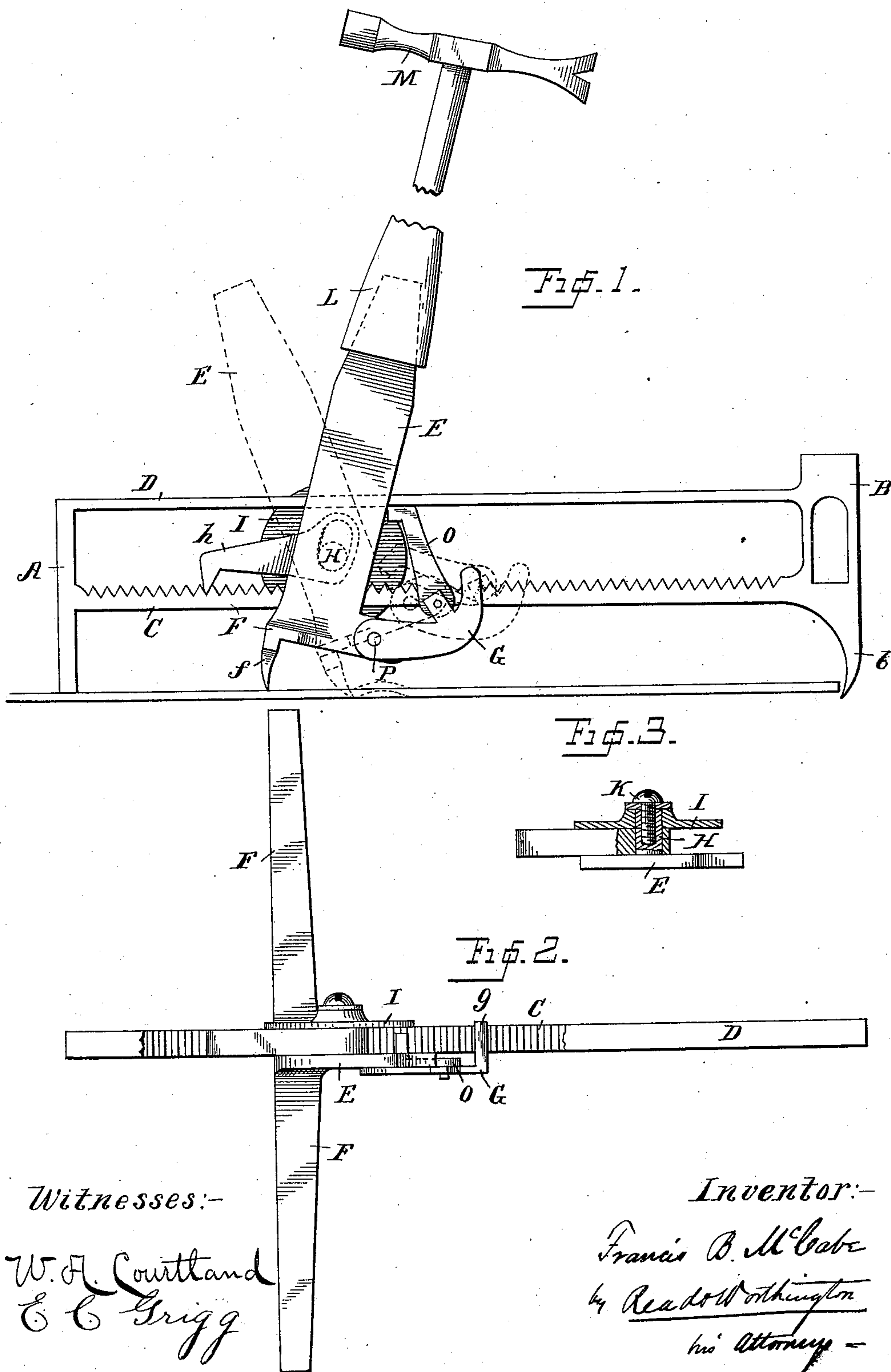


(No Model.)

F. B. McCABE.  
CARPET STRETCHER.

No. 466,467.

Patented Jan. 5, 1892.



Witnesses:-

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# UNITED STATES PATENT OFFICE.

FRANCIS B. McCABE, OF LEWISTOWN, PENNSYLVANIA.

## CARPET-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 466,467, dated January 5, 1892.

Application filed January 20, 1891. Serial No. 378,406. (No model.)

*To all whom it may concern:*

Be it known that I, FRANCIS B. McCABE, a citizen of the United States, residing at Lewistown, in the county of Mifflin and State of Pennsylvania, have invented certain new and useful Improvements in Carpet-Stretchers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in carpet-stretchers.

It has for its object to render the stretching and tacking of a carpet an easy operation, to render the implement cheap, simple in construction, and light in weight, and to prevent injury to the nap of the carpet.

The invention involves certain structural devices which will be hereinafter described in this specification and of which the novelty will be definitely pointed out in the appended claims.

In the accompanying drawings, which illustrate the invention, Figure 1 is a side elevation of an apparatus embodying the combined carpet-stretcher and tack-hammer, two positions of the operating devices being shown, one in full and one in dotted lines. Fig. 2 is a plan view partly broken away. Fig. 3 is a detail sectional view.

The frame of the device comprises two end posts A and B, one of which is provided with a spur *b*, which may be readily driven into the floor. Between these two posts extend longitudinal bars C and D, the lower one of which is provided on its upper face with a rack or series of teeth, the two bars forming a longitudinal slot in the frame. The stretching-lever E is provided with a transverse stud or projection H, which enters the slot between the two horizontal bars C and D, the lever being confined in position by a plate I, through which the stud H projects, the plate being held in position by means of a screw K. The parts are so proportioned that the plate, while preventing the lever E from lateral displacement, permits it to be shifted longitudinally of the bars C and D—that is, the whole stretching apparatus is capable of a sliding movement along the bars C and D. Upon the stud

H is a pawl *h*, provided with a slot, as indicated in dotted lines in the drawings. The lower end of the lever E carries a transverse bar F, upon which are a series of teeth *f* to engage the carpet. These teeth are preferably located at the side of the bar F, so that they may describe a larger circle when the carpet is being stretched, thus preventing the latter from slipping off the teeth. The side of the lever E opposite the row of teeth which engage the carpet is provided with a projecting stud, upon which is pivoted a pawl G, the finger *g* of said pawl extending through the space between the bars C and D, as indicated in Fig. 2. Upon the pawl G is pivoted a lock-pawl O, which is also provided with a projecting finger *n*, extending through the slot or space between the bars C and D. In operation this pawl lies back against the side of lever E, and, when the latter is thrown to the right, rides upwardly along the side of said lever until it strikes the under side of the bar D, when it arrests further tilt to the right of the lever E. The slot in the pawl *h* permits the lever E and its stud H to have a certain freedom of movement, enabling the stud to assume different positions in operation as the teeth *f* are drawn forward when stretching the carpet. As these teeth, when the lever E is shifted, describe an arc of a circle, it is evident that either the frame must rise or pivotal point H must rise. The slot in the pawl *h* inclines slightly forward and is corrugated on that portion of its wall which bears against stud H when the carpet is being stretched. This sloping and roughened wall of the slot prevents stud H from slipping suddenly upward when the lever is being pressed, which would tend to disengage the teeth from the carpet and injure the nap of the same. The upper part of the lever E is adapted to be connected with a socket L, formed in the handle of the tack-hammer M. The hammer thus becomes an actuating-arm of the lever E, and after the stretching operation has been completed may be slipped off from said lever and used to drive the tacks through the carpet. In operation the spur *b* is driven into the floor and the lever is rocked backward and forward. On the forward movement—that is, to the right in Fig. 1—the pawl G



catches upon the teeth of the rack C and the lever and its connected parts move to the right, the pawl *h* riding over the teeth of the rack, the lock-pawl O gradually rising until it engages with the under side of bar D, when tilting of the lever to the right will be arrested. The teeth *f* are then pressed into the carpet and the lever swung to the left. The pawl *h* now checks any bodily movement of the lever and its connecting parts to the left; but as the upper portion of the lever swings to the left the teeth *f* move to the right, stretching the carpet, and the stud H rises in the slot formed in the pawl *h*. The pawl G is shifted to the right and rides over one or more teeth of the rack and locks upon a tooth, preventing the teeth *f* from slipping to the left. By a reversal of movement of lever E pawl *h* is shifted to the right to a new position, so that when the lever E is again thrown to the left the teeth *f* will be given a still further progressive movement toward the front end of the frame. It will thus be seen that the pawls G and *h* engage automatically with the rack in effecting a progressive movement of the lever. The tack-hammer M is provided with a hammer and tack-lifter at one end of the handle and a recess or socket at the other end to slip over the upper end of the lever E, thus permitting leverage to be increased, reducing the compass of the apparatus for packing, and having a tack-hammer always within reach while the operation of laying the carpet is being conducted.

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 longitudinally-slotted frame provided with a pointed spur at one end, a stretching-lever provided with teeth adapted to engage the carpet, a transverse stud on the stretching-lever, projecting through the slot, a plate connected to said stud on the opposite side of the frame to prevent lateral displacement of the lever and permit longitudinal shifting, a rack mounted on the frame, and push and pull pawls carried by the lever and co-operating

with the rack for imparting a progressive movement to the lever.

2. In a carpet-stretcher, the combination of the slotted main frame, the lever E, provided with a toothed bar F for engaging the carpet, stud H, projecting through the slot of the main frame, slotted pawl *h*, pivotally supported on said frame, and pawl G for imparting a progressive movement to the toothed bar and maintaining the teeth in engagement with the carpet.

3. In a carpet-stretcher, the combination of the slotted main frame, the lever E, provided with a toothed bar F for engaging the carpet, stud H, slotted pawl *h*, the slot being inclined and provided with a roughened wall, as described, and pawl G for imparting a progressive movement to the toothed bar and maintaining the teeth in engagement with the carpet.

4. In a carpet-stretcher, the combination of the slotted main frame, stretching-lever provided with teeth for engaging the carpet, transverse stud H, projecting into the slot and confining-plate I, pawls *h* and G, and lock-pawl O, adapted to limit the throw of the lever and lock it when the carpet is stretched.

5. In a carpet-stretcher, the supporting-frame provided with the pointed spur at one end, a stretching-lever carrying on its lower arm teeth for engaging the carpet, a pivotal stud attached to the lever, a laterally-movable support provided with an upwardly-extending slot in which said stud is supported, whereby the teeth may yield vertically, so as to clear the floor during the stretching operation, and push and pull pawls co-operating with a rack on the frame to impart a progressive movement to the removable support and the stretching-lever when the latter is reciprocated.

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

FRANCIS B. McCABE.

Witnesses:

S. J. BRISBIN,  
JAMES S. RAKERD.