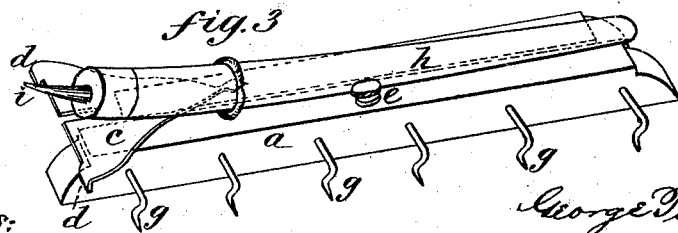
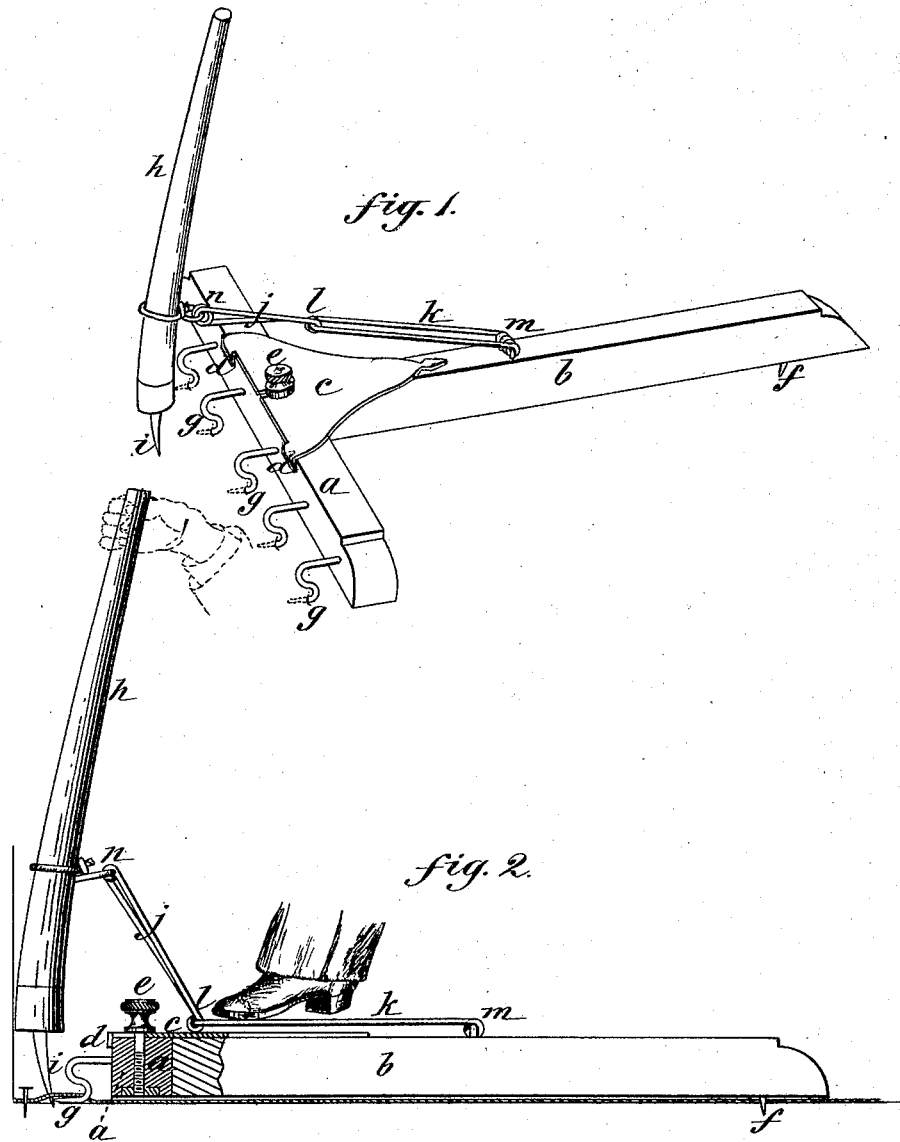


G. PIRRUNG & R. GRONOW.

CARPET-STRETCHERS.

No. 184,170.

Patented Nov. 7, 1876.



Witnesses:
J. West Wagner.
J. H. Lickford

George Pirrung
Rudolph Gronow
Per Johnson and Johnson
Attys.

UNITED STATES PATENT OFFICE.

GEORGE PIRRUNG AND RUDOLPH GRONOW, OF RAVENSWOOD, ILLINOIS.

IMPROVEMENT IN CARPET-STRETCHERS.

Specification forming part of Letters Patent No. **184,170**, dated November 7, 1876; application filed August 5, 1876.

To all whom it may concern:

Be it known that we, GEORGE PIRRUNG and RUDOLPH GRONOW, both of Ravenswood, 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:

Our carpet-stretcher has several points of improvement, which render it effective and particularly advantageous in being used, and is of simple and cheap construction.

The hand pulling-lever and the toothed pushing-bar are connected by a link jointed at both ends and in the middle, by which the lever can take a very short hold of the carpet and draw the teeth of the push-bar over the holding-point of the lever, and thereby work close up to the wall, as the link-connection folds at a point that allows the lever to work on a line with the points of the push-bar and in a vertical position, so that the stretching-points can be brought up with the carpet close against the wall by the position of the lever, and the carpet tacked while so held.

In connection with the middle-jointed link, we have adapted the hand-lever to have a universal or swiveling action upon its link-joint, to allow the lever-point to be turned to one side or the other to draw the carpet in any direction that may be desired, to take out creases and keep it straight. This facility for advancing the pulling-point gives the advantage of the action of the hands in stretching upon any line or point forward, or to either side.

The push-bar has its T-shaped parts connected by a coupling-plate and clamp-screw, so that these parts can be separated and folded with the lever in compact form for transportation and storage.

In the accompanying drawings, Figure 1 represents a view, in perspective, of a carpet-stretcher embracing our improvement; Fig. 2, a vertical section of the same, and Fig. 3 the parts detached and folded.

The push-bar is in two parts, *a b*, joined and secured together in the form of a T by a broad coupling-plate, *c*, which, being fastened

to the bar *b*, extends over the toothed bar *a*, and is braced by front lapping-lips *d*, and secured by a clamp-screw, *e*, to make it as of one piece for use, and to be separated for folding the three parts in line together, as shown in Fig. 3. The bar *b* has a spur-point, *f*, at its rear end, for holding the push-bar from moving back in taking fresh holds with the lever, and the cross-bar *a* has hook-shaped teeth *g*, for taking hold of and stretching the carpet. The teeth are made S-shaped, and take into and draw the carpet against the bent shanks, so as to prevent injuring it. The hand-lever *h* has a point, *i*, by which it is pinned to the floor in advance of the push-bar. It has a middle-jointed link-connection, *j k*, and the bar *b*, the joints *l m* of which are simple hinges, admitting only of flexure in the line of said bar *b*, while the coupling *n* at the lever has a universal or swiveling motion, to allow the lever to be pinned to the floor at any desired point within the swiveling range of the coupling, so that the carpet can be drawn to either side or straight ahead, to keep it true and take out all unevenness. Any suitable form of coupling that will give the proper freedom to the pulling-lever will do. The link *j* is shorter than the link *k*, to allow the lever *h* to be worked close up to the wall, and with the lever-point *i* within the line of the holding-teeth.

It often happens that the action of the stretcher is desired to be out of a direct line, and to one side or the other, to take out some creases or oblique folds, and for this the swiveling lever is especially and advantageously adapted.

The lever-link, being jointed intermediately, as described, allows it to flex up or down and shortens the parts in folding them; but the greatest advantage derived from this intermediate jointing *l* is the facility for using the lever close to and between the stretching-teeth, as by this means the stretcher is brought up close to the wall, and the carpet tacked while being held in this position. In obtaining this advantage the operator can place his foot upon the longest section, *k*, of the link,

to hold it down and thus get all the movement he desires from the lever, as shown in Fig. 2.

We claim—

1. The combination, with the hand-lever *h* and the push-bar *a b*, of the links *j k*, jointed to each other, the lever, and push-bar, the intermediate joint *l* being arranged to flex at a point above and to the rear of the push-bar *a*, as and for the purpose herein set forth.

2. The push-bar *a b*, in combination with the coupling-plate *c*, having the bracing-lips *d d* and the clamp-screw *e*, as and for the purpose herein set forth.

In testimony whereof the said GEORGE PIR-

RUNG has affixed his hand, at Washington, this 14th day of July, A. D. 1876.

GEORGE PIRRUNG.

Witnesses:

A. E. H. JOHNSON,

J. W. HAMILTON JOHNSON.

And at Ravenswood, Illinois, signed by the said RUDOLPH GRONOW this 20th day of July, A. D. 1876.

RUDOLPH GRONOW.

Witnesses:

A. FEHNER,

FELIX PIRRUNG.