No. 674,873. Patented May 28, 1901.

H. OCKSCHIM.

CARPET STRETCHER.

(Application filed Dec. 19, 1900.)

(No Model.)

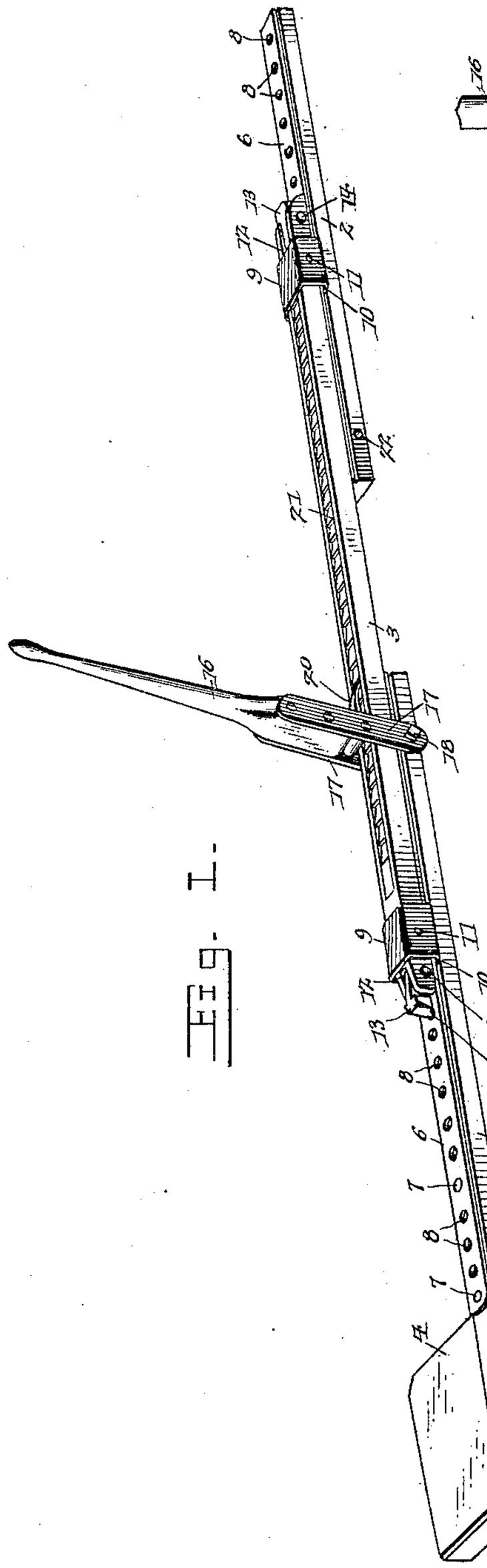

Fig. 1.

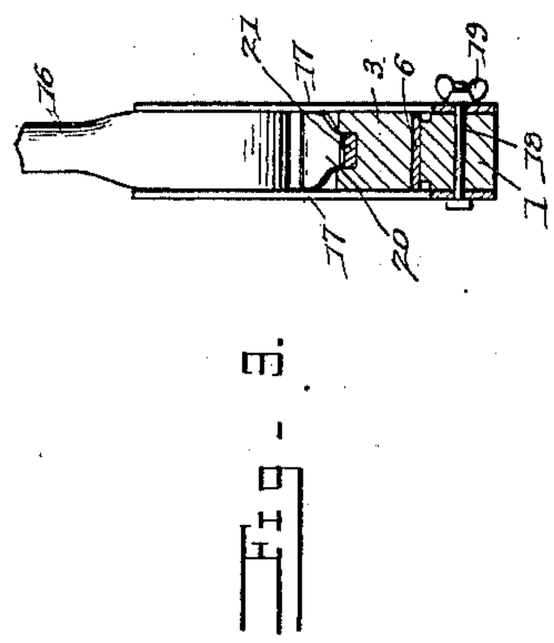

Fig. 3.

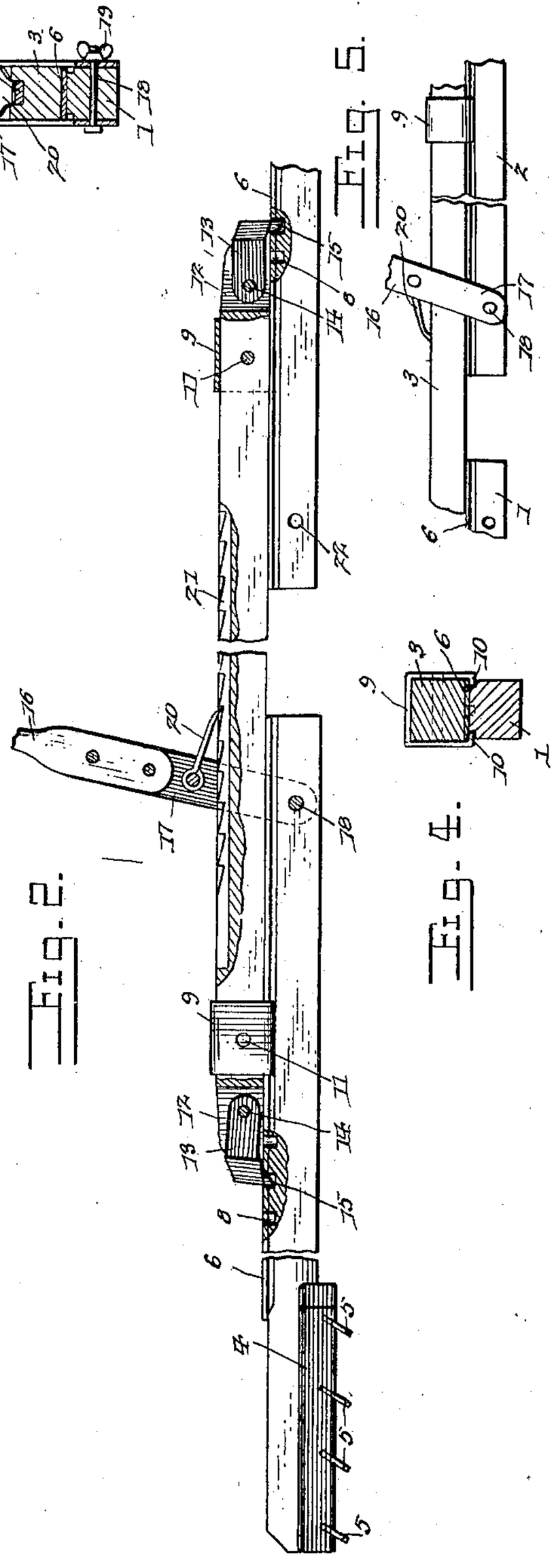

Fig. 2.

Fig. 4.

Witnesses
F. E. Allen.
Hy. S. Shepard.

H. Ockschim. Inventor.
by Cushman & Co.
Attorneys.

UNITED STATES PATENT OFFICE.

HENRY OCKSCHIM, OF BASCOM, OHIO.

CARPET-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 674,873, dated May 28, 1901.

Application filed December 19, 1900. Serial No. 40,436. (No model.)

To all whom it may concern:

Be it known that I, HENRY OCKSCHIM, a citizen of the United States, residing at Bascom, in the county of Seneca and State of Ohio, have invented a new and useful Carpet-Stretcher, of which the following is a specification.

This invention relates to carpet-stretchers, and has for its object to provide an improved device of this character which is arranged for convenient manipulation, so as to stretch the carpet with a step-by-step movement, and also arranged to automatically lock the device in the intervals between the forward movements of the device for the purpose of holding that portion of the carpet which has been previously stretched. It is furthermore designed to have the parts of the device detachable, so as to be packed into compact shape when not in use and also to provide for the convenient assembling of the parts into their operative relation.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view of a carpet-stretcher constructed and arranged in accordance with the present invention. Fig. 2 is an enlarged side elevation thereof, parts being broken away to show the mounting of the operating-lever and the means for automatically locking the device. Fig. 3 is a detail transverse sectional view taken in the plane of the operating-lever. Fig. 4 is a detail transverse sectional view showing one of the slidable connections for the parts of the device. Fig. 5 is a detail side elevation showing a rearrangement of parts.

Like characters of reference designate corresponding parts in all of the figures of the drawings.

In carrying out the present invention there are employed the respective terminal stretching and anchor bars 1 and 2 and the intermediate ratchet-bar 3, which slidably overlaps the inner ends of the terminal bars and is designed to coöperate with a ratchet-lever fulcrumed upon either of the said terminal bars, whereby the stretching-bar may be moved forwardly with a step-by-step movement.

The stretching-bar is preferably formed of wood and is provided at its outer end with a flat plate or laterally-enlarged head 4, which has the forwardly-inclined rows of teeth or fingers 5, designed to take into the carpet being stretched. As indicated in Figs. 3 and 4, the opposite upper longitudinal edges of the stretching-bar are rabbeted, and a metal face-plate 6 is secured to the top of the bar by means of suitable fastenings 7, the plate being equal in width to the width of the bar, thereby coöperating with the rabbeted portions of the bar and forming opposite longitudinal grooves in the sides thereof. The face-plate and the top of the bar are provided with corresponding openings 8, so as to form a rack upon the upper side thereof. The rear terminal or anchor bar is a substantial duplicate of the stretching-bar, with the exception that it is not provided with the stretching-head for engagement with the carpet.

As hereinbefore set forth, the intermediate ratchet-bar slidably overlaps the inner ends of the end bars, and each of its ends is provided with a substantially U-shaped slide 9, (best shown in Fig. 4 of the drawings,) that has the terminals of its opposite sides directed inwardly, so as to form flanges 10. This slide embraces the end of the ratchet-bar and has its terminal flanges slidably inserted into the respective grooves of the adjacent end bar, so as to form a slidable connection between the two bars. Any suitable fastening 11 may be passed transversely through the slide and the ratchet-bar to fixedly connect the slide to the bar. Each slide is located at a suitable distance inwardly from the adjacent end of the bar, and the terminal of the latter is bifurcated, as at 12, for the reception of a ratchet gravity-dog 13, mounted therein upon a transverse pivot-pin 14 and having its free end

projected outwardly through the bifurcation and formed to coöperate with the openings in the upper face of the adjacent terminal bar. The outer free end of the dog is laterally enlarged, so as to weight the same, and from this weighted end depends a tooth 15, which is beveled upon its inner side, so as to permit the adjacent terminal bar sliding freely outward, but locks the same against inward movement.

For operating the device there is provided an upright lever 16, located above the intermediate rack-bar and having the opposite arms 17, that straddle the intermediate portion of the bar 3 and the inner end portion of the stretching-bar 1, to which the arms are pivotally connected by means of a removable pivot-bolt 18, having a winged nut 19 upon one end thereof for the convenient removal of the bolt and the lever. The lower end of the handle portion of the lever terminates above the intermediate bar, and between the sides there is pivotally mounted a gravity ratchet-dog 20, which coöperates with a ratchet plate or bar 21, let into the upper face of the intermediate bar, so as to prevent the dog from wearing the bar.

In using the device to stretch a carpet the outer end of the anchor-bar is placed against the base-board on one wall of a room and the teeth of the stretching-bar are engaged with the loose portion of the carpet, after which the lever is forced rearwardly or in the direction of the arrow shown in Fig. 2 of the drawings, whereby the ratchet-dog 20 becomes the fulcrum of the lever and the lower end of the latter is thrown forwardly, thereby carrying the stretching-bar forwardly, whereby the carpet is stretched. It will be observed that the ratchet-dog at the forward end of the intermediate bar permits of the stretching-bar moving outwardly, but locks the same against inward movement, whereby the stretching-bar is fixedly held while the lever is being thrown forwardly for a new engagement with the intermediate bar. In some instances it may be desirable to have the lever work in the opposite direction, and to arrange for this the lever is detached, the intermediate bar reversed, so that its ratchet-teeth extend in the opposite directions, and the lever is mounted upon the inner end of the anchor-bar, as shown in Fig. 5 of the drawings, the anchor-bar being provided with a transverse opening 22 for the reception of the fulcrum-bolt 18. When thus arranged, the intermediate and stretching bars are locked together and are both moved forwardly by the manipulation of the lever, the rear dog of the intermediate bar coöperating with the ratchet-openings in the upper face of the anchor-bar to prevent rearward slipping of the connected bars. In either arrangement of the device there is a ratchet connection between one end of the intermediate bar and one of the terminal bars and a relatively-fixed longitudinally-adjustable connection between the opposite end of the intermediate bar and the other terminal bar.

What is claimed is—

1. In a carpet-stretcher, a pair of slidably-overlapped bars, one of which has a pair of opposite longitudinal edges rabbeted, and a face-plate applied to the rabbeted side of the bar and overlapping the opposite rabbeted portions forming opposite grooves, a substantially U-shaped slide fixedly connected to the other member and provided with opposite inwardly-directed terminal flanges slidably received within the respective grooves, a carpet-engaging device upon one of the members, and means for moving the bars in opposite directions.

2. In a carpet-stretcher, the combination of slidably-overlapped ratchet-bars, one of which has its upper face provided with a longitudinal series of openings, and its opposite upper edges rabbeted, a face-plate secured to the rabbeted side of the bar, overlapping the rabbeted edges thereof and forming opposite grooves, and also having perforations corresponding to the openings in the bar, a carpet-engaging head upon the bar, the inner end of the other bar being bifurcated, a ratchet-dog mounted within the bifurcation and coöperating with the openings in the former bar, a substantially U-shaped slide fixedly embracing the said other bar and having opposite inwardly-directed terminal flanges slidably fitted in the respective grooves of the former bar, and a ratchet-lever mounted upon one of the bars and coöperating with the other bar.

3. In a carpet-stretcher, terminal ratchet-bars, an intermediate ratchet-bar having its opposite ends slidably overlapping the inner ends of the respective terminal bars, and also constructed to be reversed, ratchet devices carried by the opposite ends of the intermediate bar and coöperating with the respective terminal bars, and an operating ratchet-lever, which is bifurcated to straddle the intermediate bar and the inner end of one of the terminal bars, and has a detachable fulcrum connection with the adjacent terminal bar, the fulcrum being constructed for interchangeable engagement with the inner ends of the terminal bars to accommodate the lever to the relative reversed positions of the intermediate bar.

4. In a carpet-stretcher, the combination of opposite terminal ratchet-bars, an intermediate bar slidably overlapping the inner ends of the terminal bars, and provided with ratchet-teeth, the intermediate bar being constructed to be reversed, opposite terminal ratchet devices carried by the intermediate bar and coöperating with the respective terminal bars, and a ratchet-operating lever coöperating with the ratchet-teeth of the intermediate

bar, and having a detachable fulcrum engagement with the adjacent terminal bar, said fulcrum engagement being constructed for interchangeable application to the terminal bars to accommodate the lever to the relatively-reversed positions of the intermediate bar.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

HENRY OCKSCHIM.

Witnesses:
E. E. WILLIAMS,
LOUIS SKRAUSEWSKY.