June 9, 1936. A. J. PRESTON 2,043,555

DEVICE FOR STRETCHING RUGS AND THE LIKE

Filed July 30, 1934

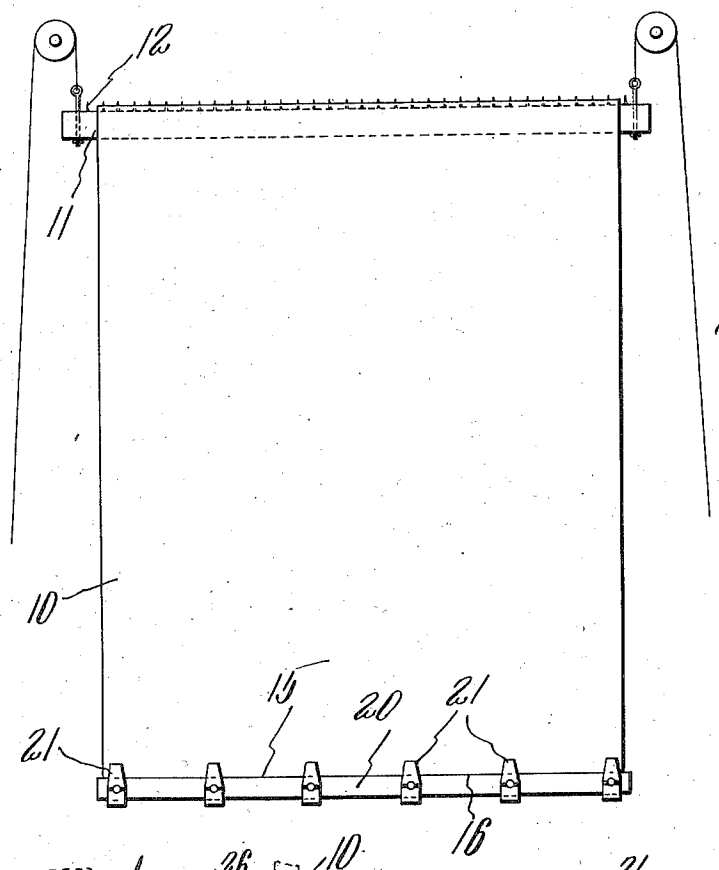


Fig. 1.

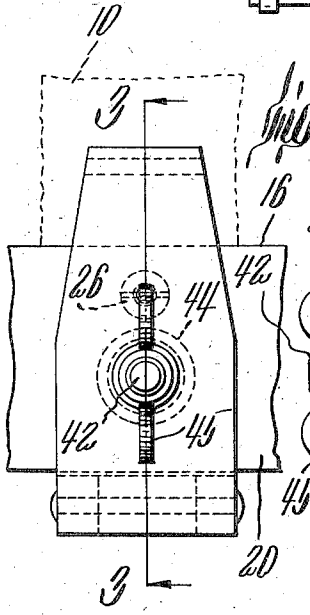


Fig. 2.

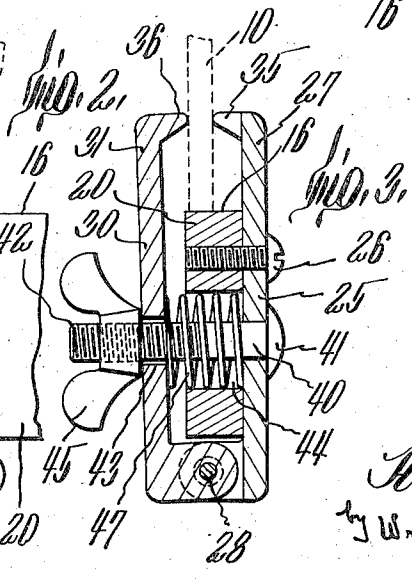


Fig. 3.

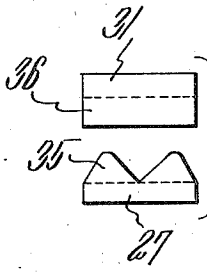


Fig. 4.

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Patented June 9, 1936 2,043,555

UNITED STATES PATENT OFFICE

2,043,555

DEVICE FOR STRETCHING RUGS AND THE LIKE

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Application July 30, 1934, Serial No. 737,585

3 Claims. (Cl. 45—24)

This invention relates to a device for stretching rugs or similar sheets of rectangular shape. When rugs are scoured or shampooed, they tend to develop wrinkles. In order to avoid such wrinkles when the rug is laid on the floor, the rug is often sized with a stiffening material assisting it to lie flat on the floor. When such sizing has been applied to a rug, it is important that while the sizing is drying, the rug be held in a plane with its edges so positioned as to avoid distortion of the outline shape of the rug. To this end, it has been customary to stretch the rugs on frames so as to hold them flat in their proper shape. The use of stretching frames requires a large amount of floor space on which the rug can be laid out for attachment to the frame. The operation of attaching the rug to the frame is also difficult and time consuming. It is an object of the present invention to provide a simple effective device which can be attached to a rug without extending the rug out full length on the floor, which is capable of quick and easy attachment to the rug, and which can be quickly released from the rug after the sizing has dried. The invention as herein described and illustrated may be embodied in a series of clamps attached to a bar of substantial weight having a straight edge, the gripping jaws of the clamps projecting outwardly beyond this straight edge to grip the marginal portion of a rug abutting the edge. The clamps are so constructed as to be capable of quick and easy attachment to the rug after one end edge of the latter has been moved into abutting contact with the straight edge of the bar. The opposite end portion of the rug is then elevated by suitable means so that the rug hangs flat in its proper shape, and is preferably hung in this manner in the drying room until the sizing is thoroughly dry.

For a more complete understanding of the invention reference may be had to the description thereof which follows and to the drawing of which,

Figure 1 is an elevation of a rug hung up with a device embodying the invention attached to its lower end edge.

Figure 2 is a fragmentary elevation of a portion of Figure 1 on a larger scale.

Figure 3 is a section on the line 3—3 of Figure 2.

Figure 4 is an end elevation of the gripping end portions of one of the clamps.

As shown in Figure 1, a rug 10 may be hoisted by a hoisting means consisting of a bar 11 having a series of sharp points 12 which penetrate the marginal portion at one end of the rug. At the opposite end of the rug the edge 15 is brought into abutting contact with the straight edge 16 of a bar 20 which is preferably rigid and may be heavy in itself or may have suitable weights attached thereto. The form illustrated in the drawing may be an iron bar so that it possesses considerable weight in itself. Arranged along the bar 20 are a series of clamps 21, six such clamps being shown in Figure 1. It is evident that the number of clamps may be varied as desired. Each clamp may consist of a lower jaw member 25 secured to the under face of the bar 20 as by a screw 26. The lower jaw 25 has a portion 27 projecting beyond the edge 16 of the bar so as to be in position to grip the marginal portion of a rug. The opposite end of the jaw 25 projects beyond the opposite edge of the bar 20 and is provided with a hinge 28 on which is rockably attached an upper jaw 30. This upper jaw also has a portion 31 projecting beyond the straight edge 16 of the bar so that the gripping ends of the projecting portions of the jaws 25 and 30 are opposite to each other. As shown in Figure 4, the gripping portion 27 of the jaw 25 may be provided with a pair of blunt teeth 35 projecting toward the opposite jaw and having round ends adapted to engage spaced points on a ridge 36 projecting from the end portion 31 of the upper jaw 30. Thus each pair of jaws grips the rug firmly in two small area, minimizing the danger of tearing or injuring the rug, but not interfering with the drying of the sizing on the lower marginal portion of the rug. To facilitate the operation of setting up on the clamps 21 so as to grip a rug which may be between the gripping ends of the jaws, a draw bolt 40 is passed through the jaws at a point between the hinged ends and the gripping ends, this bolt having a head 41 engaging against the outer face of the jaw 25. The bolt 40 is provided with a threaded end 42 passing loosely through a hole 43 in the upper jaw 30, and a hole 44 in the bar 20, a wing nut 45 being mounted on the threaded end 42 of the bolt so as to engage the outer face of the jaw 30. It is evident that by setting up on the wing nut the gripping ends of the jaws are forced together. As shown in Figure 3 the hole 44 may be made large enough to receive a compression spring 47 which bears against the opposed inner face of the jaws 25 and 30. This spring tends to push the jaws apart and to hold the clamp open. Thus when the wing nut 43 is backed off toward the end of

the threaded portion of the bolt, the spring 47 holds the jaws open so as to facilitate the insertion of the marginal portion of a rug between the gripping ends of the jaws.

In applying this device to the ends of a rug, the device is laid upon the floor with the jaws of the several clamps held open by their special springs. A rug is inserted between the jaws of the several clamps by two operators who grip the corners of the rug and stretch the edge of the rug, holding this stretched edge evenly against the straight edge 16 of the bar. While the rug is held thus, the end clamps 21 are screwed up until they grip the corners of the rug firmly. The operators then proceed from one clamp to the next, pressing the jaws together with one hand and spinning the wing nut with the other hand so as to complete the operation of setting up the clamps as rapidly as possible. In this way the device can be quickly and easily attached to a marginal portion of a rug. The opposite end portion of the rug is stretched and pressed down on the points 12, whereupon the bar 11 is elevated by suitable tackle, illustrated in Figure 1, so that the rug is raised into a vertical position, the bar 20 being attached to and supported by the lower end of the rug. This bar, with the clamps, being of substantial weight, holds the rug stretched flat, the rug being held in its proper shape owing to the fact that the clamps were set up while the lower edge of the rug was in abutting contact with the straight edge 16 of the bar. After the rug has been properly dried, the clamps are readily released by backing off the thumb nuts 45 toward the ends of the bolts 40, whereupon the device is ready for attachment to another rug.

It is evident that many modifications and changes in structure may be made in the embodiment herein described and illustrated without departing from the spirit or scope of the invention as defined in the following claims.

I claim:

1. A device of the class described comprising a bar of substantial weight having a straight edge, and a plurality of clamps spaced along said bar, each said clamp having a jaw member secured directly to said bar with its gripping portion projecting beyond said edge, a second jaw member hinged to the first jaw member and having its gripping portion projecting beyond said edge, a draw-bolt through said members between the hinged ends and gripping ends thereof, a nut on said bolt abutting the outer surface of one of said members, and a compression spring surrounding said bolt between said members.

2. A rug stretching device, comprising a bar of substantial weight having a straight edge and a series of spaced holes, and a clamp at each said hole, each clamp having a pair of jaws hinged together with gripping portions projecting beyond said edge, a draw bolt for each clamp extending through both jaws and the corresponding hole in the bar, a nut on said bolt, and a compression spring loosely fitted in said hole between the jaws.

3. A device of the class described, comprising a bar of substantial weight having a straight edge, a plurality of clamps spaced along said bar, each said clamp including a pair of jaws disposed one on each side of the bar, said jaws projecting forward beyond said straight edge of the bar for gripping engagement with a rug or the like abutting said edge, and means engaging said jaws rearwardly of said edge to hold said jaws in clamping relation.

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