

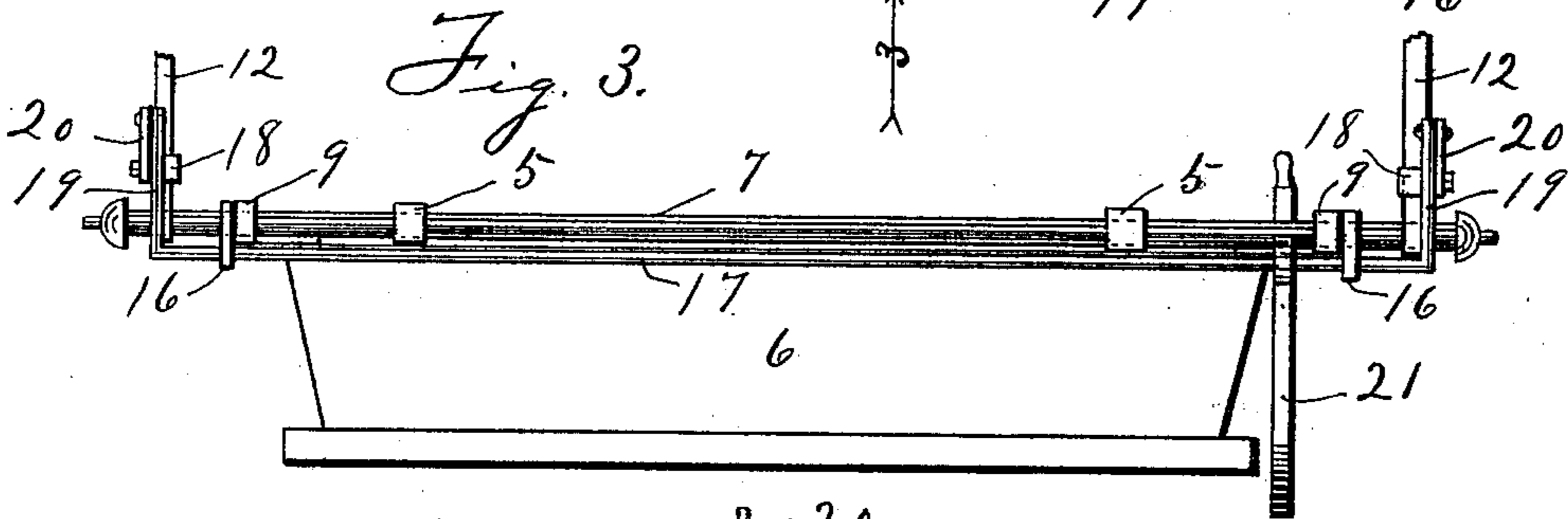
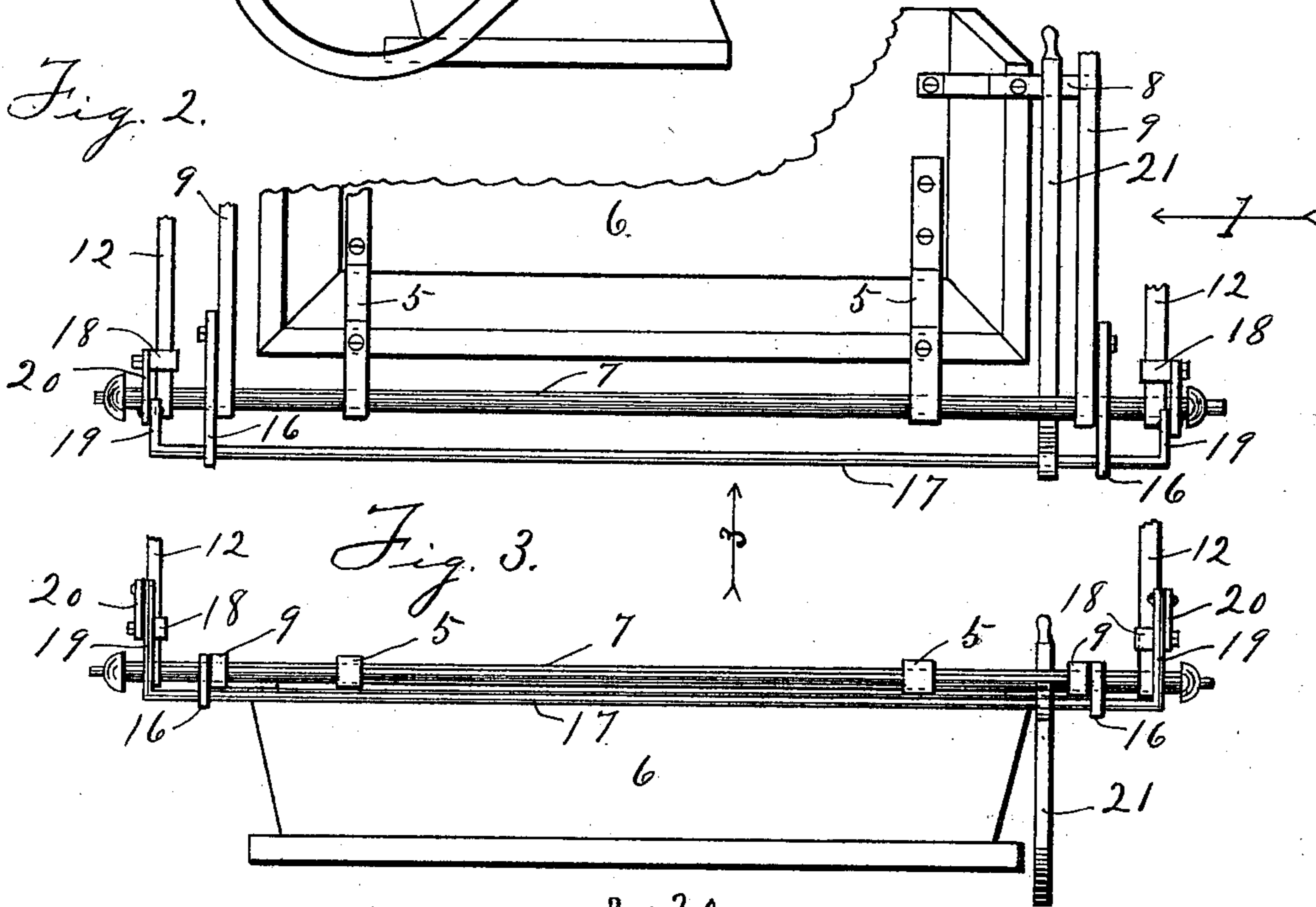
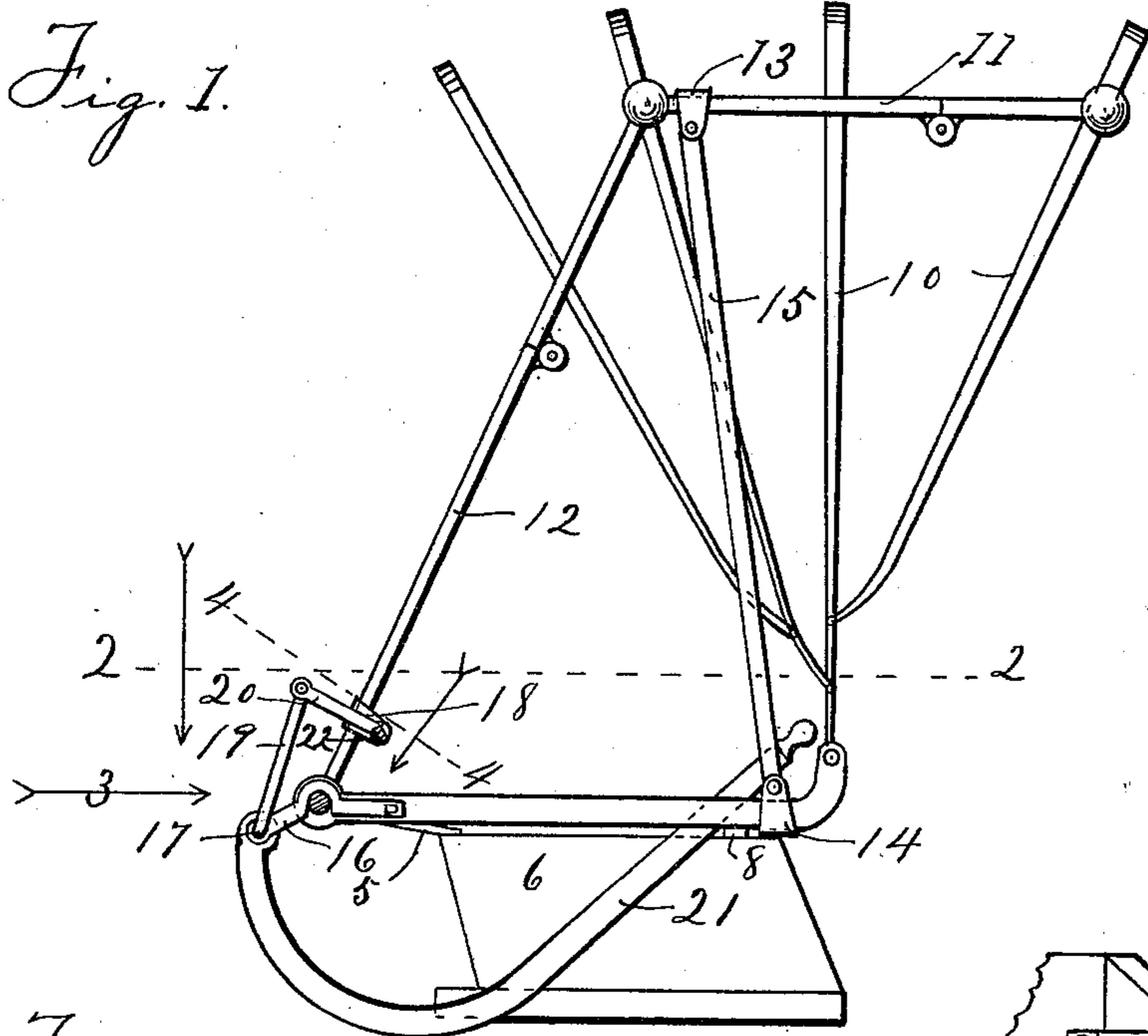
No. 658,162.

Patented Sept. 18, 1900.

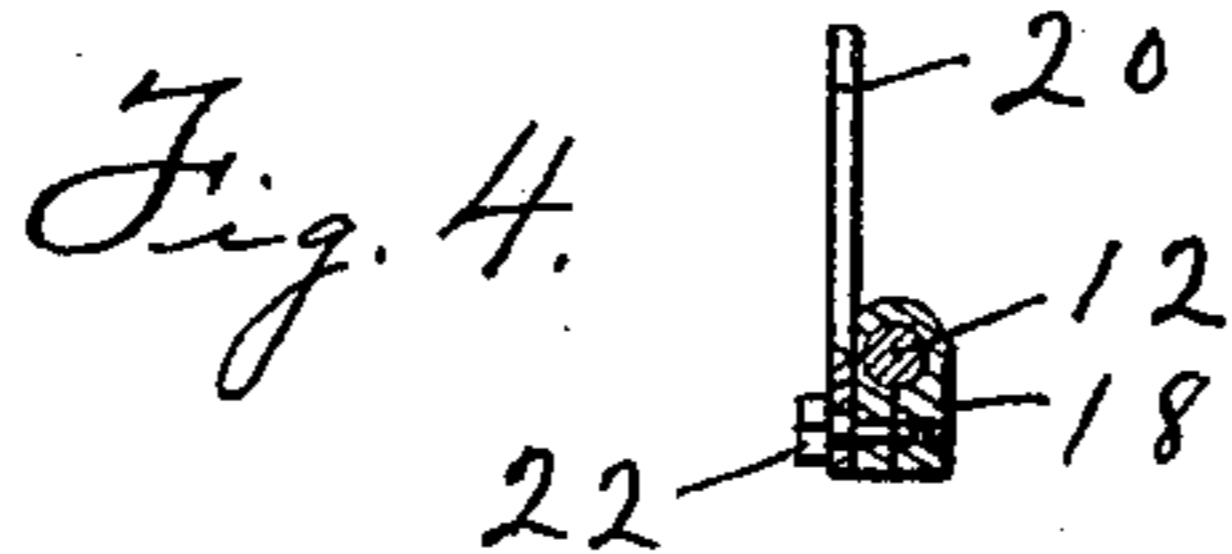
L. L. SHORT.
FOLDING DEVICE FOR BUGGY TOPS.

(Application filed Mar. 5, 1900.)

(No Model.)



WITNESSES:
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UNITED STATES PATENT OFFICE.

LACROTA LEE SHORT, OF RUSSELLVILLE, MISSOURI.

FOLDING DEVICE FOR BUGGY-TOPS.

SPECIFICATION forming part of Letters Patent No. 658,162, dated September 18, 1900.

Application filed March 5, 1900. Serial No. 7,378. (No model.)

To all whom it may concern:

Be it known that I, LACROTA LEE SHORT, of the city of Russellville, Cole county, State of Missouri, have invented certain new and useful Improvements in Folding Devices for Buggy-Tops, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to devices for operating folding buggy-tops; and it consists of the novel features herein shown, described, and claimed.

Figure 1 is a side elevation of a buggy-top frame with my device for operating the same attached. Fig. 2 is a horizontal section on the line 2 2 of Fig. 1 and looking in the direction indicated by the arrow. Fig. 3 is a rear elevation looking in the direction indicated by the arrows 3 in Figs. 1 and 2. Fig. 4 is a sectional detail on the line 4 4 of Fig. 1.

Referring to the drawings in detail, the arms 5 extend backwardly from the seat 6 and support the cross-bar 7. The arms 8 extend sidewise from the forward part of the seat and support the front ends of the side bars 9, the rear ends of said side bars being supported by the cross-bar 7. The bows 10 of the top are connected to the forward ends of the side bars 9. The upper parts of the bows are folded or unfolded by the horizontal toggle-joints 11, and the top is raised or lowered by the substantially-upright toggle-joints 12. The clips 13 are attached to the toggle-joints 11, and similar clips 14 are attached to the forward ends of the side bars 9, and the connecting-rods 15 connect the clips 13 and 14, respectively. The extension side bars 16 are attached to the side bars 9 and extend backwardly, and the rock-shaft 17 is mounted in the bearings in the rear ends of said extension side bars. The clips 18 are attached to the toggle-joints 12, crank-arms 19 extend upwardly from the rock-shaft 17, and the connecting-rods 20 connect the cranks to the clips 18. The hand-lever 21 is attached to the rock-shaft and extends downwardly and forwardly and upwardly to a position convenient to be operated by the driver. A detail of one of the clips is shown in Fig. 4.

The clip 18 is a split bearing encircling the shaft of the toggle-joint, and the bolt 22 is inserted through the connecting-rod 20 and through one half of the clip and screwed into the other half of the clip. The part of the bolt which is in the bearing of the connecting-rod is larger than the hole in the clip and serves as a head to draw the clip together without binding the connecting-rod. All the clips are alike.

When it is desired to lower the buggy-top, the driver raises the forward end of the hand-lever 21, thus operating the rock-shaft, pulling backwardly on the clips 18, breaking the toggle-joints 12, and as the bows tip backwardly the connecting-rods 15 break the toggle-joints 11, thus folding and lowering the top. When the hand-lever is operated in the opposite direction, the top is raised and unfolded.

Especial attention is called to the fact that the device is an attachment to an ordinary buggy-top and that the clips and extension-arms may be removed or applied at will. It is obvious that the device may also be made as a part of the top not to be removable.

I claim—

A folding device for buggy-tops, comprising a pair of rearwardly-extending arms 5 secured to the buggy-seat, a cross-bar 7 supported by said arms, laterally-extending arms 8 secured to the buggy-seat, side bars 9 supported by said side arms and said cross-bar, the bows of the vehicle-top being supported by said side bars 9, extension side bars 16 carried by said side bars, a rock-shaft 17 rotatably carried by said side extension side bars, a hand-lever 21 adjacent to the side of the buggy-seat for operating said rock-shaft, arms 19, 20 connecting said rock-shaft to the vertical toggle-joints for operating the same, and vertical connecting-rods 15 carried by the said side bars 9 for operating the horizontal toggle-joints, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

LACROTA LEE SHORT.

Witnesses:

W. W. ATKINSON,
L. C. BERRY.