bolts 3 through its lower side, and bolts 4 at its rear side.

Extending upon the inner side of the vertically extending part 2′ of the angle metal bar 2, is a longitudinally extending bar 5, preferably made in one part, and having extending up therefrom the extensions 5′, integral therewith, which extensions form stands for the shuttle blocks. The stands 5′ are preferably cut out at 5″ to reduce their weight. The bar 5 is secured to the vertically extending part 2′ of the angle metal bar 2, in this instance by rivets 5‴. To the upper ends of the stands 5′ is secured a hand rail 6, preferably of metal, which extends in the direction of the width of the lay.

Upon the front side of the stands 5′ are secured the shuttle blocks 7 which are attached to said stands, in this instance by screws 8. The blocks 7 have guide-ways therein for the shuttles, not shown, in the usual way.

The reeds, not shown, extend between the stands 5′, with the lower edge resting on the upper edge of the bar 5, and the upper edge secured to the hand rail 6.

On the front side of the bar 5 extends a bar 9, of wood, which is preferably adjustably secured to the bar 5 by screws 10, which extend through elongated slots in the bar 9, and into screw threaded holes in the bar 5. Adjusting bolts 11 extend through the horizontal part of the angle metal bar 2, and engage the lower surface of the bar 9, to adjust the same in a vertical plane. The upper side of the bar 9 has a longitudinal recess therein, to receive the longitudinally moving rack 12, see Fig. 2, which is operated in the usual way by straps, not shown.

Instead of having the bar 5 made in one part, it may be made in several parts, if preferred, as indicated by broken lines 5^a, in Fig. 3, the side extensions $5^{a\prime}$ forming the support for the lower edge of the reeds, not shown.

It will be understood that the details of construction of my improvements may be varied if desired.

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

1. In the lay of a narrow ware loom, the combination with a metal bar of angle shape in cross section, of a second metal bar extending upon the vertically extending portion of said angle metal bar, and secured thereto, and said second metal bar having extending up therefrom and integral there-

with, extensions forming stands for the shuttle blocks and for the hand rail.

2. In the lay of a narrow ware loom, a metal bar of angle shape in cross section, a metal bar or bars extending upon the front side of the vertically extending portion of said angle metal bar and secured thereto, and having extending up therefrom extensions forming stands for the shuttle blocks and for the hand rail.

3. In the lay of a narrow ware loom, a metal bar of angle shape in cross section, a metal bar or bars extending upon the front side of the vertically extending portion of said angle metal bar and secured thereto, and having extending up therefrom extensions forming stands for the shuttle blocks and for the hand rail, said extensions having openings therethrough.

4. In the lay of a narrow ware loom, the combination with a metal bar of angle shape in cross section, and metal stands for the shuttle blocks extending upon the front side of said vertically extending portion, and secured thereto, of shuttle blocks secured to said stands, and a hand rail secured to said stands, and an adjustable bar extending below said shuttle blocks, and a shuttle rack supported in said bar.

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