

UNITED STATES PATENT OFFICE.

GEORGE W. BARNETT, OF KAHOKA, MISSOURI, ASSIGNOR OF ONE-HALF TO
EDWARD P. SPANGLER, OF SAME PLACE.

DISPLAY-RACK.

SPECIFICATION forming part of Letters Patent No. 649,038, dated May 8, 1900.

Application filed September 16, 1899. Serial No. 730,754. (No model.)

To all whom it may concern:

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

My present invention relates to a novel display-rack designed for the support and display of a number of rugs or other textile articles capable of being rolled into cylindrical form.

The object of the invention is to produce a simple, inexpensive, and efficient display-rack embodying a carrier comprising a series of rug-supporting spindles which may be readily shifted to present any particular rug for examination and upon and from which the rugs may be wound or unwound without creating the disorder and confusion which ordinarily results from the examination of rugs or other textiles when contained in disconnected bolts or rolls.

Referring to the drawings, Figure 1 is a perspective view of my display-rack complete, showing a number of the spindles filled and others empty to clearly illustrate the construction of the device. Fig. 2 is a central vertical sectional view of the subject-matter of Fig. 1 in a transverse plane. Fig. 3 is a detail view, on a somewhat-enlarged scale, illustrating the mounting of the spindles; and Fig. 4 is a detail view illustrating the adjustable bearing and the lock for the upper shaft.

Referring to the numerals of reference designating corresponding parts in the several views of the drawings, 1 and 2 indicate a pair of vertical standards provided with supports or feet 3 and connected by transverse beams 4 and 5, located, respectively, adjacent to the opposite ends of the standards. In the frame thus constructed are mounted upper and lower horizontal shafts 6 and 7, at the opposite ends of each of which are keyed or otherwise secured coincident sprocket-wheels 8 and 9. These shafts are designed for the support and actuation of an endless carrier designed to support a number of rugs or the like in a manner to permit them to be shifted for convenience of inspection and to permit the individual rugs to be wound or unwound

to facilitate their storing or examination. This carrier comprises a pair of endless sprocket bands or chains 10 and 11, passing over the sprocket-wheels 8 and 9 at the contiguous ends of the shafts, and a series of preferably equidistant horizontal rug-supporting spindles 12, journaled at their opposite ends in bearings 13, carried by and preferably integral with certain of the links of the chains. One end of each of these spindles is squared beyond its bearing to provide means for readily effecting the attachment of spindle-operating mechanism—as, for instance, a crank 14. One end of the lower shaft 7 is likewise squared at its extremity beyond the standard 1, as indicated at 15, by means of which the wrench may be connected with the shaft to rotate it, causing the endless carrier to be set in motion and the desired display of the rugs by presenting them successively for inspection.

If it is desired to unroll any particular rug for closer examination, its spindle may be located at the upper end of the rack, and its edge may be grasped and pulled down to the bottom of the rack, thus causing the rug to be hung over the entire side of the rack for inspection. The examination having been completed, it is simply necessary to apply the crank to the spindle and rewind the rug, after which any other rug may be presented by the movement of the carrier through the rotation of the crank, which will now be connected to the end of the shaft 7.

It frequently happens that a rug can be best displayed upon the floor, and I have therefore provided a simple expedient constituting tension mechanism arranged to be exerted upon each spindle as it is presented at the bottom of the stand to facilitate the unrolling of the rug wound upon one of the lowermost spindles and its smooth, even, and compact rewinding thereon directly from the floor. This tension mechanism comprises a number of slightly-curved spring-fingers 16, radiating from the shaft 7 at various points along its length and arranged to contact with the spindles as they pass around the sprocket-wheels 9. When filled spindles are presented at the bottom of the rack, the increased effective diameters of the spindles causes the

spring-fingers 16 to be sprung back slightly and to exert more or less pressure upon the rolls of rugs, thus producing sufficient tension to compel the smooth and even winding or unwinding of the rugs upon or from the spindle.

Any suitable rug-retaining mechanism may be employed for fastening the edge of the rug along the spindle to prevent drawing or wrinkling of the former; but I prefer to employ in connection with each spindle a hook-rod 17, revolvably carried in proximity to the spindle by straps 18, carried on the spindle and provided with bearing-loops 19 for the reception of the hook-rod. The rod is provided with a series of preferably equidistant rug-retaining hooks 20, designed to be passed through the edge of the rug and to retain it smoothly and evenly upon the spindle. As the rods 17 are rotatable, the hooks 20 are permitted to swing to the position indicated in Fig. 3 of the drawings for the attachment of the rug or to lie flat against the face of the spindle when the rug is wound thereon.

Any suitable mechanism—as, for instance, the vertically-adjustable bearing-boxes 21, supporting the opposite end of the shaft 6—may be provided for regulating the tension of the sprocket-chains, and any desired expedient may be provided for locking the carrier in any desired position—as, for instance, to retain the spindles stationary while one or more rugs are wound or unwound. For this latter purpose, however, I prefer to employ an adjustable swinging locking-plate 22, provided with an angular recess 23, designed to engage the square extremity 24 of the shaft 6. The locking-plate is carried by the standard 1 and is preferably connected thereto by a pin 25, projecting from the standard and engaging a longitudinal slot 26 in the plate.

From the foregoing it will appear that I have produced an inexpensive, efficient, and easily-operated display-rack adapted for the display of a number of rugs or like articles, each of which is capable of being quickly unwound for examination and rewound into small compass; but while the present embodiment of the invention appears at this

time to be preferable, I reserve the right to change, modify, and vary the structural details illustrated and described as suggested by experience and experiment and comprehended within the scope of the protection prayed.

What I claim is—

1. In a display-stand, the combination with a support, of a carrier comprising a series of independently and bodily movable spindles, tension devices adapted for engagement by the spindles successively and individually, and means for moving the spindles to engage them with the tension devices.

2. In a display-stand, the combination with a support, of a carrier comprising a series of bodily-movable and independently-rotatable spindles, rug-retaining devices carried by each spindle, and tension devices arranged in the path of the spindles and adapted for engagement therewith to hold them independently as they are successively presented by the movement of the carrier.

3. In a display-stand, the combination with a support, of a pair of shafts, sprocket-wheels mounted on the shafts, an endless carrier comprising a pair of sprocket-chains engaging the sprocket-wheels, independently-rotary spindles connecting the chains, a series of substantially-radial spring-fingers extending from one of the shafts and into operative proximity with the adjacent spindles, and means for rotating said shafts.

4. In a display-stand, the combination with a support, an endless carrier comprising a plurality of bodily-movable and independently-rotatable spindles, and a series of substantially-radial fingers projecting into the path of movement of the spindles and adapted for engagement therewith as the spindles are moved.

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:

B. S. CRAWFORD,
G. E. MCHUGH.