

(No Model.)

J. W. SNELL, Jr.
CARPET STRETCHER.

No. 551,411.

Patented Dec. 17, 1895.

FIG. 1.

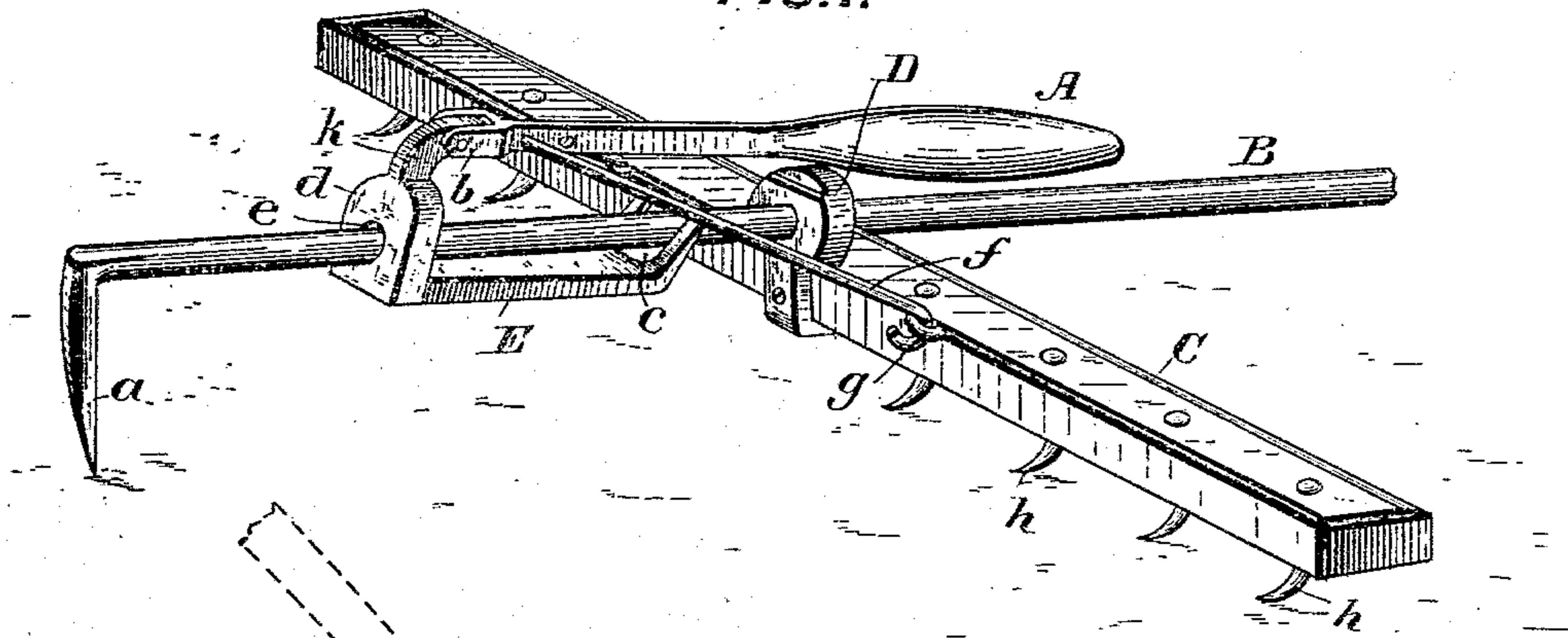


FIG. 2.

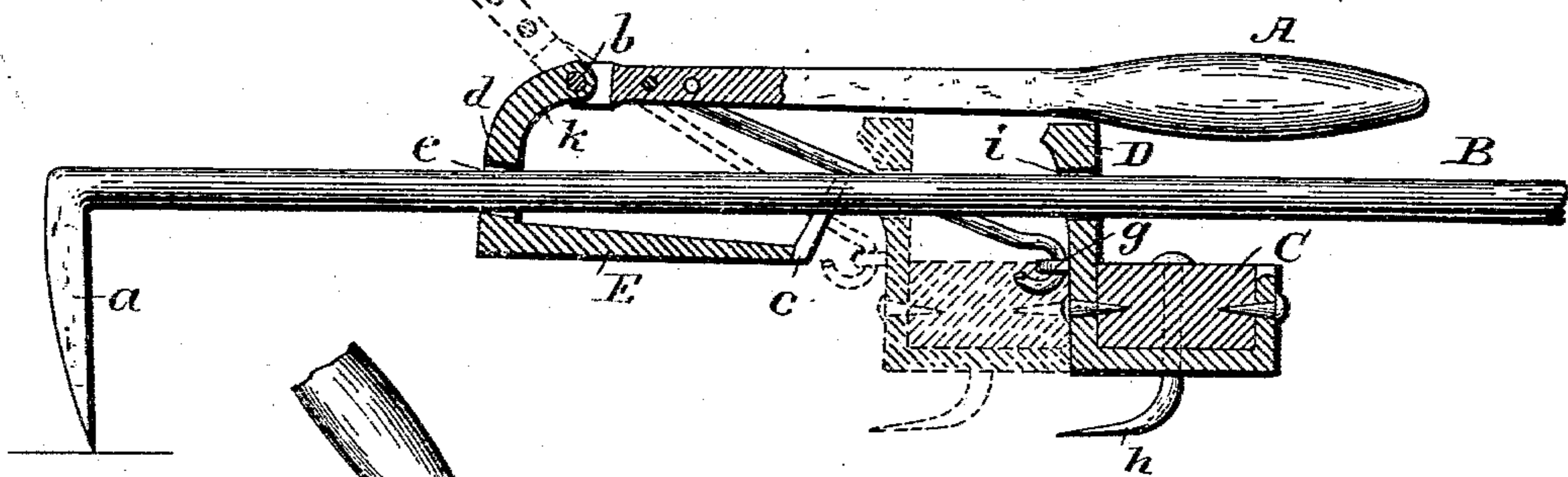
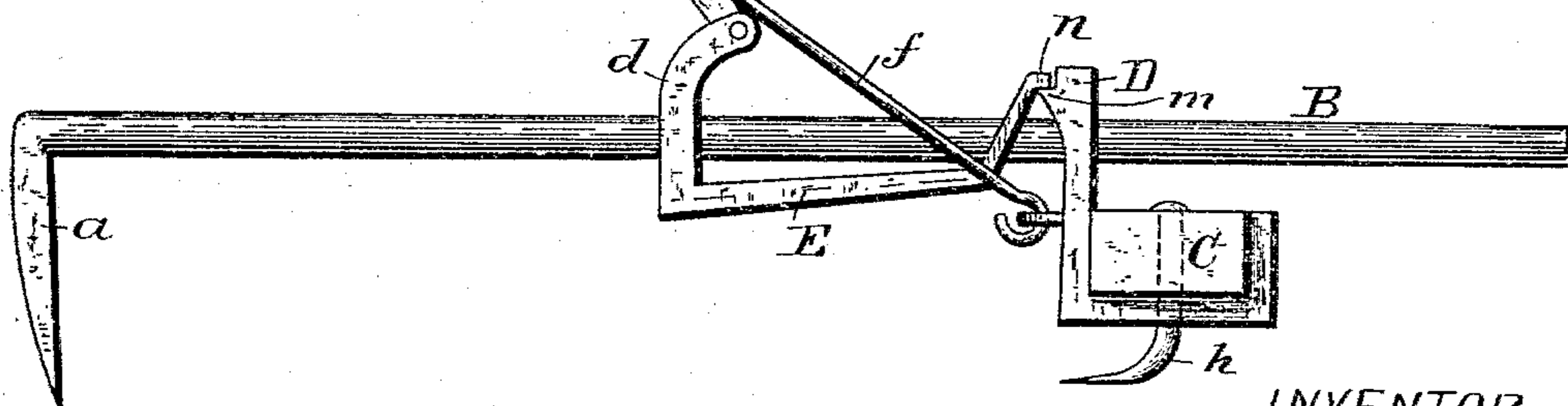


FIG. 3.



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CARPET-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 551,411, dated December 17, 1895.

Application filed March 22, 1895. Serial No. 542,749. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH W. SNELL, JR., a citizen of the United States, residing at Bay Port, in the county of Huron and State of Michigan, have invented certain new and useful Improvements in Carpet-Stretchers; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in devices for stretching carpets, and has for its object to provide a device of this character which combines the advantage of simplicity of design and cheapness of construction, obtained by eliminating several unnecessary features heretofore employed in devices of a like character, thus rendering the same capable of more easy and quick assembling and adjustment of parts, and at the same time increasing its efficiency and ease of operation.

To this end my invention consists in the construction and arrangement of parts as shown in the accompanying drawings, and set forth in the following specification.

In the drawings, Figure 1 is a view of my device shown in perspective. Fig. 2 is a view of the same in section taken longitudinally through the center of the device. Fig. 3 is a side elevation of the device, showing stretcher thrown out of engagement with main bar, thus permitting free movement of same in either direction.

Of the parts represented in the figures, B denotes the main grip. This bar is of soft iron and may either be round or rectangular in cross-section. It is provided at its front end with one or more prongs *a*, extending downward and sharpened at the end to make the same to take a firm grip into the floor. Extending at right angles to this bar and of equal length on each side of the same is the cross-bar C. This is made of wood and is provided at intervals along its length with a series of bent prongs *h h*, with points extending forward in the direction of the prong on the end of main rod B. At the middle of the cross-bar C is directly attached a suitable hard-iron

binding-tongue D. The lower part of tongue D is bent so as to partially encircle cross-bar C, making connection firmer between the tongue and cross-bar. (See cross-section in Fig. 2.) At upper part of tongue D is perforation *i*, through which the rear end of main rod passes. Just above perforation *i*, on front side of tongue *d*, is notch *m*. (See Fig. 3.)

Directly in front of the middle of the cross-bar and loosely connected to and movable on the main bar B is the binding-dog E. This dog is formed of a piece of hard iron, cleft at its rear portion so as to form a semicircular opening *c* with the two prongs on either side embracing rod B and inclined upward with tips *n n* (see Fig. 3) projecting backward from top of prongs. The front portion of the binding-dog E is upset to form an upwardly-projecting ear *d*, having the perforation *e* through which the main bar passes. Extending upwardly from the ear *d* is the curved lug *k*, to which is pivoted at *b* the handle A for operating the device. This handle is connected to the cross-bar C in any suitable manner, as shown in the drawings by means of hooked links *f*, which engage eyes *g* on the cross-bar.

Having now indicated the various elements composing my device, and the manner in which they are connected, the mode of operation is as follows: The main bar having been inserted through the perforations *e* and *i* in the binding-tongues E and D, as shown in the drawings, the front prong is made to grip into the floor and the prongs of the cross-bar are inserted into the carpet at a distance from the front prong of the main bar proportioned to the space desired to be covered in stretching the carpet. The operator then advances the handle from position shown in Fig. 1 to that shown by dotted lines in Fig. 2. This brings pressure of draw on point *b* and owing to slant of lug *k* intensifies friction at perforation *e*, making dog E immovable and drawing cross-bar C into position shown by dotted lines in Fig. 2. This throws tension of carpet on the prongs *h h* at bottom of cross-bar C. The pull forward is from the eyes *g* of cross-bar C. This, as will be shown from Fig. 2, will keep top of dog D thrown forward on rod B. As soon as pull is removed from eyes *g g*, the draw of carpet cramps dog D at

perforation *i* on main rod with sufficient force to prevent its sliding back. If it is desired to further advance the cross-bar and stretch the carpet to a still greater extent, the handle is thrown back to position shown in Fig. 1, and then again thrown over to position shown by dotted lines in Fig. 2. This may be repeated until dog E hits front prong on rod B. The under arm of dog E is so arranged that as handle is passed back from position shown in dotted lines of Fig. 2 to that shown in Fig. 1, the back part of arm rises, hits rod B, and allows the tongue E to slide forward without friction. After carpet is tacked, stretcher is loosened by single motion of handle, viz: Lug *k* is so shaped that by lifting up on handle it throws the arm on binding-dog E up against rod B. If then, when the dog E is in this elevated position, the handle be advanced slightly forward this will cause the dog *e* to slide back until it meets the binding-tongue D, when the tips at the ends of the prongs *n* will engage the notch *m*, as clearly shown in Fig. 3 of the drawings, and when in this position both the dog E and tongue D are out of binding engagement with the bar B and can be slid in either direction along the main rod by the operator having hold of the handle A.

It is to be understood that this invention is not limited to the precise form and mode of arranging parts shown in the drawings, but that minor variations may be made therein provided there is no departure from the main scope of the invention.

What I claim as new, and desire to cover by Letters Patent, is—

1. In a carpet stretcher, in combination with the main bar B, the binding bar E engaging therewith at its front end, and having a bifurcated rear end forming two prongs with tips *n, n*, at the ends thereof, and the cross bar C provided with tongue D, having a notch in the upper part thereof with which said tips engage, and means for advancing the binding bar and cross bar on the main bar, substantially as described.

2. In a carpet stretcher the combination of the cross bar C, having the perforated binding tongue D thereon, the main bar B, passing through said tongue, the binding dog E engaging the main bar and also having sliding connection therewith, and provided at its rear end with two upwardly extending prongs which engage at their ends with a notch in the upper part of the binding tongue D, whereby the dogs E and D are held in a position to move horizontally, substantially as described.

3. In a carpet stretcher, in combination with the main bar B, cross bar C, and handle A, the binding bar E having a bifurcated rear end with tips *n, n*, engaging with notch *m* on tongue D of the cross bar, said binding bar being perforated at its front end to receive the main bar, and having an upwardly projecting lug to which the handle is pivoted, substantially as described.

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

JOSEPH W. SNELL, JR.

Witnesses:

GEO. F. HAZEN,

A. G. ARNOLD.