

No. 692,500.

Patented Feb. 4, 1902.

G. W. BARNETT.
DISPLAY RACK.

(Application filed Jan. 15, 1901.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.

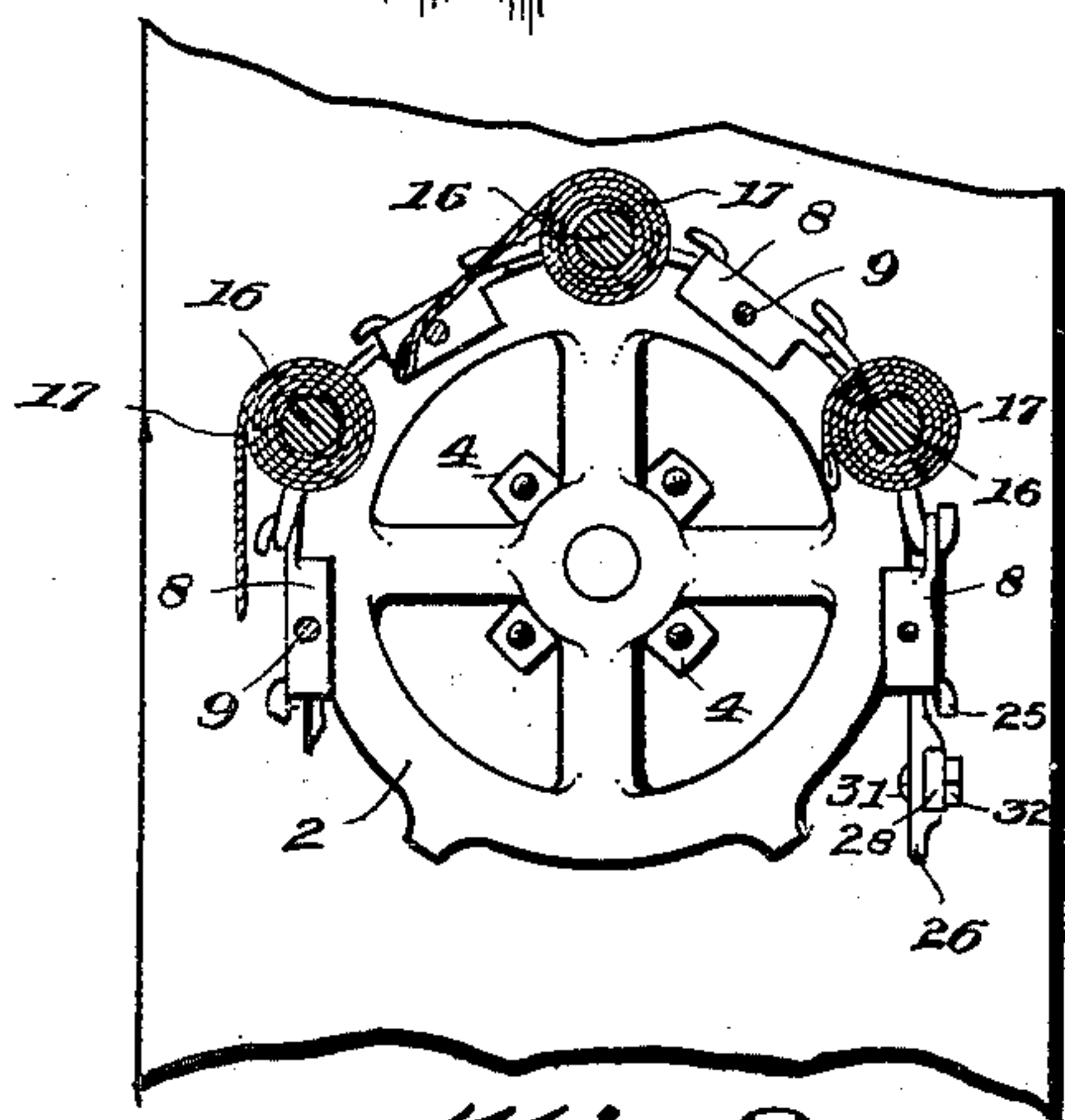
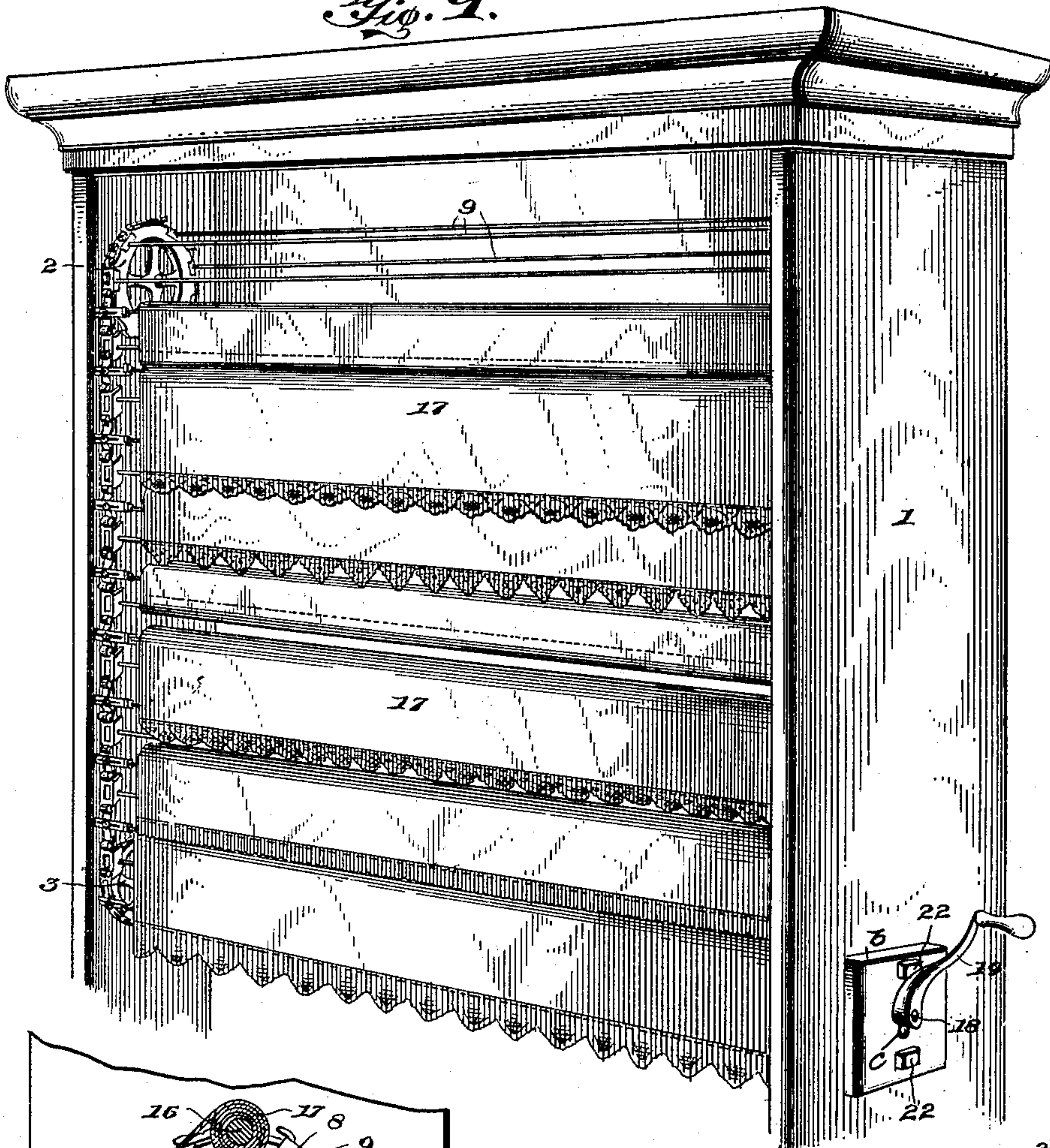


Fig. 2.

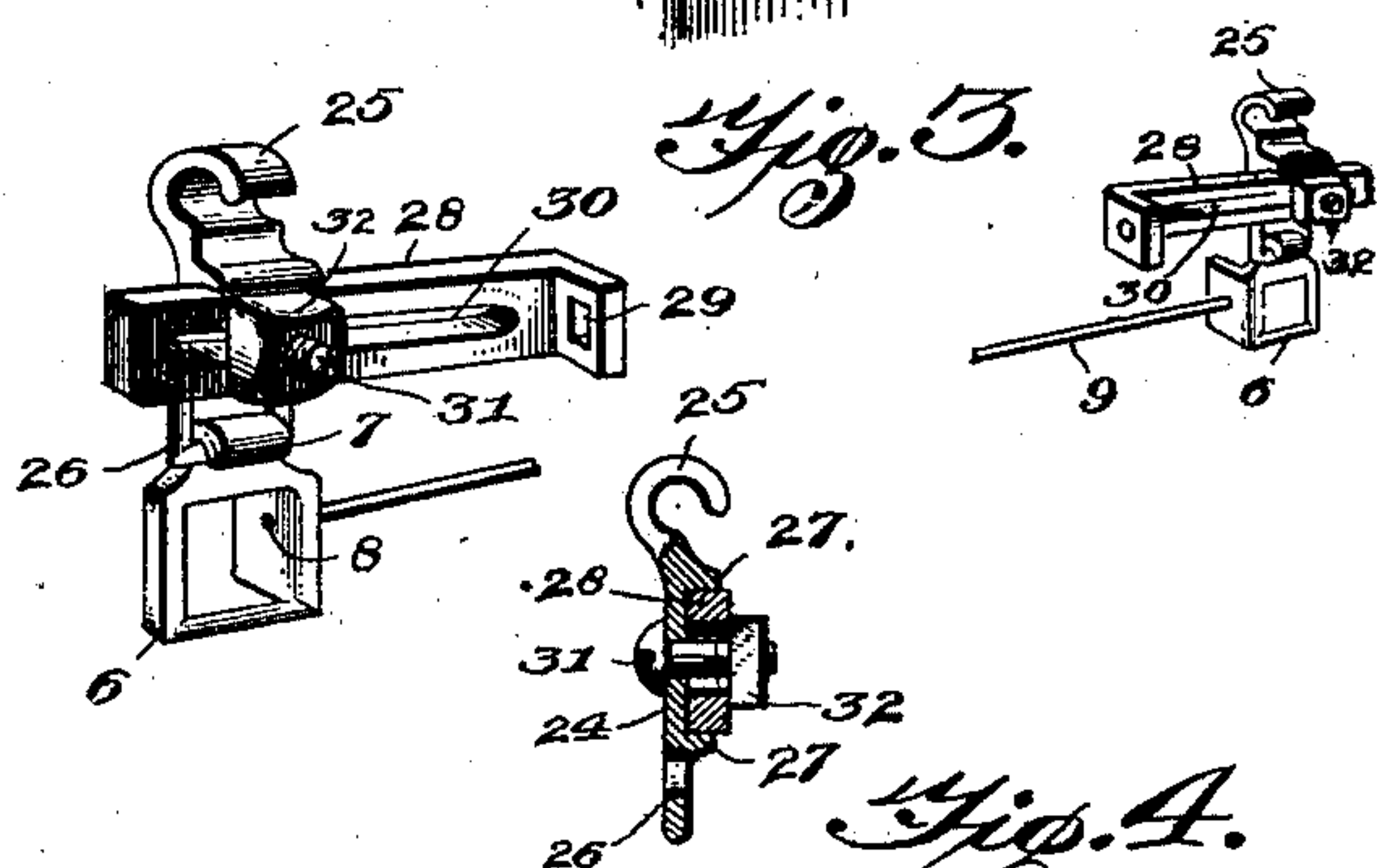


Fig. 3.

Fig. 4.

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2 Sheets—Sheet 2.

Fig. 5.

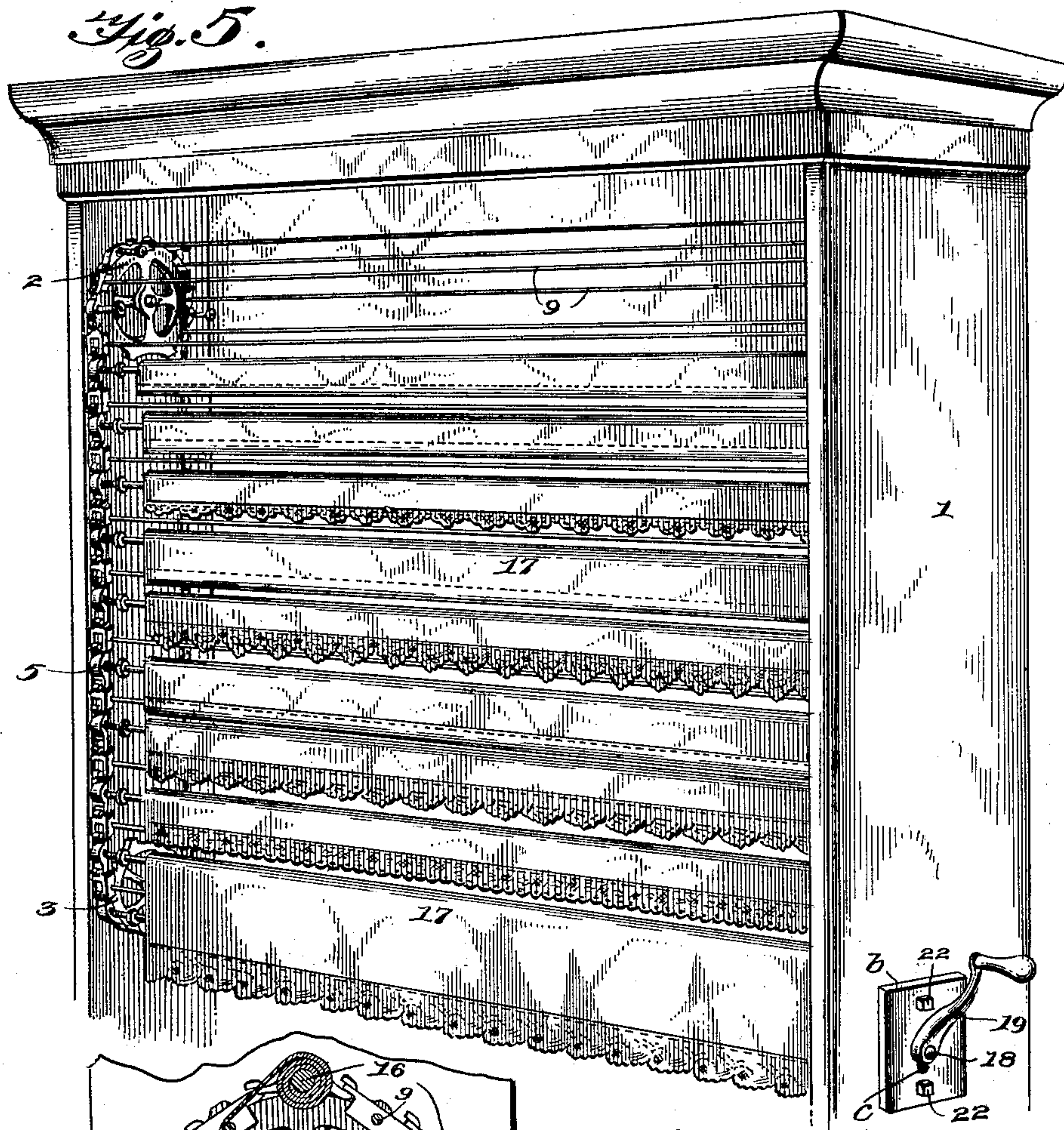


Fig. 6.

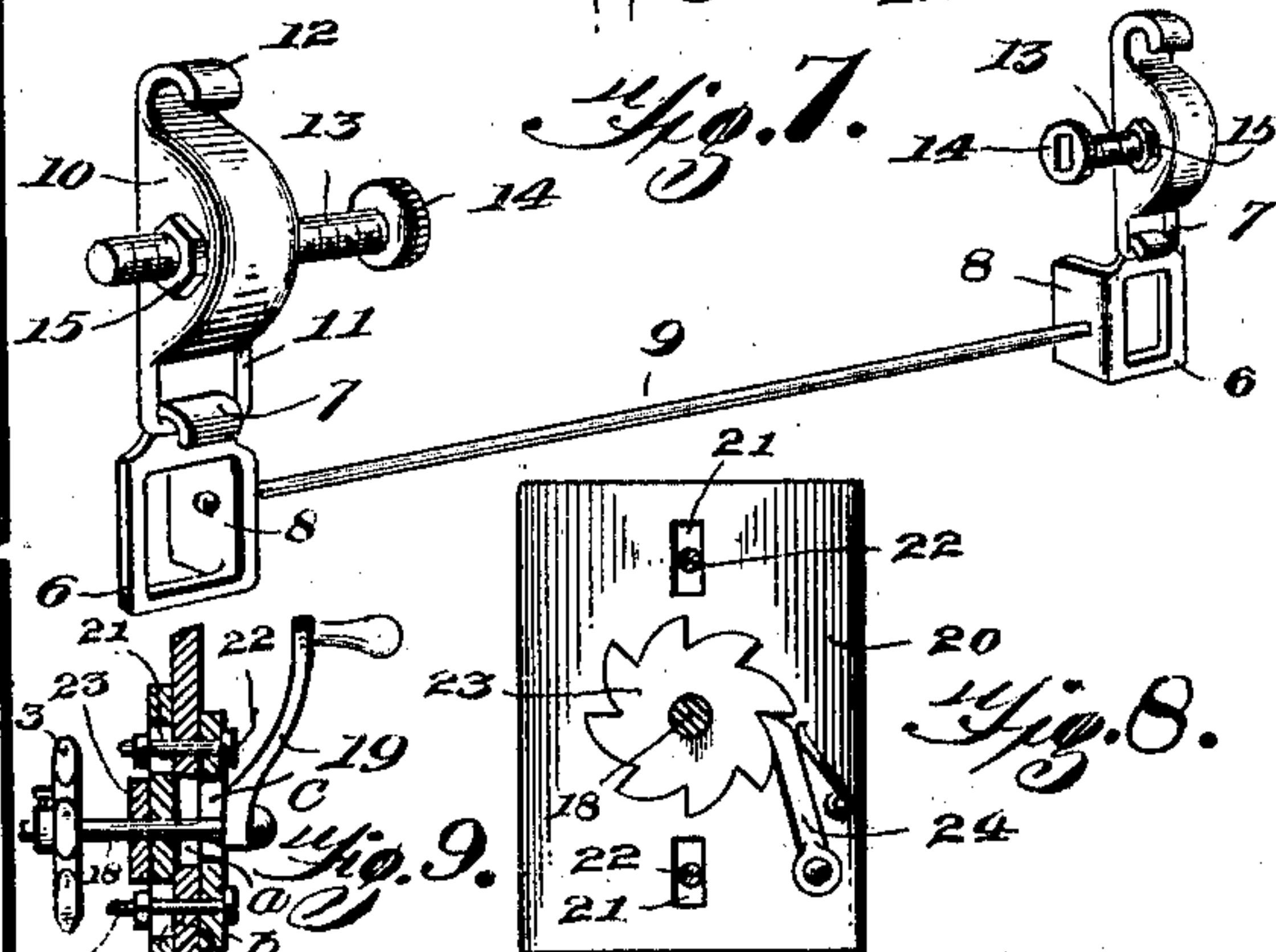
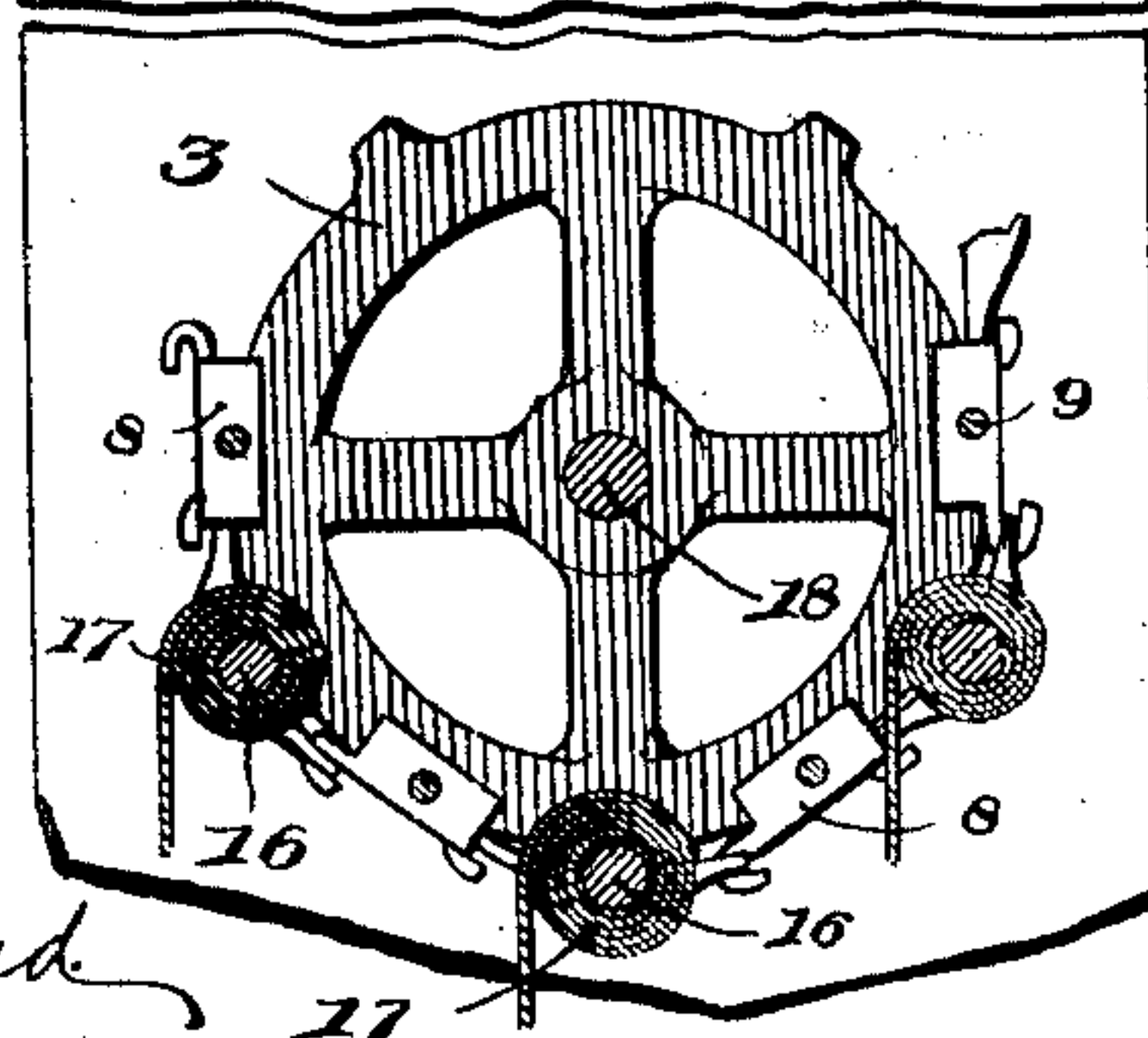
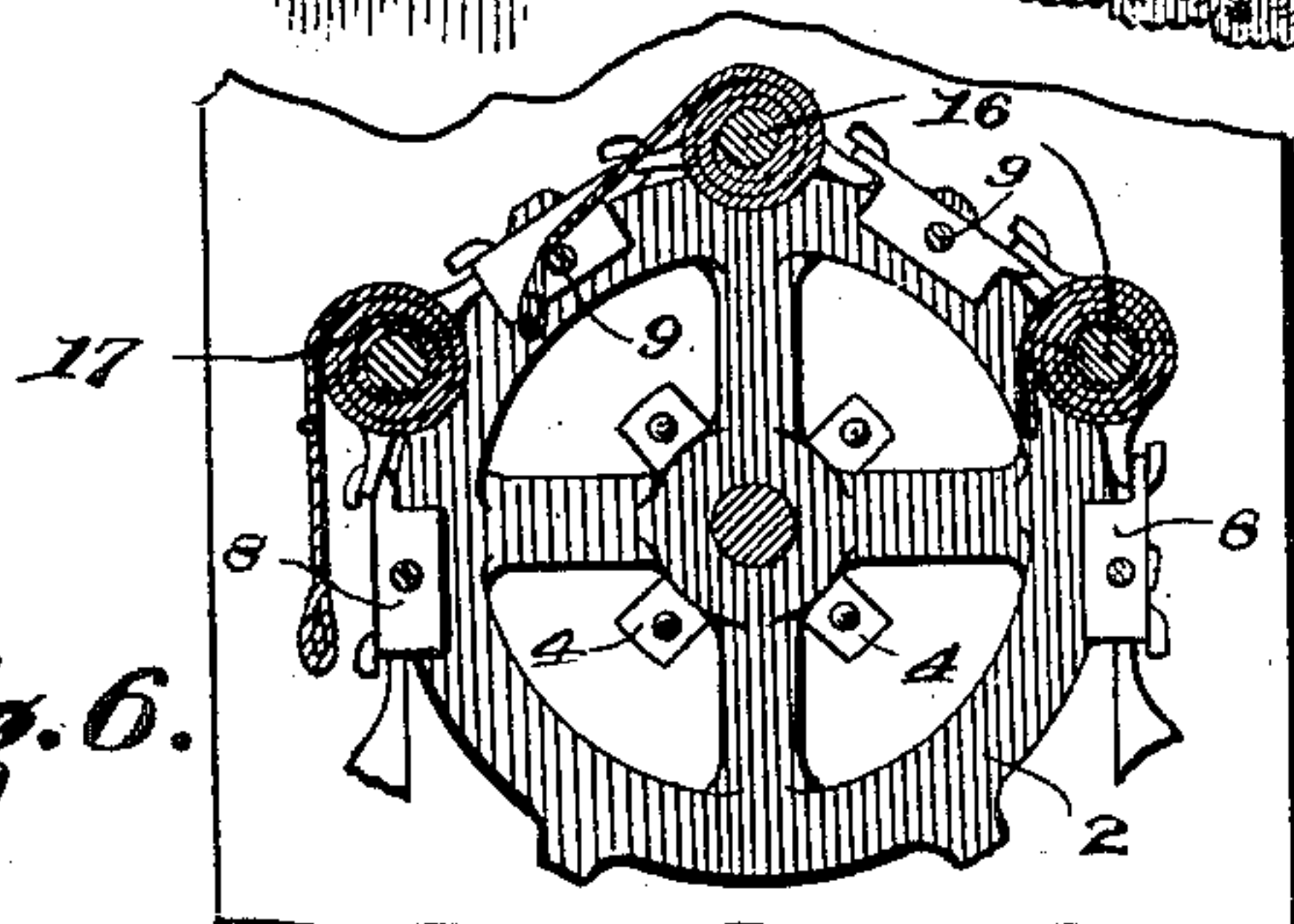


Fig. 7.

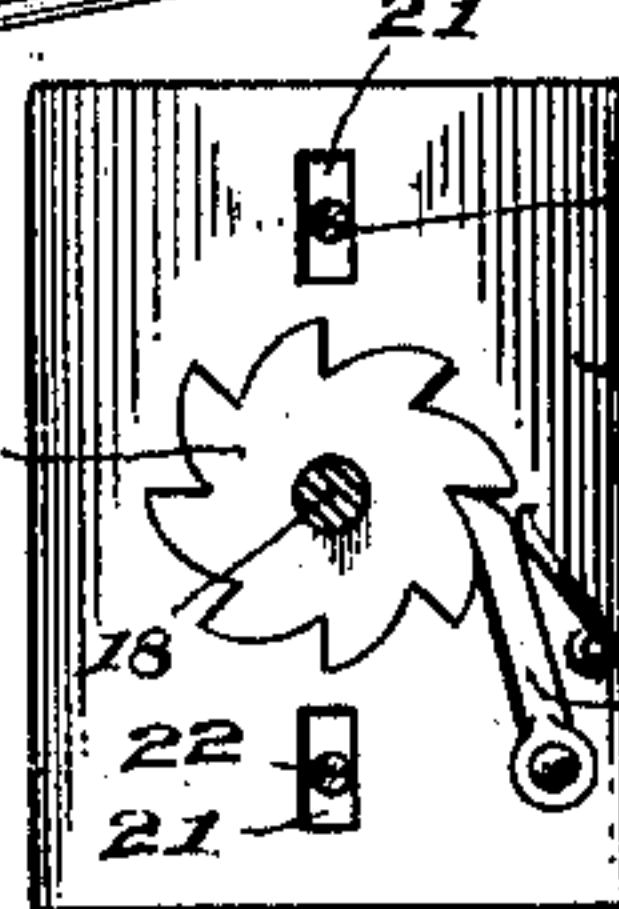


Fig. 8.

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UNITED STATES PATENT OFFICE.

GEORGE W. BARNETT, OF KEOKUK, IOWA.

DISPLAY-RACK.

SPECIFICATION forming part of Letters Patent No. 692,500, dated February 4, 1902.

Application filed January 15, 1901. Serial No. 43,342. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. BARNETT, a citizen of the United States, residing at Keokuk, in the county of Lee and State of Iowa, have invented a new and useful Display-Rack, of which the following is a specification.

This invention relates to display-racks, and has for its object to provide an improved device of this character which is especially designed for displaying maps, charts, wall-paper, window-shades, and other material which is ordinarily put up in rolls and to arrange for conveniently bringing any of the several rolls into position for inspection without disturbing or removing any of the other rolls from the device. It is furthermore designed to accommodate the device to rolls of different lengths, to maintain the rolls in their rolled-up condition, and finally to hold the free ends of the rolls in proper position for conveniently unrolling the material to display the same.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claim, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claim without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view of a display-rack embodying the present invention. Fig. 2 is a detail sectional view illustrating the mounting of one end of the endless carrier. Fig. 3 is a detail perspective view of the preferred form of a pair of opposite roller-brackets for the support of a roll of material. Fig. 4 is a detail sectional view of one of the roller-brackets. Fig. 5 is a perspective view of the device having a modified form of roller-bracket. Fig. 6 is a detail sectional view showing the mounting of the endless carrier. Fig. 7 is a detail perspective view of a pair of the modified roller-brackets. Figs. 8 and 9 are detail sectional views at right angles to each other, showing the means for tightening the endless carrier which is common to both forms of the device.

Like characters of reference designate cor-

responding parts in all of the figures of the drawings.

Referring to the drawings, 1 designates an upright substantially rectangular frame which is open throughout its front, so as to display the material contained within the frame, and may or may not have a back, as may be desired. Within this frame there is mounted a vertically-traveling support or carrier for the rolls to be displayed and comprising in general an endless conveyer or carrier having pairs of opposite roller-brackets for the support of the several rolls to be displayed, there being means for conveniently adjusting the carrier to bring any of the rolls into convenient position for inspection and the roller-brackets being adjustable transversely of the carrier to accommodate rolls of different lengths. In the illustration of the device the preferred and modified forms of roller-brackets have been shown upon separate sheets, and in describing the same the modified form has been arranged first in order.

In carrying out the invention there are provided the upper and lower sprocket-wheels 2 and 3, mounted upon suitable bearing-brackets 4, secured to the inner face of the adjacent side of the frame or casing. It will be understood that corresponding sprocket-wheels are mounted upon the opposite side of the frame. Over the respective pairs of upper and lower sprocket-wheels there travel the sprocket-chains 5, which are of peculiar construction for the support of the rolls of material to be displayed. For a complete understanding of these chains reference is had to Fig. 7 of the drawings, which shows pairs of corresponding links in the opposite chains. Each chain has an open link 6, which is provided at one end with an outwardly-directed hook 7 and at its inner edge with a rearwardly-directed longitudinal flange 8, through which the opposite chains are connected and prevented from spreading by means of a tie-rod 9, which has its opposite ends secured to the flanges of corresponding open links. Next to the open link there is a solid link 10, which has a straight flat back and a convex front, one end of the link having a loop 11, which is loosely engaged by the hook of the open link, so as to form a flexible or pivotal

connection between the two links. At the opposite end of the solid link there is provided a hook 12, which is located or bowed toward the front of the link and hooks into the adjacent end of the next open link. It will thus be seen that each chain is made up of a plurality of pairs of links which are arranged to correspond in the opposite chains. The open links are designed to receive the teeth of the sprocket-wheels and the solid links to lie between adjacent teeth in passing over the sprocket-wheels.

To mount the rolls upon the chains, the solid links are bowed outwardly, so as to provide intermediate enlargements, and each solid link is provided with an intermediate transverse opening for the reception of an externally-screw-threaded tubular roller-bracket 13, which has its inner open end provided with a milled marginal flange 14 to form a finger-piece, whereby the bracket may be turned to adjust the same longitudinally through the link for the purpose of adjusting the distance between opposite brackets to accommodate rolls of different lengths. These brackets are provided with jam-nuts 15 at opposite sides of the adjacent solid link, so as to fixedly hold the bracket against accidental rotation after it has been properly adjusted. These roller-brackets are designed for the mounting of spring-rollers 16, similar to ordinary window-shade rollers, and therefore the brackets of one chain have circular sockets or openings at their inner ends, and the brackets of the other chain have angular sockets for the reception of the relatively fixed pintles and the angular spring-actuated pintles, respectively. The charts, maps, wallpaper, or other material 17 is wrapped upon the rollers in the usual manner and is normally maintained tightly rolled upon the roller, but may be unrolled therefrom, so as to display the same.

In order that the sprocket-chains may be caused to travel simultaneously in the same direction for the purpose of bringing any of the rolls to the front of the display-rack, the lower sprocket-wheels are connected by means of a shaft 18, which is best shown in Fig. 5 of the drawings, and projects through one side of the frame or casing, so as to receive a crank-handle 19, whereby the lower sprocket-wheels may be simultaneously turned to move the roll-carrying chains. The crank end of the shaft passes loosely through a vertical slot *a* in the adjacent side of the frame or casing and has its bearing in the plate 20, which is secured to the inner side of the casing. This plate has the opposite vertical slots 21 for the reception of the respective fastenings 22, which pass through the casing

and by which the plate may be adjusted vertically, so as to take up any slack in the chains. A suitable wear-plate *b* is applied to the outer side of the frame, the fastenings 22 passing therethrough to hold it in place, and also provided with a slot *c*, corresponding to the slot *a* and for the reception of the shaft 18. A ratchet-disk 23 is fixedly mounted upon the shaft and adjacent to the adjustable bearing-bracket thereof, and a spring-actuated ratchet-dog 24 is also mounted upon the outer side of the bracket and designed to prevent accidental reverse turning of the chains. The opposite lower sprocket-wheel is also vertically adjustable and may be provided with an operating crank-handle, so that the movable roll-support may be manipulated from opposite sides of the casing. As shown in Fig. 2 of the drawings, the tie-rods 9 also form supports for the free ends of the rolled material when at the top of the frame or casing.

The roller-bracket hereinbefore described has been that of the modified form, and I will now describe the preferred form of bracket, reference being had to Figs. 3 and 4 of the drawings. In this preferred form the link 24, which forms the bracket, is flat and solid, having the opposite terminal hook 25 and the loop or eye 26, as in the other form of bracket. Extending transversely across the outer face of the plate-like body of the link are the opposite parallel outwardly-directed flanges 27, which constitute a transverse open-ended groove for the adjustable slidable reception of the longer arm of a substantially L-shaped roller-bracket 28, which has its other arm located at the inner end thereof and provided with a pintle socket or opening 29 for the mounting of the adjacent end of a roller. The longer arm of the bracket is provided with a longitudinal slot 30 for the reception of a screw-threaded fastening or pin 31, which is provided at its outer end with a binding-nut 32 to be set against the L-shaped bracket, and thereby adjustably connect the latter to the link.

What is claimed is—

In a display-rack, opposite endless carriers, formed by sprocket-wheels and sprocket-chains, certain of the corresponding links having inner rearwardly-directed flanges, tie-rods connected to the flanges of corresponding links, and opposite brackets carried by the other corresponding links.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

GEORGE W. BARNETT.

Witnesses:

EDMUND JAEGER,
F. JAEGER, Jr.