D. W. JOHNSON.

OIL CLOTH DISPLAY RACK.

APPLICATION FILED JULY 14, 1915.

1,178,645.

Patented Apr. 11, 1916.

2 SHEETS—SHEET 1.

Fig. 2.

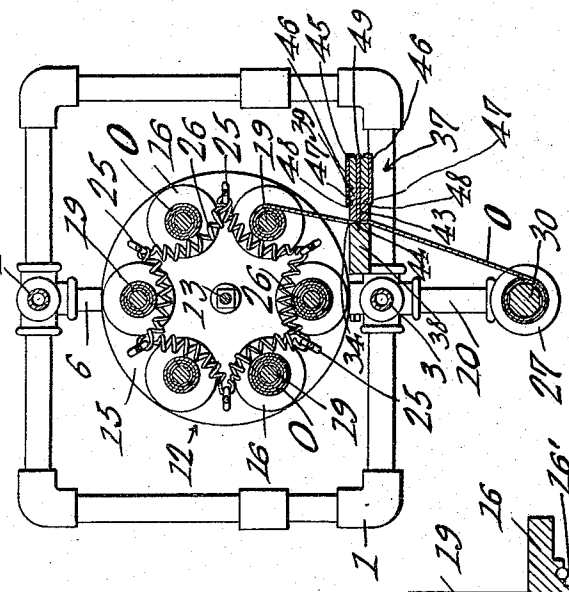


Fig. 5.

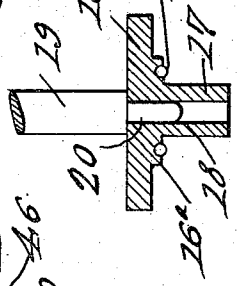


Fig. 1.

Witnesses

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2 SHEETS—SHEET 2.

Fig. 1.

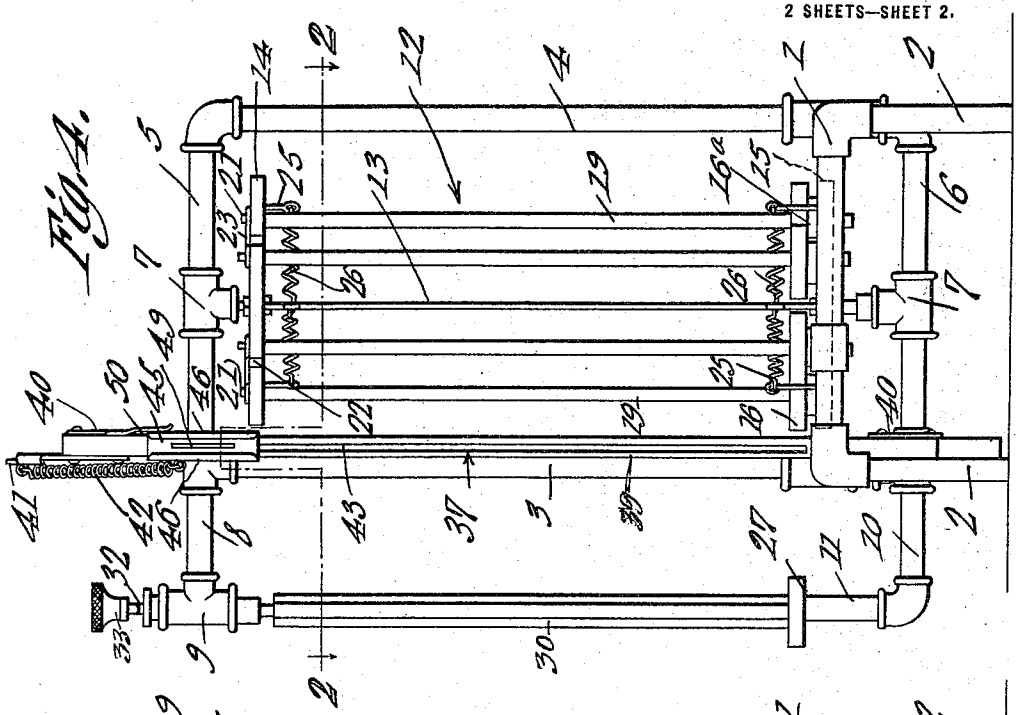
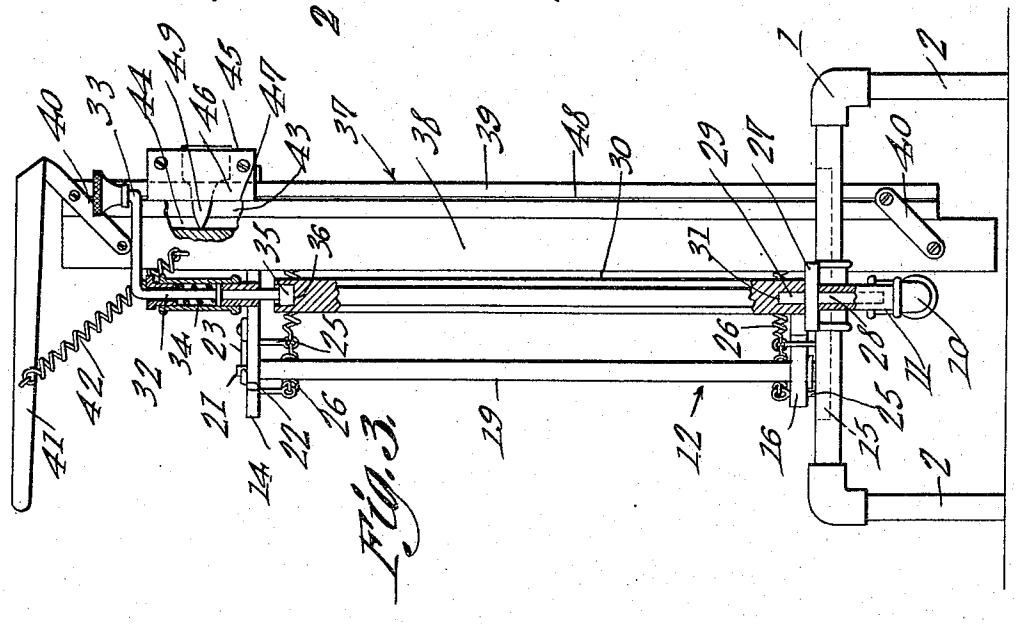


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

DWIGHT W. JOHNSON, OF BETHANY, NEBRASKA.

OIL-CLOTH-DISPLAY RACK.

1,178,645. Specification of Letters Patent. Patented Apr. 11, 1916.

Application filed July 14, 1915. Serial No. 39,865.

To all whom it may concern:

Be it known that I, DWIGHT W. JOHNSON, a citizen of the United States, residing at Bethany, in the county of Lancaster and State of Nebraska, have invented a new and useful Oil-Cloth-Display Rack, of which the following is a specification.

The present invention is an appliance especially adapted for conveniently mounting and displaying rolls of oil cloth, and aims to provide a novel and improved display rack of that character provided with novel and improved means whereby a desired length of oil cloth may be readily taken from the selected roll and then cut off.

The present device embodies means for rotatably mounting a number of rolls of oil cloth or other fabric, whereby the rolls may be conveniently displayed, means for winding up a desired amount of any particular style of oil cloth from the respective roll, and means for cutting or severing the oil cloth after the required length thereof has been unwound from the roll, so that the oil cloth which is cut off will be rolled up ready for handling. In other words, the invention aims to provide an apparatus for conveniently displaying various styles of oil cloth, and for enabling the required length of the particular oil cloth selected by the purchaser, to be readily unrolled and cut off, without the necessity of handling the rolls independently, as usual, and unrolling the oil cloth upon a table, the floor, or the like, which is troublesome, and which involves difficulty in unrolling the desired amount of oil cloth, especially when the desired amount of oil cloth is long.

Another object of the invention is the provision of an oil cloth display rack of the nature indicated, embodying a unique assemblage of the component parts, and improved generally in its details, to enhance the utility and efficiency thereof.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

The invention is illustrated in the accompanying drawings, wherein:—

Figure 1 is a plan view of the structure. Fig. 2 is a horizontal section thereof taken on the line 2—2 of Fig. 4. Fig. 3 is a side elevation of the device, portions being broken away and shown in section. Fig. 4 is another side elevation, looking at right angles to the line of view in Fig. 3. Fig. 5 is an enlarged sectional detail illustrating the means for supporting one of the spindles.

In carrying out the invention, there is provided a suitable supporting frame 1, which may be constructed of piping, and which is provided with legs 2 for conveniently supporting the device upon the floor in the store or elsewhere. The frame 1 is provided with a pair of opposite standards 3 and 4 having their upper and lower ends connected by the respective yokes 5 and 6, and said yokes are provided intermediate their ends with bearings 7, preferably in the form of T-couplings interposed in the pipes constituting the yokes. Outstanding brackets 8 and 10 are carried by the upper and lower ends, respectively, of the standard 3, a bearing 9 in the form of a T-coupling being attached to the free end of the upper bracket 8, and the free end of the lower bracket 10 having an upstanding tubular socket member or pipe section 11.

A rotatable carrier or rack proper 12 for the rolls of oil cloth is mounted for rotation about a vertical axis upon the frame, between the standards 3 and 4, whereby the carrier 13 is disposed in an upright position. The carrier 12 embodies a central vertical shaft 13 having its ends journaled within the bearings 7, and upper and lower circular heads 14 and 15 are secured rigidly to the shaft 13 adjacent the upper and lower ends thereof. The rolls of oil cloth 0 are carried in an upright position between the heads 14 and 15, and to support the rolls upon the lower head 15 an annular series of disks 16 are provided with central depending bosses 16^a provided with anti-frictional balls 16′ seating upon the head 15, and provided with depending pintles 17 journaled through the head 15 for rotatably mounting

the disks 16 thereon. Each disk 16 and its pintle 17 has a bore 18 therein.

The rolls of oil cloth 0 are slipped upon upright spindles 19 which have their lower ends reduced, as at 20, and slipped into the bores 18 of the respective disks 16, and the upper ends 21 of the spindles 19 are received in open radial slots 22 formed in the upper head 14. The upper ends of the spindles are held within the slots 22 by means of hooks 23 pivoted upon the upper head 14 and engageable with the upper protruding terminals of the spindles. When the hooks 23 are disengaged from the spindles, the upper ends of the spindles may be swung outwardly out of the slots 22, and may then be lifted off of the disks 16, so that the spindles 19 may be readily passed or slipped into the rolls of oil cloth, and after which the spindles may be replaced for conveniently applying the rolls to the carrier 12.

In order to normally prevent the oil cloth from unwinding from the rolls, tension means are carried by the heads 14 and 15, said means embodying stems 25 attached to the heads between the spindles 19 and projecting therebetween, and the hooked ends of coiled wire retractile springs 26 are engaged to the stems 25, whereby the intermediate portions of the coiled springs 26 will bear against the inner sides of the rolls for preventing the rolls from spinning. This provides simple and effective means for frictionally holding the rolls, it being noted that when the rolls are applied, the springs 26 will be bowed inwardly, and due to the contractile tension of the springs they will continually bear against the rolls as the rolls decrease in diameter, due to the unwinding of the oil cloth therefrom.

The means for winding up the oil cloth which is unwound from one of the rolls is carried by the brackets 8 and 9, and to this end, a disk 27 is seated upon the socket member 11 and is provided with a central depending pin 28 fitting in said member, and is also provided with a central upstanding pin 29. An upright roller or core member 30 is provided with a socket 31 at its lower end receiving the pin 29, the roller 30 seating upon the disk 27, whereby the disk 27 will support the oil cloth wound upon the roller 30. A rotatable spindle 32 is slidable through the bearing 9, and is provided at its upper end with a hand crank 33, a spring 34 being disposed within the bearing 9 for yieldably depressing the spindle 32 into engagement with the upper end of the roller 30. The lower terminal of the spindle 32 has a flattened or non-circular portion 35 received by a similarly-shaped recess 36 in the upper end of the roller 30, whereby the roller 30 will be rotated with the spindle 32 when the crank 33 is rotated by hand. The roller 30 is disposed at one side of the rack and is parallel and coextensive with the spindles 19 whereby the oil cloth may be readily wound upon the roller 30 from any one of the spindles when the carrier 12 is rotated to the proper position.

Disposed between the carrier 12 and the roller 30, is an oil cloth clamping and cutting means 37, which embodies a pair of upright coöperating bars 38 and 39, the bar 38 being rigidly secured to the frame 1 adjacent the standard 3 between the carrier 12 and roller 30. The bar 39 is mounted to move to and from the bar 38 for frictionally gripping and releasing the oil cloth, respectively, and to this end, upper and lower pairs of links 40 are terminally pivoted to the opposite sides of the bars 38 and 39, adjacent the ends of said bars. When the bar 39 is moved upwardly, it will be moved against the bar 38, and conversely, when the bar 39 is lowered, it will be moved away from the bar 38. One of the upper links 40 is extended to provide an angularly extending handle or lever 41, and the handle 41 is connected by means of a coiled wire retractile spring 42 with the bar 38, whereby the spring 42 yieldably swings the handle 41 downwardly to bring the bar 39 against the bar 38.

The bar 39 has a longitudinal or vertical slot 43, and the bar 38 is provided with a complementing slot or groove 44 registering with the slot 43 for accommodating the cutter which is movable along the bar 39. This cutter embodies a slide 45 movable along the bar 39 opposite the bar 38, and having side plates 46 overlapping the sides of the bar 38. The side plates 46 have flanges or lips 47 working in longitudinal grooves 48 provided in the sides of the bar 39, whereby the slide 45 is guided for vertical or longitudinal movement along the bar 39. The cutter blade 49 is carried by the slide 45 and projects through the slot 43 into the slot or groove 44. A leaf spring 50 is attached to one side of the bar 39 adjacent the upper end of the said bar, and projects downwardly to receive the respective side plate 46 of the slide 45, when the slide is raised, to hold said slide in raised position ordinarily.

In use, the rolls or oil cloth or other fabric may be placed upon the carrier 12 in a convenient manner, the rolls being held by the spindles 19 and seating upon the disks 15, and the springs 26 provide tension means for holding the rolls against accidental or unwarranted rotation. The rolls are thus supported in an upright position, and may be conveniently rotated with the carrier 12, so that the various styles of oil cloth or fabric may be readily and effectively exhibited to the prospective purchaser, the oil cloth being unwound slightly from the rolls in order that the designs thereof can be observed. When the desired style or grade of

oil cloth is selected, the carrier 12 is rotated to bring the respective roll of oil cloth adjacent the bars 38 and 39, and the oil cloth is then unwound and passed between the bars 38 and 39, the bars being first separated by raising the handle 41. Then when the handle 41 is released, the bar 39 will be brought against the bar 38 under the influence of the springs 42, so that the oil cloth will be gripped between the bars, although the oil cloth may be readily drawn or pulled from between the bars to the roller 30. The oil cloth is then wound around the roller 30, and the crank 33 is then rotated for winding the oil cloth upon the roller 30. The bars 38 and 39 being held yieldably together will sufficiently grip the oil cloth to bring the same under tension or to render the same taut, whereby it will be wound tightly upon the roller 30. The desired amount of oil cloth is measured off in any suitable manner, for instance, by providing an ordinary or suitable measuring device adjacent the bar 38 for contacting with and measuring the oil cloth as it is drawn from the roll and wound upon the roller 30, or the oil cloth may be provided with a linear scale thereon to assist in readily laying off the desired length of oil cloth. After the desired length of oil cloth has been drawn from the roll, the slide 45 is moved downwardly along the bar 38, and the cutter blade 49 working within the slots 43 and 44 will sever the oil cloth clamped or gripped between the bars 38 and 39. The oil cloth is thus cut off in a convenient and desirable manner. The oil cloth which is wound upon the roller 30 is then removed, by raising the spindle 32 so that it is disengaged from the upper end of the roller 30, and the roller 30 may then be swung to one side and lifted off of the pin 29. The roller 30 may then be removed from the oil cloth and replaced, or may be allowed to remain in the oil cloth for conveniently handling the same, another roller 30 being substituted upon the rack.

The present device therefore enables the rolls of oil cloth to be displayed or exhibited readily, and also permits the oil cloth to be conveniently unwound from any roll and then cut loose. The present device is particularly useful in retail stores, since it enables the salesman to exhibit and handle the oil cloth with despatch. The device also provides attractive means for displaying the oil cloth, as well as rendering it more easy to handle the same.

Instead of supporting the device in an upright position, the same may be supported in a horizontal position, if desired, and slight changes in the details of construction may be resorted to in building the racks without departing from the spirit of the invention.

Having thus described the invention, what is claimed as new is:

In a display rack, a rotary carrier embodying a pair of heads and detachable spindles carried thereby and removable from between said heads, the spindles being arranged in an annular series and being adapted to hold rolls of fabric, stems carried by the heads and projecting therefrom between said spindles, and coiled wire retractile springs having their ends attached to said stems and adapted to be bowed inwardly by the rolls.

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

DWIGHT W. JOHNSON.

Witnesses:
HERBERT D. LAWSON,
BESSIE R. JOHNSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."