

J. E. COOPER.

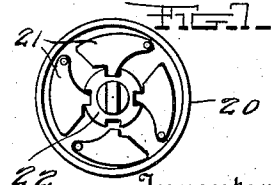
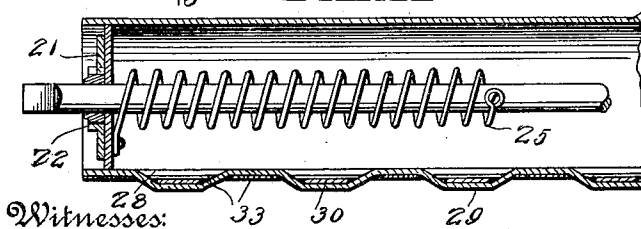
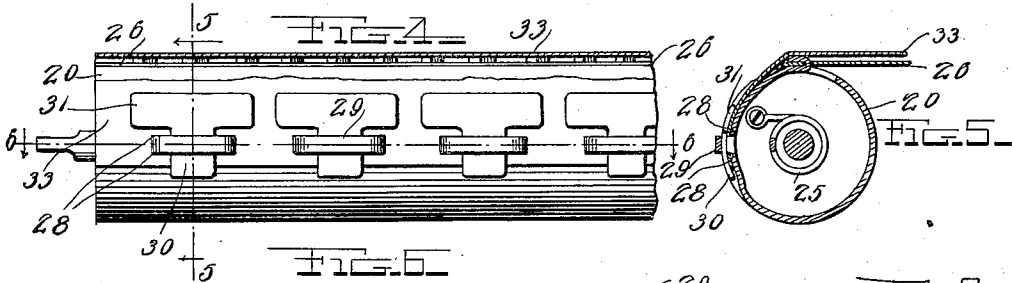
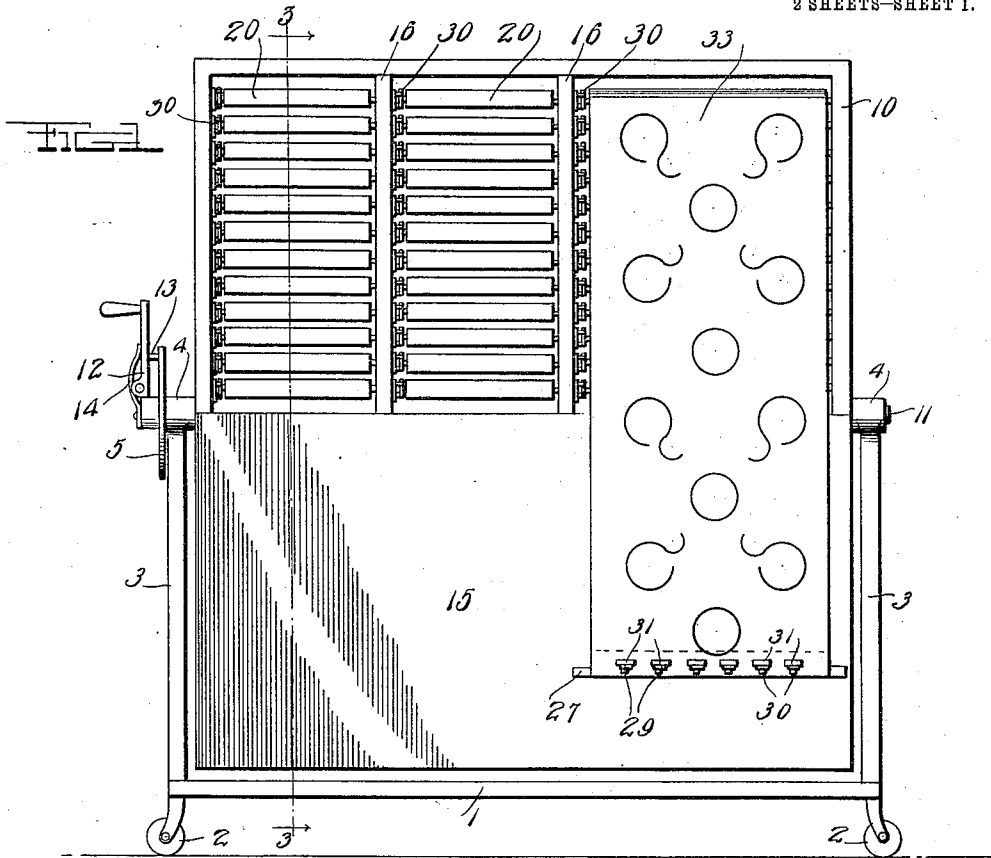
DISPLAY RACK.

APPLICATION FILED JULY 3, 1911.

1,007,537.

Patented Oct. 31, 1911.

2 SHEETS-SHEET 1.



Witnesses:

D. R. Pierce

N. L. Collamer.

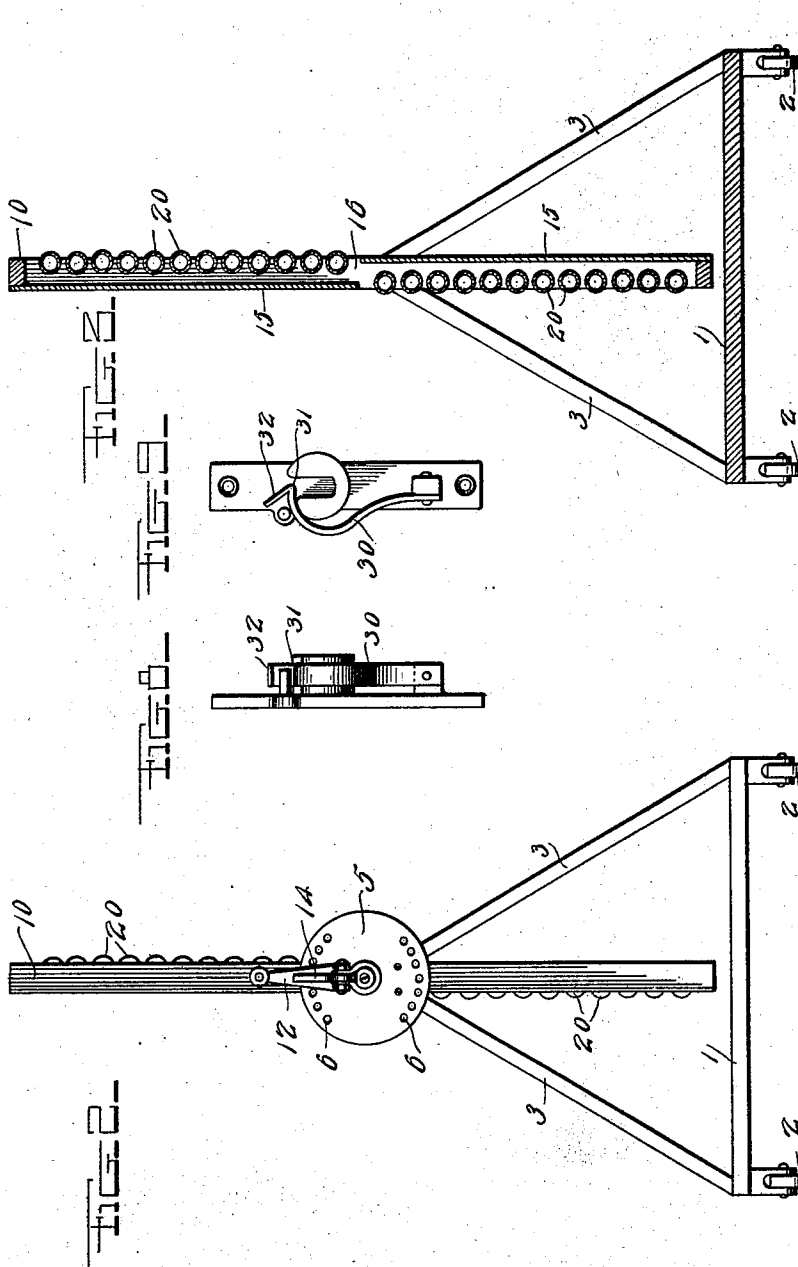
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J. E. COOPER.
 DISPLAY BACK.
 APPLICATION FILED JULY 3, 1911.

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Patented Oct. 31, 1911.

2 SHEETS—SHEET 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOSEPH EVANS COOPER, OF CRIPPLE CREEK, COLORADO.

DISPLAY-RACK.

1,007,537.

Specification of Letters Patent.

Patented Oct. 31, 1911.

Application filed July 3, 1911. Serial No. 636,600.

To all whom it may concern:

Be it known that I, JOSEPH E. COOPER, a citizen of the United States, residing at Cripple Creek, in the county of Teller and State of Colorado, have invented certain new and useful Improvements in Display-Racks; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to store furniture, and more especially to display racks; and the object of the same is to produce certain features of improvement in rotary sample sheet racks of this character such as will appear from the following specification and claims.

In the drawings—Figure 1 is a front elevation of this improved rack; Fig. 2 is an end view; Fig. 3 is a vertical section on the line 3—3 of Fig. 1; Fig. 4 is a plan view of part of the roller with parts broken away; Fig. 5 is a vertical section on the line 5—5 of Fig. 4. Fig. 6 is a horizontal section on the line 6—6 of Fig. 4; Fig. 7 is an end view of the roller; Fig. 8 is an edge and Fig. 9 a front view of the spring catch.

The support for this improved display rack comprises a substantially rectangular base 1 preferably mounted on caster wheels 2 at its four corners, uprights 3 converging at both ends of the base, bearings 4 carried by said uprights, and a disk 5 at the outer end of one bearing having perforations 6 for a purpose to appear below. When this improved rack is made of large size as described below, the casters will by preference be employed so that the entire device may be rolled around on the floor; but it is quite obvious that the rack could be made of smaller size and the casters omitted, and the entire device then set upon a table and used in the same manner as set forth hereinafter.

The rack which is carried by the support above described includes a rectangular frame 10 whose end bars have stub shafts 11 journaled in the bearings 4, and to the outer end of one stub shaft is pivoted a crank handle 12 having a pin 13 adapted to engage any of the perforations 6, the handle being swung toward the disk 5 by means of a spring 14 so that the pin will normally retain its engagement with one of the perforations. Within the frame at opposite sides

of its pivotal center or axis are disposed two plates (preferably of light thin metal) 15, one being secured to one face of the frame and the other to the opposite face thereof so that each half of the frame is rendered box-shaped as best seen in the vertical sectional view, the open side of the box being above the axle or axis and the closed side standing below it and serving as a table or support for the articles to be displayed by this improved rack.

Disposed between the end bars of the frame if the rack is small, or between upright strips 16 therein if the rack be quite large, are a number of rollers 20 constructed much after the pattern of the ordinary shade roller in wide use today. That is to say, each comprises a cylindrical body having a stub shaft at one extremity mounted in a suitable bearing and a number of weighted pawls 21 at its other extremity and whereof one is in constant mesh with a ratchet wheel 22 carried by the fixed spindle of the roller so that the latter may be turned in one direction against the tension of its contained spring 25 and one of the pawls will hold it, but in order to cause it to turn in the other direction it must be rotated so rapidly that all the pawls fly out by centrifugal force. Secured at one end to the periphery of the roller is a backing 26 of canvas or other similar heavy fabric, and the outer or free end of the backing carries a transverse guard strip 27 which is a little longer than the roller so that it will strike the end bars of the frame or the strips 16 therein in case the roller should wind up accidentally and quickly, and thereby prevent the entire backing 26 from being drawn into the box-shaped receptacle out of reach of the operator. In case the roller shell is of metal as it may be, and in case the guard strip 27 is of metal as it also may be, a convenient means for attaching the sheet to be displayed to these members is by cutting in them parallel slits 28 so as to leave longitudinal strips 29 between each pair of slits, bending the strips 29 outward or upward a trifle, and inserting through them the shanks 30 of T-shaped sheet-metal fasteners whose cross heads 31 are longer than the length of said slits 28 so that they cannot become displaced.

The fabric to be displayed is indicated by the numeral 33, and it obviously may be of paper, cloth, or other textile or sheet ma-

terial; and when it is to be displayed it is attached to the backing sheet 26 by cutting slits in it to correspond with those numbered 28 in the roller 20 and the guard 27, superimposing these slits over those in the members just mentioned, and inserting the locking devices in the manner above described. Thereafter the winding up of the backing sheet 26 on the roller will carry with it the sheet 33 which is being displayed, but when unwound by drawing down the strip 27 the displayed sheet 33 will come off with the backing 26 and both will be drawn down over the plate 15 to within view of the prospective customer. At this time the salesman will manipulate the crank handle 12 to set the entire rack at the proper angle where it can be best seen by the customer and will receive the best light to show it off to advantage.

When the rack contains a large number of rollers as indicated in the drawings, possibly arranged in three groups or banks as shown, several different fabrics 33 can be displayed simultaneously side by side, or perhaps one set overlapped upon the other so that their lower ends only are exposed; and if the customer be dissatisfied with all that are displayed, they can be housed within the box-shaped upper portion of the rack, and a new set drawn out in a manner which will be clear. After all in this half of the rack have been displayed the operator by manipulating the crank handle 12 can disengage its pin 13 from one of the perforations 6, and by giving a half revolution to the axle of the entire rack the latter can be reversed so that the box-shaped portion at the other side thereof comes into view and a new set of articles can be displayed to the prospective customer. A detail which commends itself for use in this connection is shown in Figs. 8 and 9 and consists of a spring catch 30 secured to each side bar of the frame 10 and to the strips 16 therein and having its free end hooked as at 31 so as to engage over the spindles or stub shafts of the rollers in order to prevent the latter from falling out of their bearings when the rack is rotated through half a revolution. By preference each hook has a thumb-piece 32 so that if a roller is to be removed the thumb can be engaged therewith and the hook disengaged from the spindle, and when another roller is to be inserted the spindles

pass down by this thumb-piece and drop easily into the bearings provided for them.

All parts of this device are of the preferred materials, sizes, proportions, and specific details of construction other than as herein described. It will be unnecessary to amplify the uses of display racks of this kind, as they are well known.

What is claimed as new is:

1. In a display rack, the combination with a support having alined bearings, and a fixed disk carried by one of them and having in it a series of perforations; of the rack proper including a frame having stub shafts journaled in said bearings, a crank handle pivoted to the outer end of one shaft and having a pin adapted to engage said perforations, and a spring holding the pin normally in engagement therewith.

2. In a display rack, the combination with a support having alined bearings; of the rack proper including a frame having stub shafts journaled in said bearings, means for turning and setting it therein, plates covering half the rack and disposed on respectively opposite sides of and respectively above and below the axis of the frame, a series of rollers journaled in each half of the frame, and a backing sheet carried by each roller and of sufficient length to be drawn downward over the plate which is most remote from said roller.

3. In a display rack, the combination with a support having alined bearings, one of them having in it a series of perforations; of the rack proper including a frame having stub shafts journaled in said bearings, plates covering half the rack and disposed on respectively opposite sides of and respectively above and below the axis of the frame, a series of rollers journaled in each half of the frame, a backing sheet carried by each roller, a crank handle pivoted to the outer end of one shaft and having a pin adapted to engage said perforations, and a spring holding the pin normally in engagement therewith.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOSEPH EVANS COOPER.

Witnesses:

LEON H. CASE,
H. C. HARRIS.