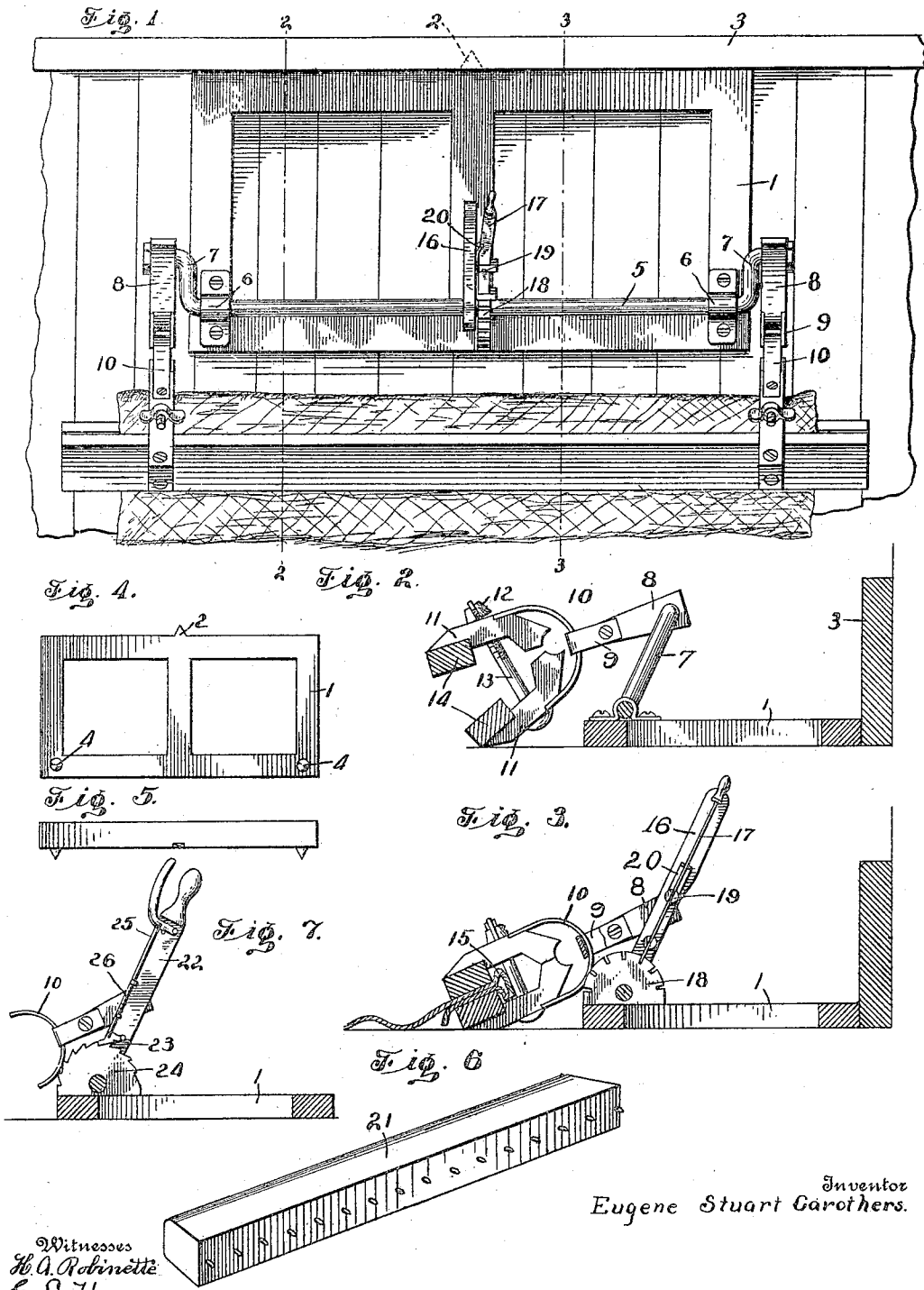


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E. S. CAROTHERS.
CARPET STRETCHER.

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CARPET-STRETCHER.

No. 812,405.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, EUGENE STUART CAROTHERS, a citizen of the United States, residing at Westpoint, in the county of Clay and State of Mississippi, have invented certain new and useful Improvements in Carpet-Stretchers, of which the following is a specification.

My invention relates to an improved carpet-stretcher; and it consists in the constructions, combinations, and arrangements herein described and claimed.

An object of my invention is to provide an inexpensive and durable construction which can be conveniently employed for quickly and evenly stretching a carpet or other covering while in position upon the floor.

A further object of my invention is to provide an improved construction by which a breadth of carpet will be evenly stretched at all points across its width, thereby insuring a uniform stretching of the carpet and causing it to lie evenly on the floor.

A further object of my invention is to provide an improved carpet-stretcher in which the clamp is adapted to securely hold the carpet without danger of injury thereto and in which a resilient or yielding means is provided for equalizing the stretching force exerted on the clamp and preventing injurious strain on the carpet.

Referring to the accompanying drawings, forming a part of this application and in which similar reference-symbols indicate corresponding parts in the several views, Figure 1 is a plan view illustrating one embodiment of my invention with a breadth of carpet secured in the clamp in position for being stretched. Fig. 2 is a sectional view taken on the line 2 2 of Fig. 1. Fig. 3 is a sectional view taken on the line 3 3 of Fig. 1. Fig. 4 is a bottom plan view, on a reduced scale, of the anchor or securing frame shown in Fig. 1. Fig. 5 is a side elevation of the construction shown in Fig. 4. Fig. 6 is a perspective view of a claw-bar for temporarily retaining the carpet in stretched position after removal of the stretcher; and Fig. 7 is a view similar to Fig. 3, illustrating a modified construction.

Referring especially to Figs. 1 to 6 of the drawings, 1 indicates a securing frame or anchor, provided at its forward end with a tooth or lug 2 for extending into or beneath the usual mop-board 3 and with two teeth 4 on its under surface for engaging the floor. A spindle 5 is journaled in bearings 6 6 on the

frame 1 and provided with parallel cranks 7 7 at its respective ends. Each crank is pivotally secured to a link 8, formed with an eye 9 for engaging a resilient or yielding connecting element 10, secured to the clamp. In the construction illustrated the yielding connection is shown comprising a flat spring constructed to separate the jaws of the clamp when the lock-nut 12 of the latter is loosened, as shown especially in Fig. 2. These flat springs constitute a very satisfactory construction, since they act to normally maintain the jaws of the clamp separated, and as they yield in proportion to the stretching strain exerted upon them they serve also to equalize the stretching effect exerted at the two ends of the clamp and thereby prevent uneven stretching or injurious strain on the carpet. My preferred form of clamp comprises two members 11, secured to the ends of each flat spring 10 and carrying plane jaws 14 for clamping the carpet. The clamping-jaws may be formed to extend across the entire width of a breadth of carpet, if desired. A locking-bolt 13 extends through each pair of clamp members and carries a thumb-nut 12 for forcing the jaws into clamping engagement with the carpet. As shown especially in Fig. 3, space is provided for permitting a fold 15 of the carpet to extend beyond the clamping-jaws to prevent injury of the fabric. This constitutes a very advantageous construction, since it insures a positive and secure clamping of the carpet without danger of injury thereto. An operating-handle 16 is secured to the spindle 5 and carries a suitable hand-latch 17 in position to engage a notched sector 18, supported on the anchor 1. As shown especially in Figs. 1 and 3, the hand-latch is pivotally supported at 19 on the operating-handle and provided with a spring 20 for normally maintaining it in engagement with the notched sector. The operating-handle 16, spindle 5, cranks 7, and links 8 thus constitute an operating means for exerting a stretching force on the connecting element 10 of the clamp.

In the operation of my invention, the frame 1 is securely anchored by inserting its tooth 2 into or beneath the mop-board and pressing the teeth 4 into the flooring. The operating-handle 16 is swung rearwardly to shift the clamp away from the frame 1, and the carpet to be stretched is clamped between the jaws 14. The operating-handle is then swung forward sufficiently to exert the desired stretch-

ing force on the carpet and locked in such position by engagement of its latch with the notched sector 18. The teeth of the claw-bar 21 are then pressed through the carpet into the flooring adjacent the clamp for temporarily retaining the carpet in stretched position until it can be tacked after removal of the clamp. The clamp is then loosened to release the carpet and the stretcher removed, after which the carpet is tacked in position.

Fig. 7 illustrates a modified form of operating-handle 22, pivotally supporting a pawl 23 in position to engage a segment of a ratchet-wheel 24, secured to the frame 1, an actuating-rod 25 for said pawl being provided with a spring 26 for normally maintaining the pawl in engagement with the ratchet.

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

1. In a carpet-stretcher, the combination of a clamp comprising jaws, means for clamping said jaws together, a plurality of flat springs carrying said jaws and tending to maintain them in open position, an operating means for said clamp provided with a plurality of cranks, and link connections between said cranks and flat springs, substantially as described.

2. In a carpet-stretcher, the combination of a clamp comprising jaws, means for clamp-

ing said jaws together, a plurality of resilient means connecting said jaws, an operating means for said clamp provided with a plurality of cranks, and link connections between said cranks and resilient means, substantially as described.

3. In a carpet-stretcher, the combination of a clamp comprising jaws, means for clamping said jaws together, a plurality of resilient means connecting said jaws, an operating means for said clamp provided with a plurality of cranks, common means for actuating said several cranks, and link connections between said cranks and resilient means, substantially as described.

4. In a carpet-stretcher, the combination of a clamp comprising jaws, means for clamping said jaws together, a plurality of flat springs carrying said jaws and tending to maintain them in open position, an operating means for said clamp provided with a plurality of cranks, a common means for actuating said several cranks, and link connections between said cranks and flat springs, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

EUGENE STUART CAROTHERS.

Witnesses:

ERLE MOORE,

JENNIE E. CUNNINGHAM.