

UNITED STATES PATENT OFFICE.

LEWIS W. RIVERS, OF SALT LAKE CITY, UTAH TERRITORY.

IMPROVEMENT IN CARPET-STRETCHERS.

Specification forming part of Letters Patent No. **192,599**, dated July 3, 1877; application filed February 12, 1877.

To all whom it may concern:

Be it known that I, LEWIS WALDO RIVERS, of Salt Lake City, in the county of Salt Lake and Territory of Utah, have invented a new and useful Improvement in Carpet-Stretchers, of which the following is a specification:

Figure 1 is a side view of my improved machine. Fig. 2 is a detailed front view of the swinging arm and jaw, lower jaw, and feet.

Letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved carpet-stretcher, which shall be simple in construction, light, strong, durable, convenient in use, saving of time, and effective in operation, stretching either carpet or matting tight, and holding it securely while the operator is driving stay-tacks.

The invention consists in an improved carpet-stretcher, formed of the U-bar, the stationary jaw, the swinging arm and jaw, the arm or lug, the lever provided with a sharp lower end, curved and spurred, the spring and arm with ratchet-teeth, the pointed feet to the lower jaw of the U-bar, and the foot-rest on the top of the U-bar, the same being an improvement on my patent of July 25, 1876, No. 180,272.

A is the U-shaped bar, of iron or steel, to the lower arm of which is attached a wide jaw, B. To the other arm of the U-bar A is pivoted an arm, C, to the lower end of which is attached a jaw, D. The faces of the jaws D B are grooved or corrugated, to enable them to take firm hold of the carpet without tearing it, and the arm C is made of such a length that the strain upon the carpet will draw the said jaws more firmly together.

Upon the top of the U-bar A is formed a rasp-faced rest, I, for the foot of the operator. Upon the bend of the bar A is formed an arm or lug, E, which is slotted to receive the lever F, which is pivoted to it by a pin or bolt. The lower end of the lever F is curved forward, and made sharp, to cause it to enter the floor easily, and prevent its slipping.

At a convenient distance upon the lever F, above the point where it is pivoted to the lug E, are two spurs, J, upon which the arm G,

with ratchets, one end of which is pivoted to the A bar, is pressed when the lever F is to be locked in any desired position. To the bottom of the jaw B is attached two pointed feet, H, pointing forward, which prevents the machine slipping back while a new leverage is being taken with the lever F. The spring g, held in position by the spurs K K, raises the ratchet-arm G, thus preventing its interfering with action of the lever F.

In using the stretcher, the carpet is placed between the jaws B D, and the lower end of the arm C pressed forward to insure a hold on the carpet. The lower end of lever F is inclined forward, and the machine placed upon the floor; then place either foot upon the foot-rest I I, which will force the points of the lever F into the floor. The top or handle of the lever F is forced back or from the carpet, which draws the entire machine with it, and the carpet tight. Should the carpet not be tight enough, retain the foot on the rest, raise the lever F slightly, by the handle, and incline it forward; the feet H H will hold the machine from slipping, being drawn down into the floor by tension of the carpet. Then throw your weight on the foot-rest again; the point of the lever F again penetrates the floor, and the lever F can again be forced back, and thus the carpet be drawn still tighter.

The movement of the lever F can be repeated until the carpet is drawn as tight as required. Having drawn the carpet sufficiently tight, the lever F being inclined back, the foot is changed from the foot-rest I I to the top of the ratchet-arm G, and overcomes the spring g, and forces the arm G down, causing the ratchet-edge to catch on the spur J. The hand and foot can then be removed. The stretcher will remain in position, and hold the carpet firmly, though under great strain. The greater the strain or tension the deeper the points of the feet H H and lever F are drawn into the floor, and the tighter the arm C C wedges the jaw D against the carpet.

As soon as the top of the lever F passes a perpendicular line the tension of the carpet or matting tends to force the points into the floor. Stay-tacks can now be driven.

To release the stretcher, the top of the le-

ver F is forced back sufficiently to allow the spring *g* to lift the arm G clear of the spur J, which releases the lever F.

By pressing the foot on the top of the swinging arm C, the lower end is swung up and the carpet released.

I do not wish to be understood as claiming in this any part of the invention for which a patent was granted to me July 25, 1876, No. 180,272.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

An improved carpet-stretcher, formed of the U-bar A, the stationary jaw B, the pointed feet H, the swinging arm C, the foot-rest I, the lever-bar F, provided with a curved and pointed lower end, and spur J, the slotted arm G with ratchets, the spurs K K, and spring *g*, and the lug or slotted arm E, constructed and operating substantially as hereinbefore described.

L. W. RIVERS.

Witnesses:

H. J. RIVERS,

R. E. AYLESWORTH.