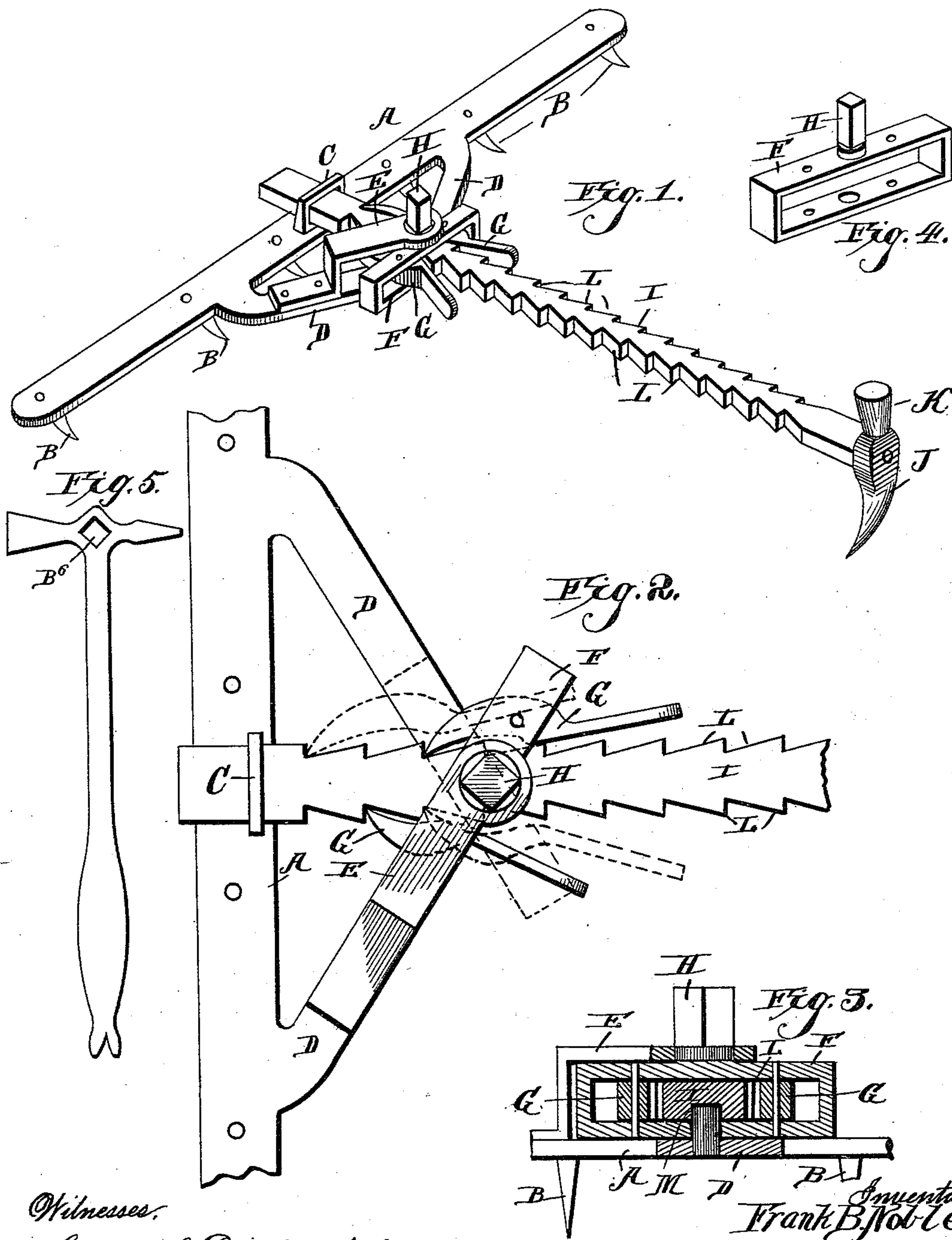


(No Model.)

F. B. NOBLE.
CARPET STRETCHER.

No. 424,495.

Patented Apr. 1, 1890.



Witnesses:
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UNITED STATES PATENT OFFICE.

FRANK BRIDGE NOBLE, OF MONROE, WISCONSIN.

CARPET-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 424,495, dated April 1, 1890.

Application filed March 28, 1889. Renewed February 4, 1890. Serial No. 339,192. (No model.)

To all whom it may concern:

Be it known that I, FRANK BRIDGE NOBLE, a citizen of the United States, residing at Monroe, in the county of Green and State of Wisconsin, have invented new and useful Improvements in Carpet-Stretchers, of which the following is a specification.

My invention relates to improvements in carpet-stretchers; and it consists in certain novel features hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of my improved carpet-stretcher. Fig. 2 is an enlarged plan view of a portion of the device, showing the manner of operating the same; and Fig. 3 is a cross-sectional view. Fig. 4 is a detail view of the ring or loop that carries the pawls. Fig. 5 is a detail view of the hammer with the socket forming a wrench to operate the carpet-stretcher.

Referring to the drawings by letter, A designates the cross-head or stretching-bar, provided on its under side with the depending teeth B, which are adapted to take into the carpet in the operation of the device, as will be readily understood. This cross-head or stretching-bar is provided on its upper side with a guide-loop C, through which the rack-bar passes, and is also provided with an arm D, projecting from its edge, as shown, the said arm D having a bracket E formed on its upper side. Between the end of the bracket E and the upper side of the arm D, I arrange the loop F, in the ends of which I pivot the pawls G. This loop F is pivoted to the upper side of the arm D by a short pivot-pin or stud which projects upward from the said arm through the lower portion of the ring. On its upper side the ring is provided with a post H, which projects through the end of the bracket E, and has an angular extremity adapted to be engaged by a wrench in the operation of the device. The rack-bar I is provided at one end with a securing-point J, which is driven into the floor when the device is to be used to stretch a carpet, and has an enlarged knob K at its upper end to receive the blows of the tool by which it is driven into the floor. The rack-bar is provided on its opposite edges with a series of teeth L, which are engaged by the pawls G, and in its

under side the rack-bar is provided with a longitudinal groove M, which is engaged by the upper end of the stud upon which the lower portion of the loop F is pivoted. The rack-bar passes through the loop F and the guide-loop C, and is prevented from swaying from side to side by the said guide-loop and the pivot-pin engaging the groove M.

In practice the point J is secured in the floor adjacent to the wall, and the teeth B are made to engage the carpet. The post H is then engaged by a wrench and the wrench oscillated, so as to rotate the said post alternately in contrary directions. It will be observed upon reference to the drawings that the pawl G at one end of the loop F engages the rack-bar, while the pawl at the other end of the ring is disengaged therefrom. As the post is rotated in one direction, the pawl then in engagement with the rack-bar acts as a lever to cause the said ring to swing toward the securing-point of the rack-bar, and consequently draw the cross-head or stretching-bar toward the said point and thereby stretch the carpet. When the post has been rotated to its fullest extent in one direction, it is then rotated in the contrary direction, and the pawl, formally disengaged from the rack-bar, will then engage the same and in its turn serve as a lever to force the ring forward. It will thus be seen that the said pawls act alternately to draw the cross-head forward, so that the carpet is effectually stretched.

My device is very compactly arranged, and is composed of very few parts, which are not liable to get out of order, and which present no projecting surfaces which are liable to be broken.

In Fig. 5 is shown the combined wrench and hammer preferably employed in operating the stretcher. The hammer is of the usual style, with the exception that it has a socket B⁶ in its head, said socket forming a wrench, by means of which the loop F, carrying the pawls, may be operated.

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

1. The combination, with the cross-head and the rack-bar, of the horizontally-vibrating loop mounted on the cross-head and the pawls pivoted in the opposite ends of the loop and

engaging the opposite sides of the rack-bar, as set forth.

2. The combination, with the cross-head and the rack-bar having the longitudinal groove
5 in its under side, of the guide-loop on the upper side of the cross-head through which the rack-bar passes, the loop pivoted on an arm of the cross-head and having an angular post on its upper side, the lower pivot of the loop
10 engaging the longitudinal groove of the rack-bar, and the pawls pivoted in the ends of the loop and engaging the sides of the rack-bar, as set forth.

3. The combination of the cross-head having
15 the guide-loop C and a bracket E on its upper side, an arm D, having the rack-bar

passing through the loop C and having a longitudinal groove in its under side, the loop pivoted on the cross-head and having an angular post extending through the end of the
20 bracket E, and having its lower pivot engaging the groove in the rack-bar, and the pawls pivoted in the loop and engaging the sides of the rack-bar, as specified.

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

FRANK BRIDGE NOBLE.

Witnesses:

J. A. BRIDGE,
AARON KEISTER.