(No Model.)

E. WILCOX.

CARPET STRETCHER.

No. 492,857. Patented Mar. 7, 1893.

Fig. 1.

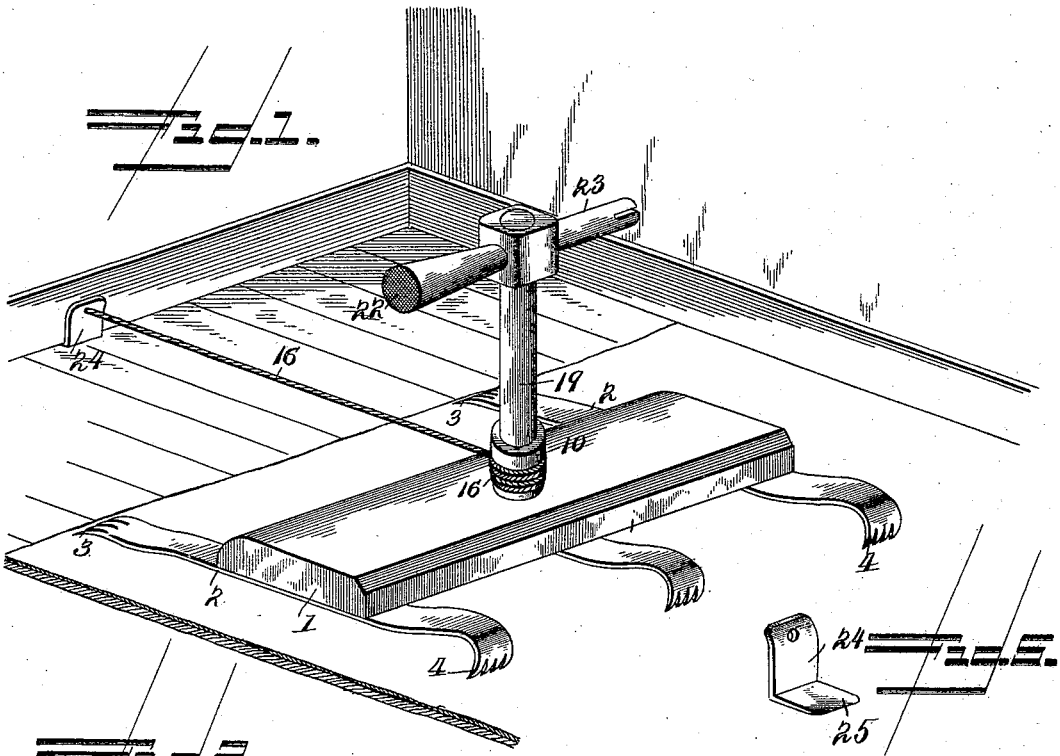


Fig. 5.

Fig. 2.

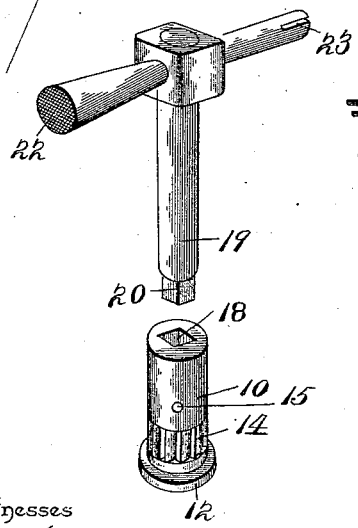


Fig. 3.

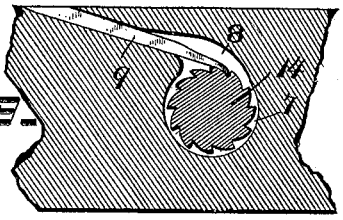
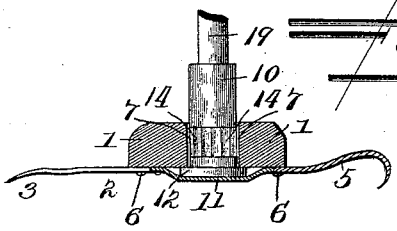


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

ELIZA WILCOX, OF ASHLEY, MICHIGAN.

CARPET-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 492,857, dated March 7, 1893.

Application filed July 16, 1892. Serial No. 440,232. (No model.)

To all whom it may concern:

Be it known that I, ELIZA WILCOX, a citizen of the United States, residing at Ashley, in the county of Gratiot and State of Michigan, have invented a new and useful Carpet-Stretcher, of which the following is a specification.

My invention relates to improvements in carpet-stretchers of that class comprising a claw-bar, a windlass thereon, and an anchoring device, flexibly connected with the windlass and adapted for connection with the mop-board surrounding the floor upon which the carpet is to be laid.

The objects of my present invention are to provide a carpet-stretcher of this class which embodies simplicity, strength and durability, may be easily operated, and is extremely effective. Furthermore, to provide means for operating the windless for stretching the carpet and to adapt the same means thus provided for driving the tacks and for subsequently withdrawing the anchor.

With these and other objects in view the invention consists in certain features of construction hereinafter specified and particularly pointed out in the claims.

Referring to the drawings: Figure 1 is a perspective view of the carpet-stretcher constructed in accordance with my invention. Fig. 2 is a detail in perspective of the combined handle for operating the windlass, hammer, and anchor-drawer. Fig. 3 is a horizontal longitudinal section of the claw-bar. Fig. 4 is a vertical transverse section of the same. Fig. 5 is a detail in perspective of the anchor.

Like numerals of reference indicate like parts in all the figures of the drawings.

The claw-bar 1 is preferably formed of wood, and is oblong in plan, and at its ends, upon its under side, has secured metal straps 2, whose front ends are downwardly bent and serrated to form front claws 3 for pushing the carpet and whose rear ends, beyond the claw-bar, are curved and downwardly bent to form pulling claws 4. A similar pulling claw 5 is secured to the under side of the claw-bar between the straps 2, but does not project in front to form the pushing claws. These straps are secured in position by means of screws 6, passed upward therethrough into the claw-bar. A circular opening 7 is formed in the center of the claw-bar, vertically through the same, and a diagonal bore 8, communicating with the opening, is likewise formed in the bar and extends from one edge of the same inward. A steel pawl 9 is located in the bore, and its inner or operating end projects into the opening.

10 designates a cylindrical windlass, which is passed from the under side upward through the opening, the upper end of the windlass projecting above the claw-bar. A metal plate 11 is secured to the under side of the claw-bar and serves as a lower bearing for the windlass, preventing a downward withdrawal, while a shoulder 12, formed on the lower end of the windlass, bears against the under side of the claw-bar and prevents an upward withdrawal. In this manner the windlass, as will be observed, is locked within the claw-bar and yet is capable of free revolution therein. Within the opening the windlass is provided with an annular series of inclined ratchet-teeth 14, which engage with the pawl when the windlass is rotated in one direction, but ride lightly over the same when turned or rotated in the opposite direction. Immediately above the claw-bar the windlass has a transverse opening 15, formed therein, and a light rope or other flexible connection 16 is secured within the same, whereby it may be wound upon the windlass by a rotation of the latter. The upper end of the windlass is provided with a square mortise 18, and in the same takes removably the lower end of a handle 19. This handle has a tenon 20, formed in its lower end for the purpose of making this connection, and is provided at its upper end with a transverse head, which also serves as a grip for the hand while rotating the handle and windlass. The head, at one side of the handle, is enlarged to form a hammer-face 22, while its opposite end is slotted to form an approximate claw 23.

24 designates the L-shaped anchor, which is connected to the free end of the cord and has its lower end reduced or beveled to form a driving-point or edge 25, for taking between the lower edge of the mop-board and the floor.

In operation the anchor is first driven by the hammer between the mop-board and the floor, after which the claw-bar is placed in

position upon the carpet; the handle is inserted in the mortise of the windlass and is rotated by hand so that the rope is wound thereon and the free edge of the carpet drawn toward the mop-board. As the rope is wound upon the windlass, the latter is locked by the pawl against retrogression and the winding operation is continued until the carpet is placed under sufficient tension. At this point the handle may be removed from the windlass and employed as a hammer for driving the tacks set into the carpet. After the tacks have been driven and it is desired to move the stretcher to another point along the edge of the carpet, the handle is reversed and its claw employed to withdraw the anchor.

It will be observed that the claw is not of the ordinary construction, but is simply a cylindrical portion having a kerf or slot which is disposed at an angle to the longitudinal disposition of the handle so that when engaged with the vertical portion of the anchor when the latter is in position, an upward push upon the upper end of the handle will serve to pry or withdraw the anchor from its position. After the carpet has been stretched and the anchor removed from the mop-board, the rope 16 may be readily unwound from the spool or windlass, or the stretcher rotated so as to unwind the rope.

Having described my invention, what I claim is—

1. In a carpet-stretcher, the combination with a claw-bar having an opening, and bored tangentially with relation to the same, a cylindrical windlass mounted in the opening and provided above the claw-bar with teeth, a fixed pawl driven in the bore and extending into the opening for engaging the teeth, a cord or rope secured to the windlass, and an anchor connected to the free end of the rope, of a handle removably mounted in the windlass and having its upper end provided with a transverse head forming a handle and hammer for driving the anchor, substantially as specified.

2. In a carpet-stretcher, the combination with a claw-bar having an opening, and bored tangentially with relation to the same, a cylindrical windlass mounted in the opening and provided with teeth, a pawl located in the bore and extending into the opening for engaging the teeth, a cord or rope secured to the windlass, and an anchor connected to the free end of the rope, of a handle removably mounted in the windlass and having its upper end provided with a transverse head and handle combined, one end of which is enlarged to form a hammer-head and the other slotted to form an anchor-engaging claw, substantially as specified.

3. In a carpet-stretcher, the combination with the claw-bar having the cylindrical opening, the bore, the pawl therein, of the cylindrical windlass mounted in the opening and having its lower end provided with an annular shoulder bearing against the under side of the bar and above the same provided with ratchet-teeth, a plate secured to the under side of the bar and passing under and forming a bearing for the lower end of the windlass, an anchoring device, a flexible connection between the same and windlass, and means for rotating the windlass, substantially as specified.

4. In a carpet-stretcher, the combination with the claw-bar having the cylindrical opening, the windlass journaled in the opening, the L-shaped anchor having a driving-point, a flexible rope between the same and windlass, an angular mortise in the upper end of the windlass, of a handle terminating at its lower end in a tenon angular in cross-section and removably fitting the mortise, and a transverse head at the upper end of the handle, one end of which is enlarged to form a hammer-head and the opposite end of which is kerfed at an angle to the length of the handle and adapted to engage with the L-shaped anchor above its driving-point, 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.

ELIZA WILCOX.

Witnesses:
ALBERT I. WILCOX,
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