J. D. CAPERS.

ROLL HOLDING DISPLAY RACK.

APPLICATION FILED JULY 26, 1910.

991,827.

Patented May 9, 1911.

3 SHEETS—SHEET 1.

FIG. 1.

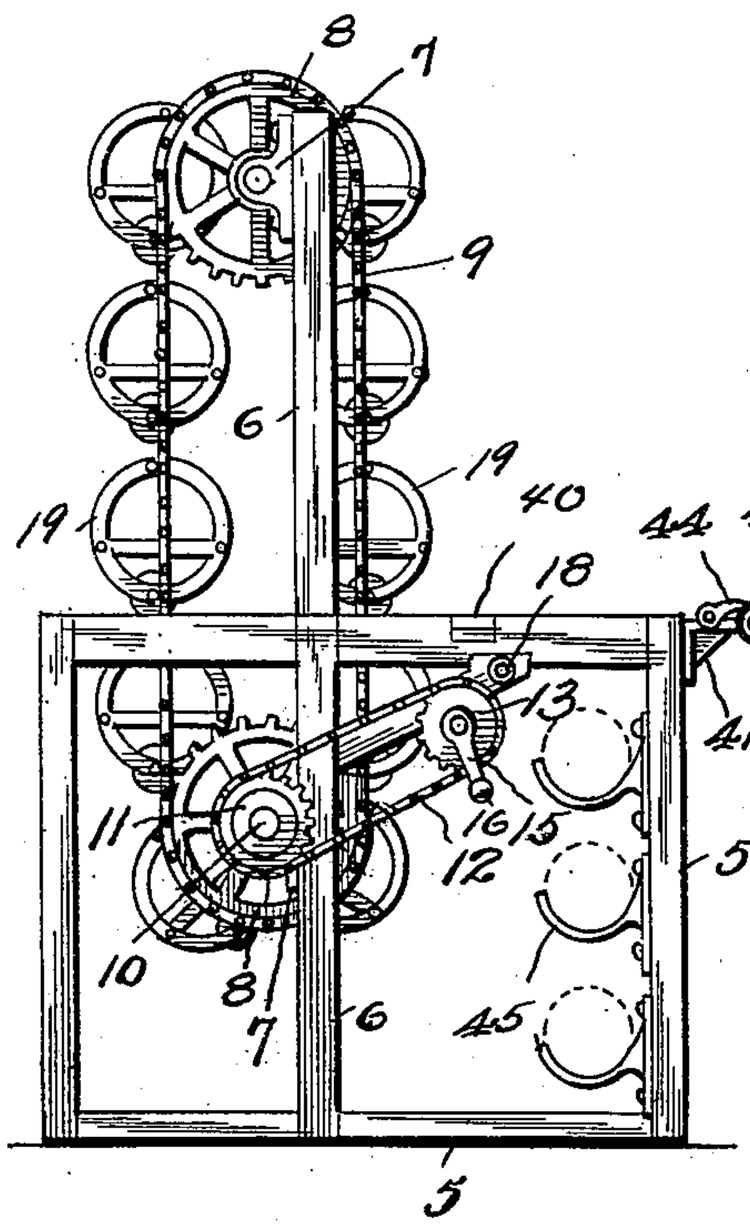


FIG. 2.

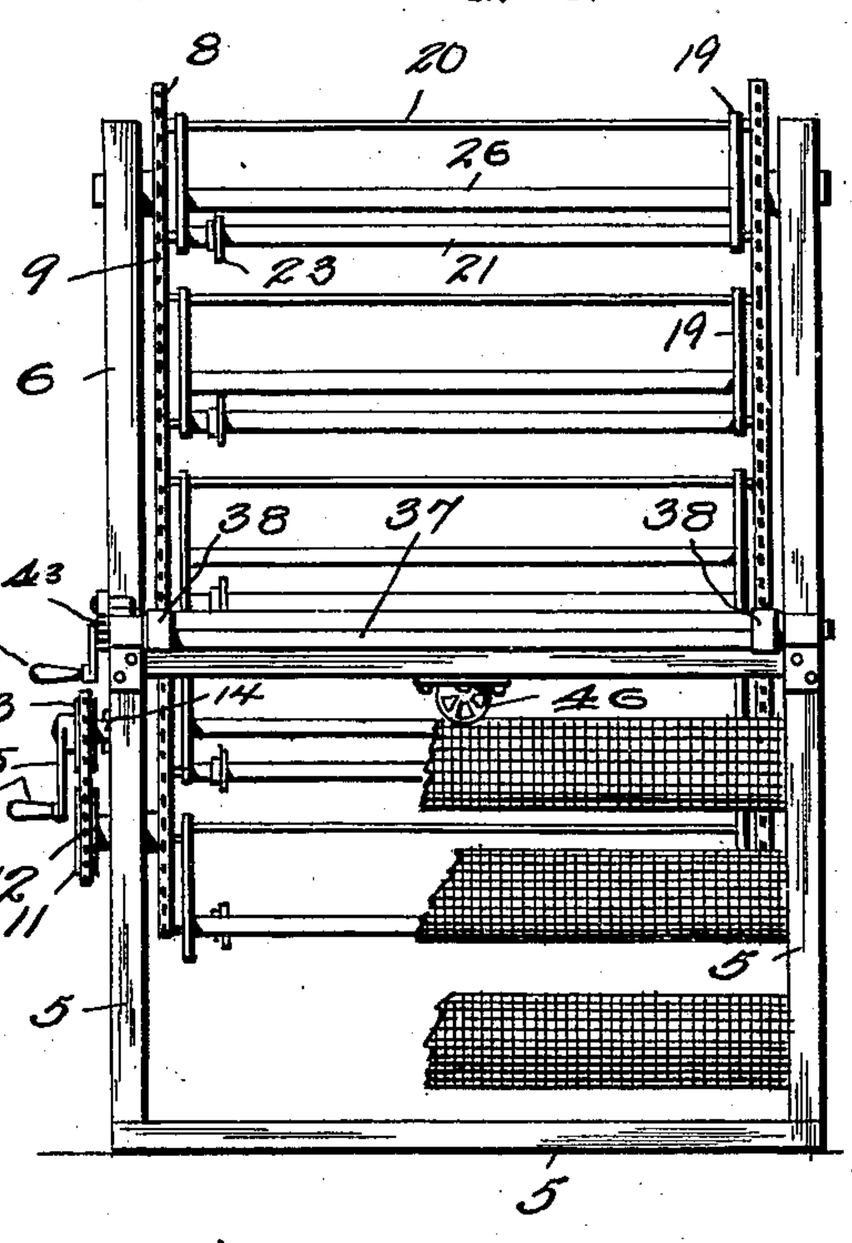


FIG. 3.

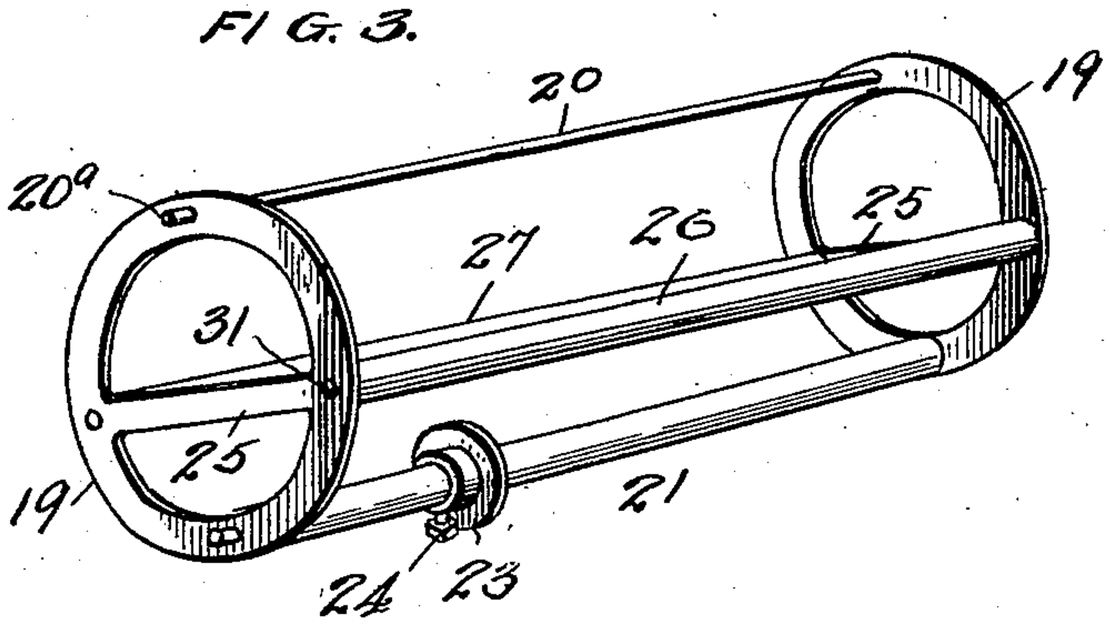
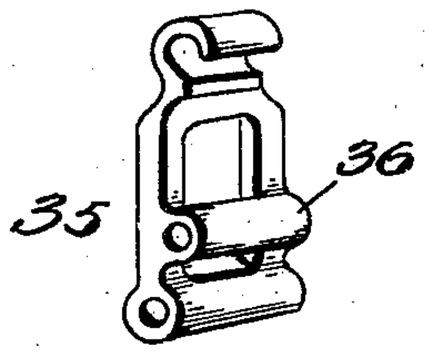


FIG. 4.



WITNESSES

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3 SHEETS—SHEET 2.

FIG. 5.

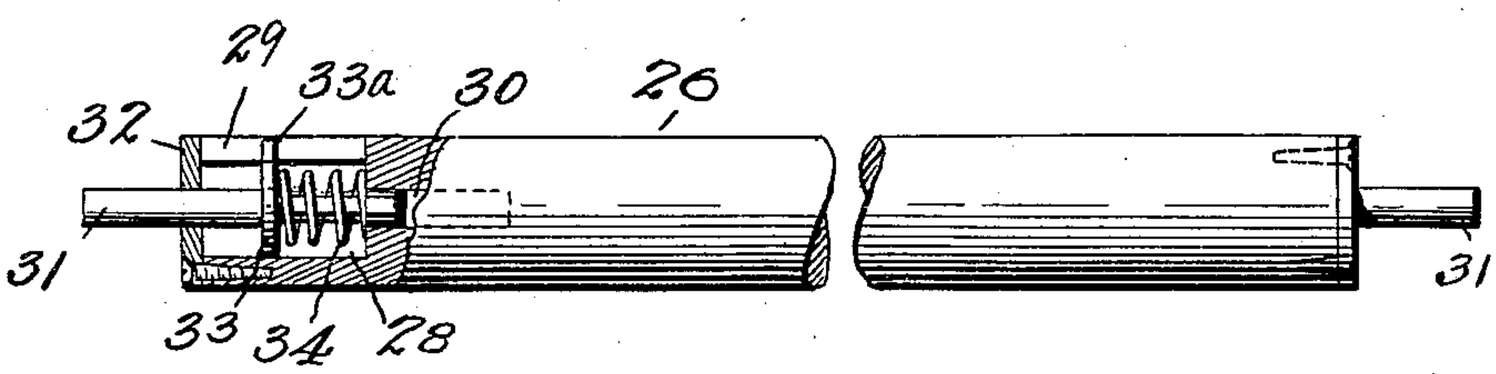


FIG. 6.

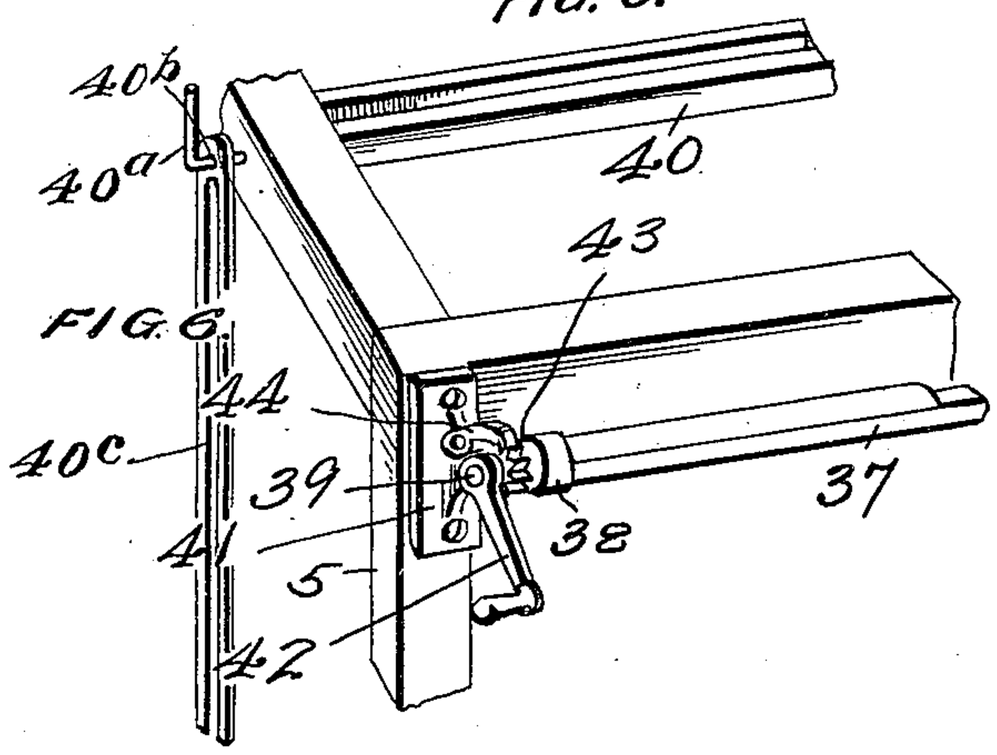
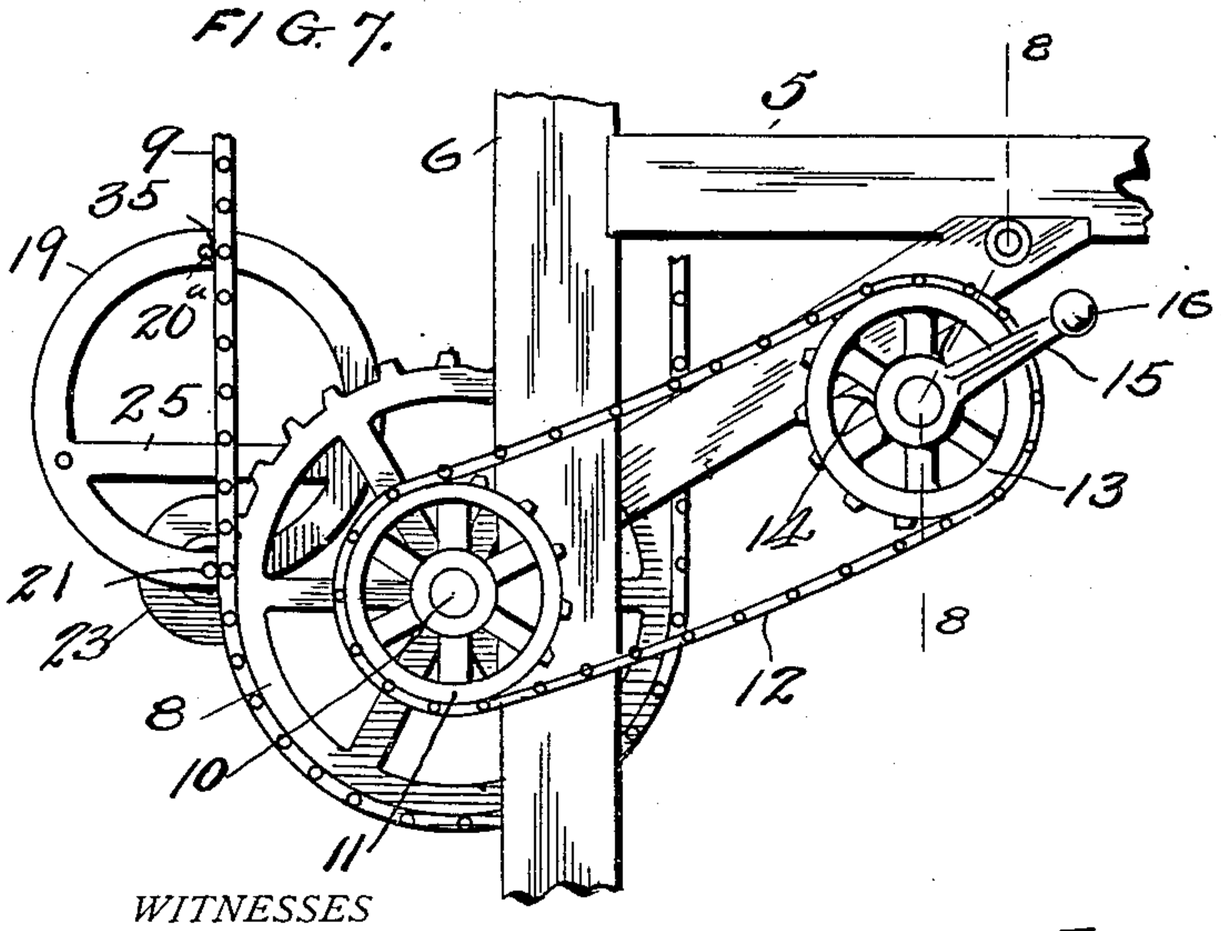


FIG. 7.



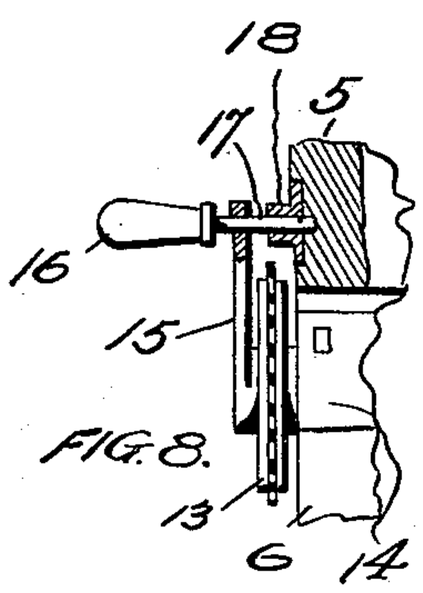


FIG. 8.

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3 SHEETS—SHEET 3.

FIG. 9.

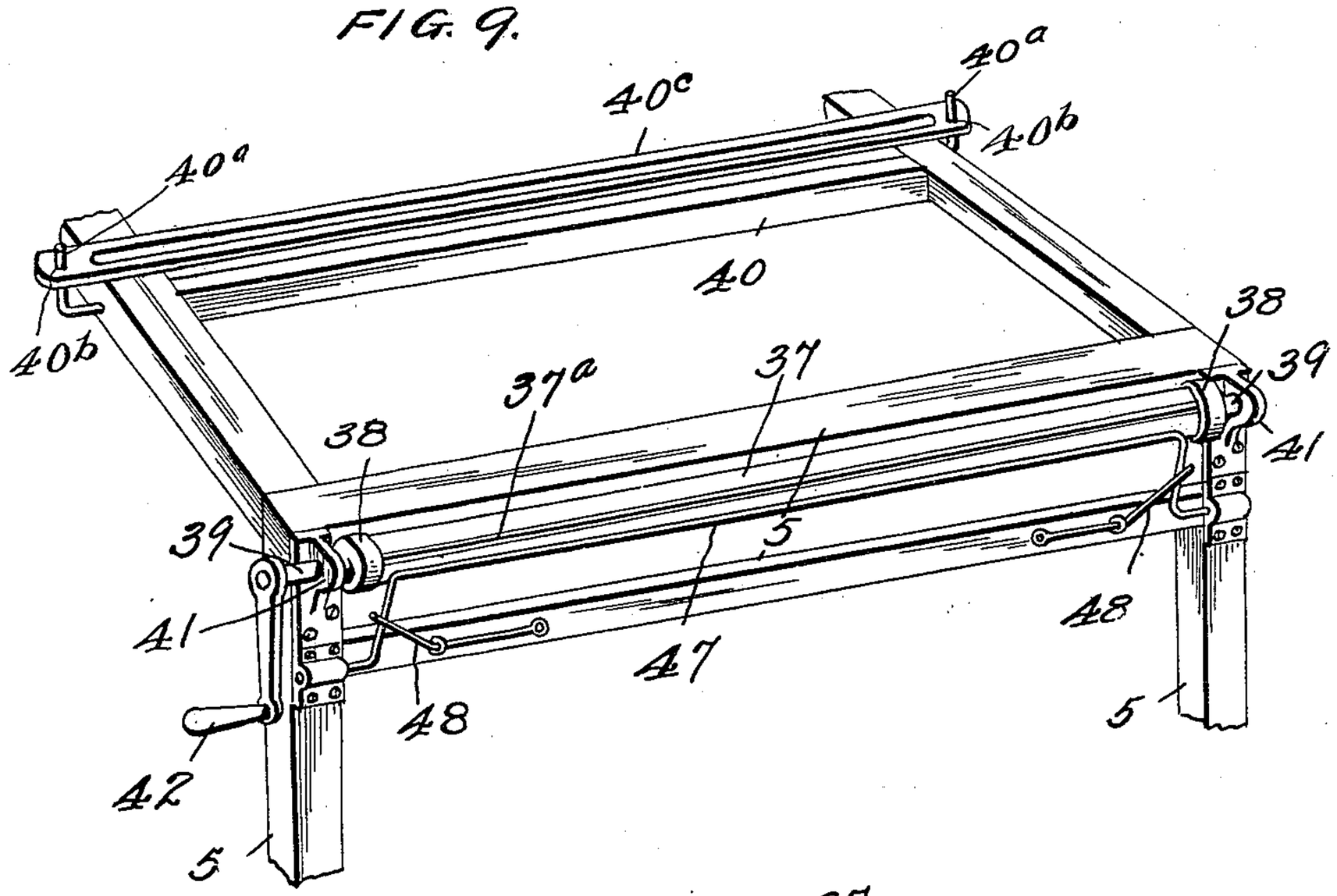


FIG. 10.

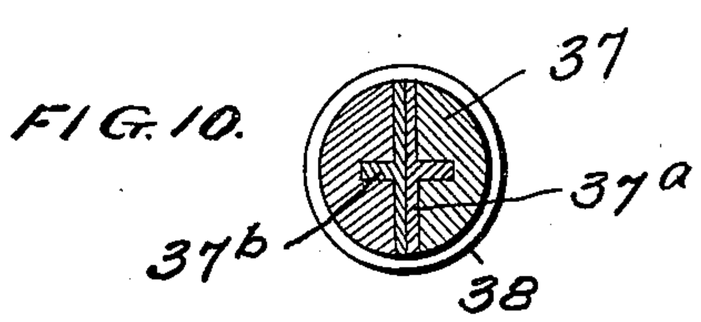
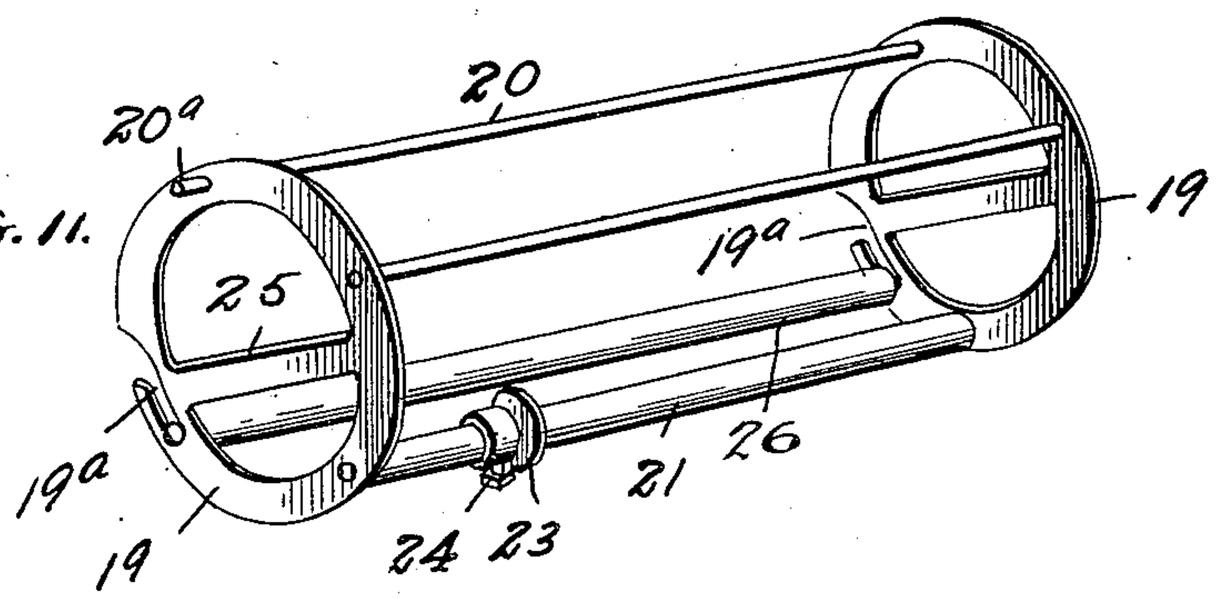


FIG. 11.



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ROLL-HOLDING DISPLAY-RACK.

991,827. Specification of Letters Patent. Patented May 9, 1911.

Application filed July 26, 1910. Serial No. 573,877.

To all whom it may concern:

Be it known that I, JAMES D. CAPERS, citizen of the United States, residing at Shaw, in the county of Bolivar and State of Mississippi, have invented certain new and useful Improvements in Roll-Holding Display-Racks, of which the following is a specification.

My present invention relates to a rack to display rolls of merchandise, for instance wire screening, in convenient positions so as to be readily accessible for the purpose of selling quantities therefrom, and my invention relates more specifically to that class of display racks which comprises a frame in which is mounted a movable endless chain carrying roll-holding members at spaced points so that by moving the chain selected rolls may be brought into registry with that portion of the frame where the material is to be cut off.

The object of my invention is to provide certain novel details in the foregoing class of display racks, with respect to attachments for the frame and the structure of the roll holders whereby the material may be more advantageously handled.

In the accompanying drawings, which show my invention, Figure 1 is a side elevation. Fig. 2 is a front elevation. Fig. 3 is a detail perspective view, on an enlarged scale, of one of the roll-holders, removed. Fig. 4 is a similar view of one of the chain links which support the roll-holders. Fig. 5 is a detail elevation, partly broken away and in section, of one of the removable roller rods. Fig. 6 is a fragmentary perspective view of a portion of the frame, showing a portion of the winding roll. Fig. 7 is a fragmentary elevation illustrating the actuating parts of the endless chains. Fig. 8 is a section on the line 8—8 of Fig. 7. Fig. 9 is a view similar to Fig. 6, showing a slightly modified form. Fig. 10 is a detail transverse section through the split roller. Fig. 11 is a similar view to Fig. 3 showing a slightly modified form.

Referring now to these figures, my rack embodies a rectangular frame made up of a series of beams 5 secured at right angles to one another and parallel beams 6 which extend vertically above the frame at the sides thereof, and support the bearings 7 of the upper and lower sprocket wheels 8 about which travel the endless side chains 9.

The lower sprocket wheel 8 of one of the chains 9 is mounted upon a shaft 10 upon which is secured an outer sprocket wheel 11 connected by a chain 12 to a sprocket wheel 13 supported at one side of the frame in a bearing 14, the shaft of which is provided with a crank 15. The handle 16 of this crank is mounted upon a pin 17 slidable through the end of the crank and mounted into and from a socket 18 formed in the side of the frame so that the chains 9 may be locked from movement.

The holders for the rolls of material, as shown particularly in Figs. 3 and 11, each comprise a pair of end rings 19, connected at diametrically opposite points by rods 20 and 21 having reduced end trunnions projecting loosely within openings in said rings. The trunnions 20^a of rod 20 project beyond the rings for a purpose to be hereinafter described, and the rod 21 has a collar 23 loosely disposed thereon and adapted to be secured in selected adjustment by a set screw 24. The rings 19 are each spanned by a bar 25, and said rings are further connected by trunnioned rods 26 and 27 at diametrically opposite points on a plane at right angles to that of the rods 20 and 21.

As shown in Fig. 5, the rod 26 has one end axially bored at 28 and has a longitudinal slot 29 communicating with said bore which in turn communicates with an axial recess 30. The trunnion 31 at this end of the said rod has its inner end within the recess 30 and extends through bore 28 and outwardly through a centrally apertured end plate 32. This trunnion 31 has, within bore 28, a rigid circular disk 33 interfitting said bore, and provided with a lip 33^a extending into the slot 29 to prevent rotation of said disk and trunnion. A spring 34 coiled about trunnion 31 and compressed between the disk 33 and the inner end of the bore 28, normally presses said trunnion outwardly to engage within the opening in the adjacent ring 19. In Fig. 11, however, rod 26 is in one piece and removable from the end rings 19 as the result of having its end trunnions disposed within tangential slots 19^a in the said rings. At equi-distantly spaced points, the chains 9 have links 35, shown in Fig. 4 and provided with transverse intermediate tubular portions 36 in which engage the projecting trunnions 20^a of rods 20 so as to support the roll-holders

in the said chains. Thus, with the roll-holders mounted in the chains as described, it is simply necessary to remove rods 26, and lay a roll of material in each of the holders, and then replace the said rods, the rolls being held by rods 20 and 21 and 26 and 27 and being prevented from longitudinal movement through the rings 19, by the cross-bars 25. Should the roll be shorter than the holder, the collar 23 of rod 21 may be adjusted to confine the roll and prevent the same from sliding. When the rolls are in position within the several holders, it is simply necessary to turn crank 15 to bring a selected roll in position above the frame top, the gearing being so related that one complete revolution of the said crank serves to move the succeeding roll into position, when the connections may be locked by moving the handle shank 17 into the frame socket 18.

Transversely across the top of the frame forwardly of the endless chains 9, is arranged a longitudinally slotted cutting board 40, over which the material is to be drawn from the selected roll-holder, at the ends of which board 40 are hooks 40^a to engage the openings 40^b of a longitudinally slotted guide strip 40^c, so as to aline its slot over that of the board 40 whereby a knife may be inserted therein and drawn therealong to sever the material. Before cutting, however, the material from the selected roll is wound upon a split roller 37, the longitudinal halves of which have their inner adjacent faces protected by metallic strips 37^a, (see Fig. 10,) provided with longitudinal ribs 37^b embedded in said halves. This split roller is normally held together by means of removable end caps 38 carrying trunnions 39 adapted to rest in brackets 41 secured upon the front of the frame adjacent its top, and may be tensioned by suitable means.

As shown in Fig. 6, the trunnion 39 at one end, carries a crank 42 and a ratchet wheel 43, and the corresponding bracket 41 carries a pawl 44 to engage said ratchet wheel and hold the roll while the material is being cut along the board 40. As shown in Fig. 9, however, the split roller 37 is tensioned by means of a U-shaped rod 47, the ends of which are journaled upon the side frame beams 5, and engaged by springs 48 which tend to force said rod 47 against said split roller.

The forward uprights of the frame may also have inner curved and alined brackets 45, to hold reserve rolls of merchandise, and the forward upper frame beam may have a twine holder 46 secured thereto in convenient position for use in tying the roll while upon the split roller 37 which may then be removed by disengaging its end caps 38 and withdrawing the halves separately.

I claim:

The combination of a frame, a pair of spaced endless chains mounted in said frame, and provided at intervals with links having tubular portions, and roll holders between said chains, each of said holders comprising end rings, and rods extending therebetween in a circular series to inclose a roll, one of said rods being removable, and another one of said rods having portions projecting beyond the rings and into the aforesaid tubular portions of the links to support the holder.

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

JAMES D. CAPERS.

Witnesses:
M. C. Goodwin,
M. L. Turpin.