

A. WOOLSON.

Trays for Cloth Finishing Machines.

No. 141,192.

Patented July 22, 1873.

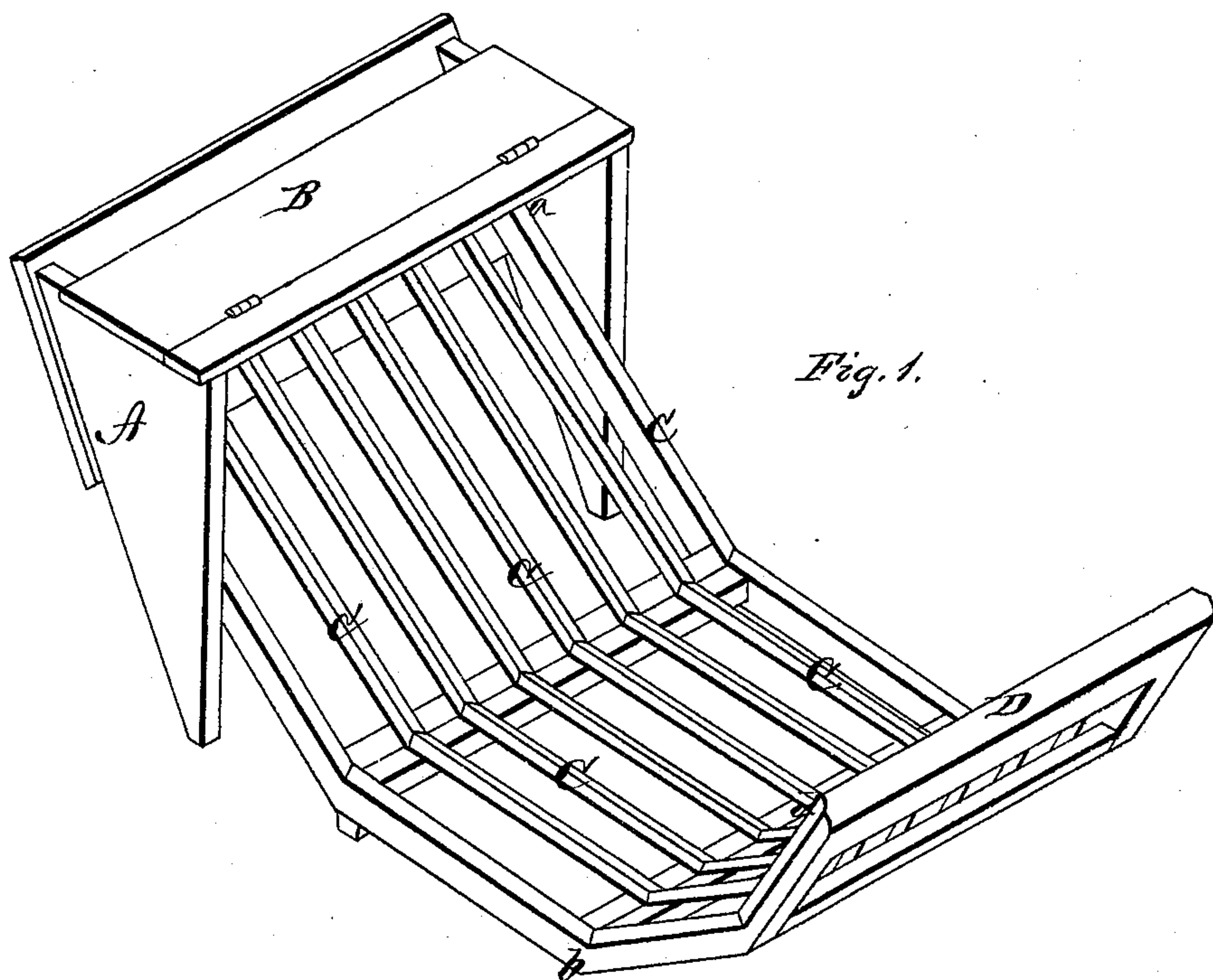


Fig. 1.

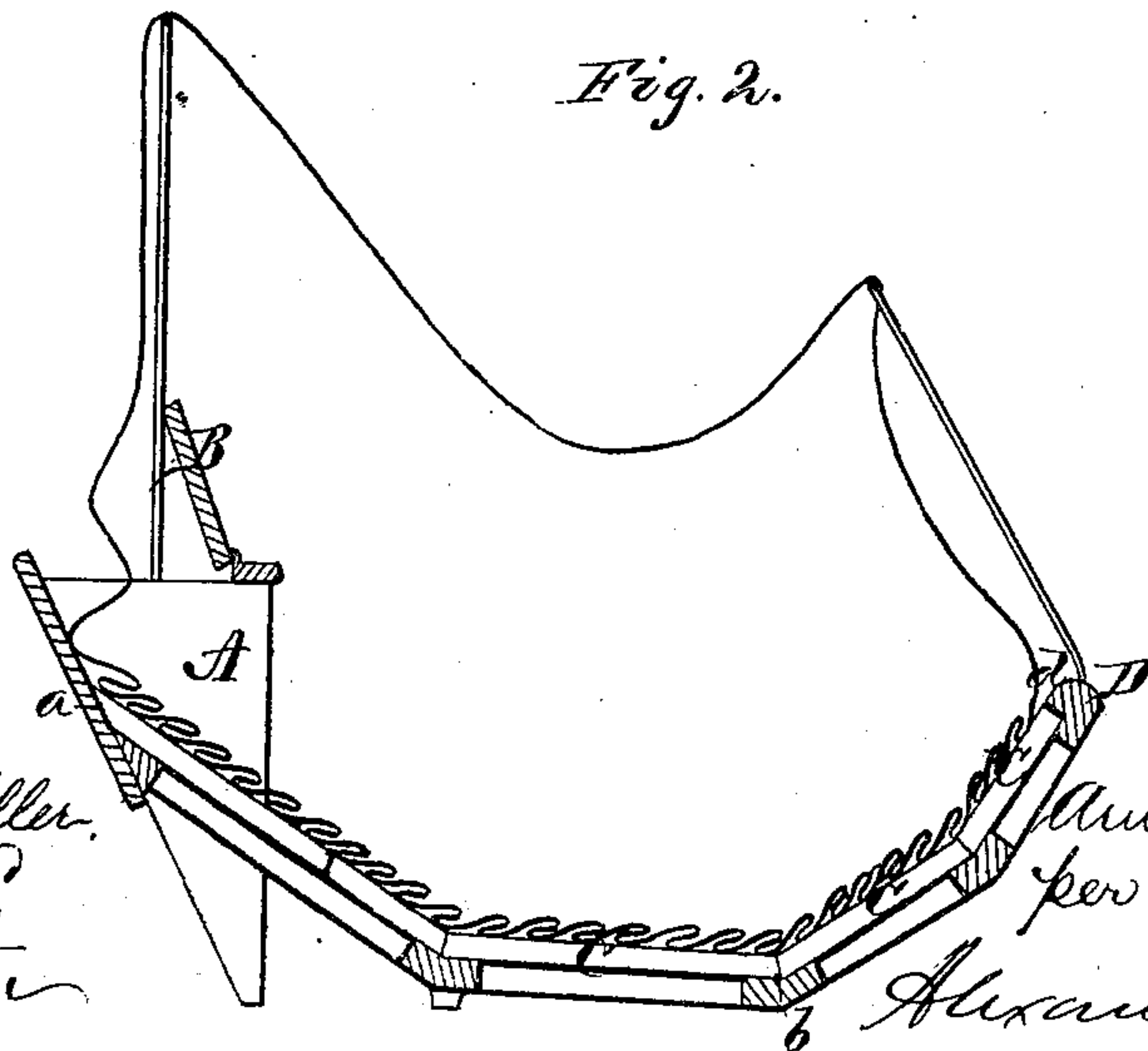


Fig. 2.

Witnesses:

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AMASA WOOLSON, OF SPRINGFIELD, VERMONT.

IMPROVEMENT IN TRAYS FOR CLOTH-FINISHING MACHINES.

Specification forming part of Letters Patent No. **141,192**, dated July 22, 1873; application filed May 14, 1873.

To all whom it may concern:

Be it known that I, AMASA WOOLSON, of Springfield, in the county of Windsor and in the State of Vermont, have invented certain new and useful Improvements in Guiding-Trays for Finishing Cloth; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of a guiding-tray for cloth-finishing machines, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a perspective view, and Fig. 2 a longitudinal section, of my invention.

A represents the usual box or hopper forming the receiving end of the tray, and provided with a hinged lid, B, which is to be turned up to receive the cloth from the machine, and to be turned down to fold the cloth on when it is to be taken out of the machine. The bottom of the tray is made of a series of parallel tracks or guides, C C. The upper part of these tracks or guides which comes in contact with the cloth or goods is made with an angular or sharp edge. The tracks or guides are placed lengthwise of the tray, parallel with each other, and at suitable distances apart to allow the goods to sag a little between them, thus causing the upper edges or surfaces of the tracks or guides to press up into the goods, thus preventing the cloth from slipping sidewise either way in its passage from the receiving end A to the delivering end D, carrying the goods through the tray precisely in the same line on which it is received. The bottom of the tray is in a curved or angular form or shape, so as to form a downward-curved grade from *a* to *b*, for the greatest part of the distance on the receiving end of the tray, and then a sharper curve or

angle upward from *b* to *d*, the rest of the way bringing the bottom folds of the goods nearly vertical or edgewise at the delivering end D, so as to allow the goods to be drawn out and up into the machine without disturbing or tangling them.

This form of the tray may be made by several angles of different lengths, as shown, or it may be made by bending the guides or tracks to some general circular form substantially similar to the form shown in the drawing.

When the machine under which this tray is placed is in operation, it draws the cloth into it from the delivering end D of the tray, while at the same time the cloth is being delivered and folded into the receiving end A of the tray by the machine, and this continuous drawing of it out at one end and the folding into it at the other causes the whole mass of the folded goods which is thus evenly distributed through the tray to move slowly, evenly, and gently onward through it, without any tumbling or tangling of the goods. The greater weight of goods on the longer descending grade *a b* of the curve forces upward what is on the shorter, steeper, and ascending part *b d* of it, causing the whole body of the folded goods to move easily and continuously, folding it evenly. The cloth is thus made to pass through the machine and the tray continuously, and as many times as is desirable, in so even and gentle and true a manner as to cause the edge of the goods to pass into the machine at any given point without attention, which is very important, both in order to the proper saving of the lists, and also to keep the goods so as to pass through the middle or working parts of the machine.

Thus, by adjusting the tray at either or both ends, the goods can be made to enter the machine at any desired point continuously, with but little or no attention.

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

1. The guiding-tray for cloth-finishing machines, curved as described, and having its

bottom formed of a series of parallel tracks or guides, C C, each having a sharp or angular edge along the upper surface, upon which the cloth rests, substantially as and for the purposes herein set forth.

2. The combination of the end piece A with hinged lid B and the ribs C, placed lengthwise of the tray, and arranged on a curve from the receiving to the delivering end of the

same, all substantially as and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 2d day of April, 1873.

AMASA WOOLSON.

Witnesses:

EDMUND C. BURKE,
HENRY CLOSSON.