

No. 708,974.

Patented Sept. 9, 1902.

M. E. SHINN.
CARPET STRETCHER.
(Application filed Apr. 15, 1901.)

(No Model.)

Fig. 1.

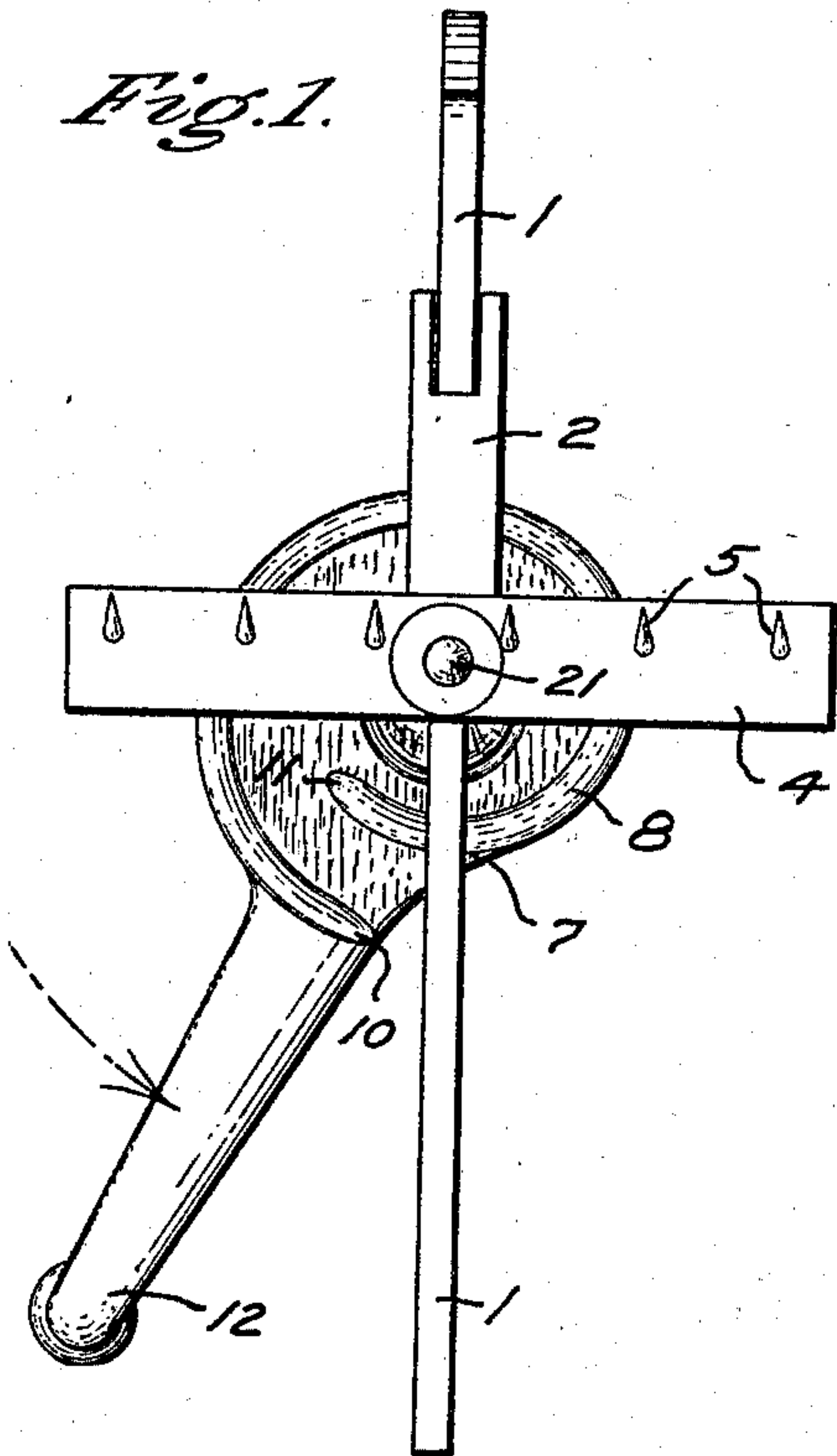
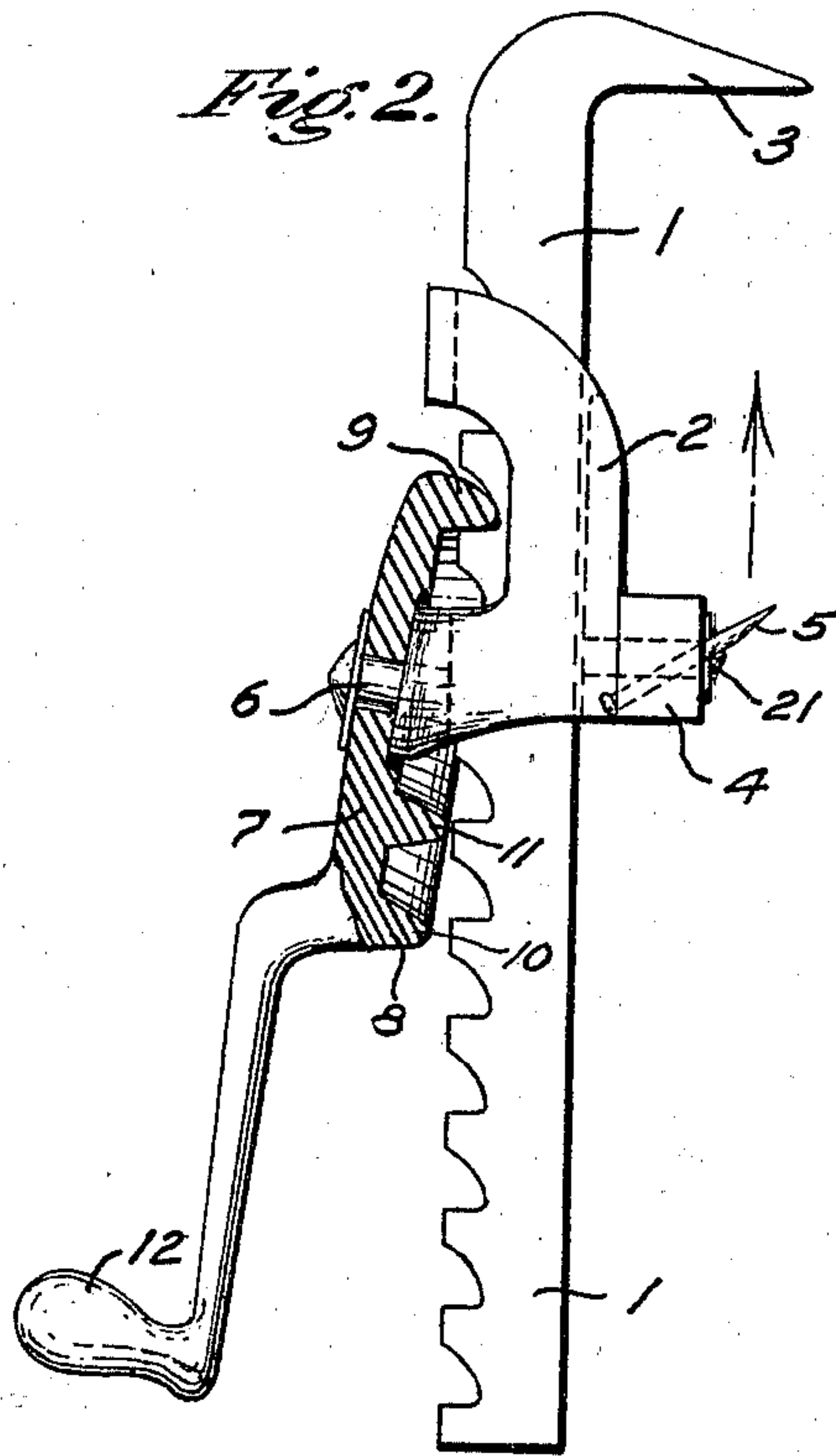


Fig. 2.



WITNESSES:

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MARTIN E. SHINN, OF CHICAGO, ILLINOIS, ASSIGNOR TO FREDERICK J. HERBERT, OF CHICAGO, ILLINOIS.

CARPET-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 708,974, dated September 9, 1902

Application filed April 15, 1901. Serial No. 55,942. (No model.)

To all whom it may concern:

Be it known that I, MARTIN E. SHINN, a citizen of the United States of America, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Carpet-Stretchers, of which the following is a specification.

The main object of my invention is to provide a new and improved form of self-locking carpet-stretcher, which is simple, compact, and inexpensive. I accomplish this object by the device shown in the accompanying drawings, in which—

Figure 1 is a bottom plan of a carpet-stretcher embodying my invention. Fig. 2 is a side elevation of the same, partly broken away.

In the form shown, 1 is a shank having its end 3 bent at right angles to its body and pointed and having a series of rack-teeth on the side opposite to the point 3.

2 is a sleeve encircling the body 1 of the rack and slidable thereon, having the bar 4 pivoted at 21 on its lower side. The bar 4 is provided with claws 5 for gripping a carpet. Pivoted at 6 on the side of the sleeve 2 opposite the bar 4 is the cam 7, comprising a plate having on its lower face the spiral thread 8. The cam 7 is tilted at an angle to the rack 1, so that its spiral thread is in mesh with one of the teeth of said rack, as at 9, while the opposite part of said thread will freely pass above the teeth of said rack. The ends 10 and 11 of the spiral thread are spaced apart a distance equal to the spacing of the teeth on the rack 1. It will thus be seen that one revolution of the cam 7 will drive the sleeve 2 along the rack 1 a distance equal to said tooth-space.

12 is a handle rigidly connected with the cam 7, by means of which the cam may be given its rotation.

To operate my device, the bar 4 is attached to the edge of the carpet by means of the pins 5. The point 3 of the member 1 is inserted into a crack between the boards of the floor. Then by turning the handle 12 in the direction indicated by the arrow in Fig. 1 the cam 7 will be turned in the same direction and will cause the sleeve 2 to move in the di-

rection shown by the arrow in Fig. 2. Thus it will be seen that for each revolution of the cam 7 the carpet will be stretched a distance equal to the pitch of the rack.

When it is desired to stretch a bias edge of the carpet, as is the case in a bay-window or similar place, the bar 4 may be secured along the edge of the carpet, while the shank 1 extends in the direction of the grain. This will permit of stretching the carpet without twisting it, as might be the case if the bar 4 were rigidly secured at right angles to the said shank.

It will be seen that the pressure between the spiral thread 8 and the rack is always about normal to the curvature of said spiral thread, thus making the device self-locking against relative movement of the rack 1 and the sleeve 2. When the device is not in use, the bar 4 may be turned on its pivotal connection into alinement with the shank 1, thus bringing the device into compact form suitable for storage.

It will be understood that some of the details shown may be modified in various ways without departing from the spirit of my invention. I therefore do not confine myself to such details, except as hereinafter limited in the claims.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a carpet-stretcher, the combination of a shank having on its upper face a series of rack-teeth and having at one end a downwardly-projecting claw, a sleeve having an opening extending entirely through the same to receive said shank and permit its projection through the sleeve at either end, and being longitudinally slidable along said shank, a plate pivoted on said sleeve at an angle to said shank and having thereon a spiral thread in mesh with the teeth on said shank, a handle for revolving said plate, and a bar pivoted to the under part of said sleeve below and near said plate and having thereon a number of downwardly-projecting claws co-acting with the claw on said shank.

2. In a carpet-stretcher, the combination of a shank having on its upper face a series of rack-teeth and having at one end and integral therewith a downwardly-projecting

claw, a sleeve having an opening extending entirely through the same to receive said shank and permit its projection through the sleeve at either end, and being longitudinally slidable along said shank, a plate pivoted on said sleeve at an angle to said shank and having thereon a spiral thread in mesh with the teeth on said shank, a handle for revolving said plate, and a bar secured to the under part of said sleeve below and near said plate and having thereon a number of downwardly-projecting claws coacting with the claw on said shank.

3. A carpet-stretcher comprising a flattened shank 1 having one end bent downwardly and sharpened to form the integral claw 3 and having a series of rack-teeth on the upper edge of said shank; the sleeve 2 through which said shank projects at both ends, having an opening through its upper part to expose the rack-teeth therein; the toothed bar 4 pivoted to the under side of the sleeve 2; and the plate 7 having a spiral thread on its under face, having a handle and being

pivoted to said sleeve on an incline with part of said spiral thread in mesh with the teeth exposed through said opening.

4. In a carpet-stretcher, the combination of a shank having on its upper face a series of rack-teeth and having at one end a downwardly-projecting claw, a sleeve longitudinally slidable along said shank, a plate pivoted on said sleeve at an angle to said shank and having thereon a spiral thread in mesh with the teeth on said shank, a handle for revolving said plate, and a bar pivoted to the under part of said sleeve below and near said plate and having thereon a number of downwardly-projecting claws coacting with the claw on said shank, said bar being adapted to be turned at any angle to said shank or substantially parallel with same.

Signed at Chicago this 10th day of April, 1901.

MARTIN E. SHINN.

Witnesses:

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H. P. SIMONTON.