

(No Model.)

B. R. STOGSDILL.
CARPET STRETCHER.

No. 558,227.

Patented Apr. 14, 1896.

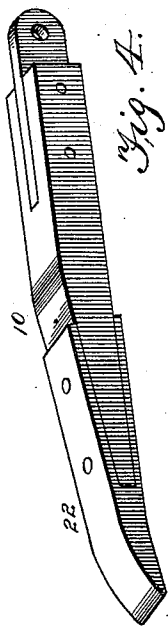


Fig. 4.

Fig. 2.

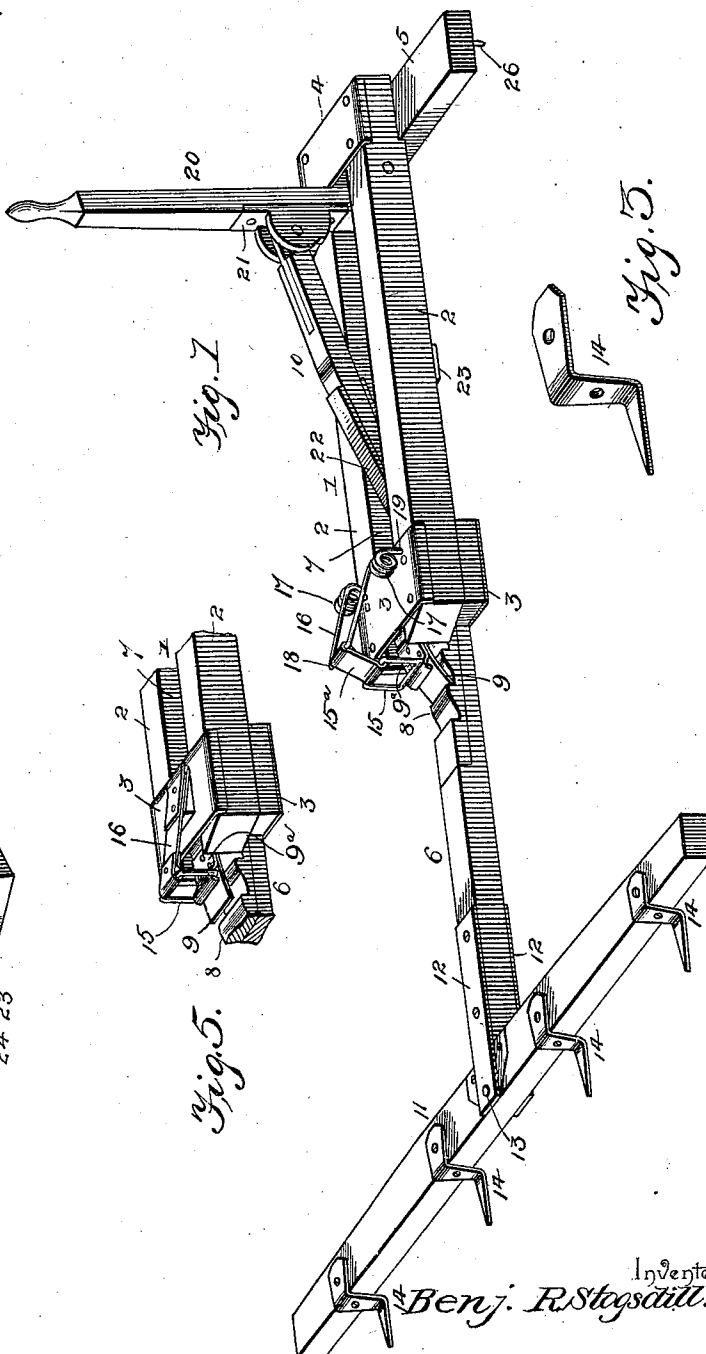
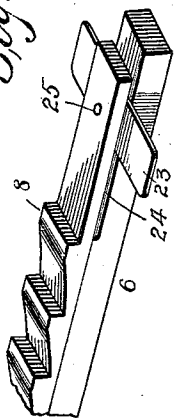
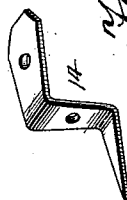


Fig. 1.

Fig. 5.

Fig. 3.



Witnesses

E. H. Monroe.
V. B. Hillyard.

By *his* Attorneys.

Inventor
Benj. R. Stogsdill.

Cash & Co.

UNITED STATES PATENT OFFICE.

BENJAMIN R. STOGSDILL, OF WEBB CITY, MISSOURI.

CARPET-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 558,227, dated April 14, 1896.

Application filed August 22, 1895. Serial No. 560,160. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN R. STOGSDILL, a citizen of the United States, residing at Webb City, in the county of Jasper and State of Missouri, have invented a new and useful Carpet-Stretcher, of which the following is a specification.

This invention relates to carpet-stretching devices which embody in their organization a relatively-fixed and a movable section, an operating-lever, and a detent, and has for its object to improve this class of contrivances and provide an appliance which can be readily folded into a compact form for storing, transporting, or for any other required purpose, and which will be strong, so as to be capable of withstanding a severe strain, easy of manipulation, and susceptible of use without tearing or fraying the carpet, and which will prevent the flying upward of the inner end of the movable section and hold the sections in alinement during the operation of the device and while it is subjected to strain.

Other objects and advantages of the invention will appear from the following description and the drawings hereto attached, and in which—

Figure 1 is a perspective view of a carpet-stretcher constructed in accordance with the present invention. Fig. 2 is a detail view showing the means for preventing the upward movement of the relatively-movable section. Fig. 3 is a detail view of one of the series of teeth provided on the cross-head for engagement with the carpet. Fig. 4 is a detail view of the operating-pawl. Fig. 5 is a detail view of a modification.

The relatively-fixed section 1 comprises parallel bars 2, which are spaced a short distance apart and which are connected at their front ends by plates 3 and at their rear ends by a plate 4 and a foot-bar 5, the latter extending a short distance on each side of the bars 2 for the feet of the user to obtain a purchase upon, so as to hold the device in an operative position. The movable section 6 is a single bar and its inner end portion is adapted to operate in the space 7, formed between the parallel bars 2 and between the upper and lower plates 3, and a ratchet-bar 8 is firmly attached to the top side of the bar or movable section 6, so as to receive the wear of the detent 9 and the pawl 10. A

cross-head 11 is located at the outer end of the section 6 and is secured thereto by means of plates or strap-irons 12, the latter being attached to the top and bottom sides of the section 6 and having their outer end portions projecting beyond the end of the said section 6 and coming upon opposite sides of the cross-head 11 and receiving a bolt 13, by means of which attachment is had between the said cross-head and the plates 12.

The teeth 14 are pointed at their lower ends and extend up in front of and over the top side of the cross-head 11 and are attached to the latter by suitable fastenings passing through the vertical and horizontal portions thereof and into the front and top side of the said cross head. This construction admits of the teeth being easily detached for any purpose and replaced by new ones.

The detent 9 is pivotally supported at its inner end between the bars 2 in any convenient manner, and its outer end is adapted to engage with the teeth of the ratchet-bar 8, so as to hold the section 6 in its advanced position. A plate 9^a is attached at one end to the detent 9, and its opposite end is bent to provide a hook, by means of which the said detent is detachably connected with the link 15 when it is required to hold the said detent out of engagement with the teeth of the ratchet-bar 8. The link 15 has pivotal connection with the spring 16 or with a second link 15^a, which latter is coupled with the said spring. This spring 16 may be flat, as shown in Fig. 5, or may be constructed of wire, as shown in Fig. 1, in which latter case it appears with side coils 17, connected by a loop 18 and having oppositely-extending arms 19, which enter the bars 2 and form positive means of attachment of the spring therewith.

The operating-lever 20 is pivotally supported between the bars 2 in proximate relation to the foot-bar 5 and has a bracket-casting 21 near its pivoted end, to which the pawl 10 has pivotal connection. By this disposition of the operating-lever the user can perch upon the foot-bar 5 and manipulate the device and stretch the carpet. The pawl 10 is reinforced at its operating end by a metal point 22, which is cleft at its inner end to receive the outer extremity of the main body of the pawl and to which it is attached in any convenient manner.

A turn-bar 23 is located at the inner end of the section 6 and is fitted in a seat or recess 24, formed between the rear end of the ratchet-bar 8 and the opposing portion of the section 6, and is held in place by means of a bolt 25, passing through registering openings formed in the parts 8, 6, and 23. When it is required to insert the section 6 or remove the same from the section 1, the bar 23 is turned upon the bolt 25, so as to lie parallel with the said section 6, and when the latter is in working position the said bar 23 is turned to sit crosswise of the bars 2, thereby preventing the inner end of the said section 6 from flying upward when the device is performing the work of stretching a carpet.

The operation of the invention is not different from others of its class; but it may be well to state that the foot-bar 5 is not intended to obtain a purchase against the surbase of a room, but is designed to occupy a nearly central position, and is held from slipping by providing spikes or prongs 26 on its under side which engage with the floor and are held so engaged by the weight of the user placed upon the foot-bar 5.

When the device is in service and stretching a carpet, the detent 9 is disengaged from the link 15, as shown in Fig. 1, and after the carpet has been stretched and tacked the link 15 is engaged with the detent 9 by having its lower end sprung under the hooked end of the plate 9^a, and upon moving the lever 20 forward, so as to disengage the detent from the tooth of the ratchet-bar 8 with which it is in engagement, the spring 16 will regain itself and lift the detent out of the path of the teeth of the ratchet-bar and permit the section 6 to move backward, so as to disengage the teeth 14 from the carpet.

When the stretcher is in use, the link 15 is disengaged from the detent 9, thereby permitting the latter to engage with the teeth of the ratchet-bar and hold the latter in its forward adjustment against the tension of the carpet, as will be readily understood.

Changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed as new is—

1. A carpet-stretcher comprising a relatively-fixed section formed of two parallel bars spaced apart and connected at their opposite ends, and having a foot-bar, a movable section having a cross-head provided with engaging-teeth, and having a ratchet-bar at its inner end, and adapted to operate between the parallel bars of the fixed section, a detent for holding the sections extended, a lift-spring to be detachably connected with the detent, an operating-lever fulcrumed to the fixed section and within convenient reach of the foot-bar, and a pawl having connection with the operating-lever and adapted to engage with the

teeth of the ratchet-bar on the movable section, substantially as set forth.

2. A carpet-stretcher comprising a relatively-fixed section formed of two parallel bars spaced apart and connected at their opposite ends, and having a foot-bar, a movable section having a cross-head provided with engaging-teeth, and having a ratchet-bar at its inner end, and adapted to operate between the parallel bars of the fixed section, a short bar having pivotal connection midway between its ends to the movable section and adapted to be turned so as to lie parallel with the movable section or crosswise of the bars of the fixed section, whereby the inner end of the movable section is held from flying upward while in operation, a detent for holding the sections extended, an operating-lever fulcrumed to the fixed section and within convenient reach of the foot-bar, and a pawl having connection with the operating-lever and adapted to engage with the teeth of the ratchet-bar on the movable section, substantially as set forth.

3. A carpet-stretcher comprising a relatively-fixed section formed of two parallel bars spaced apart and connected at their opposite ends, and having a foot-bar, a movable section having a cross-head provided with engaging-teeth, and having a ratchet-bar at its inner end, and adapted to operate between the parallel bars of the fixed section, a detent for holding the sections extended, a lift-spring, a link carried by the said spring and adapted to be detachably connected with the detent, an operating-lever fulcrumed to the fixed section and within convenient reach of the foot-bar, and a pawl having connection with the operating-lever and adapted to engage with the teeth of the ratchet-bar on the movable section, substantially as specified.

4. A carpet-stretcher comprising a relatively-fixed section formed of two parallel bars spaced apart and connected at their opposite ends, and having a foot-bar provided on its lower face with engaging-spurs, a movable section having a cross-head provided with engaging-teeth, and having a ratchet-bar at its inner end, and adapted to operate between the parallel bars of the fixed section, a detent for holding the sections extended, a lift-spring, a link carried by the said spring and adapted to be detachably connected with the detent, an operating-lever fulcrumed to the fixed section and within convenient reach of the foot-bar, and a pawl having connection with the operating-lever and adapted to engage with the teeth of the ratchet-bar on the movable section, substantially as specified.

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

BENJAMIN R. STOGSDILL.

Witnesses:

D. M. ROSE,
M. PLATNER.