H. Hungerford, Carnet Stretcher. Patented Oct. 16, 1866.

1 958,831. Any Angustoril Witnesses

UNITED STATES PATENT OFFICE.

HENRY HUNGERFORD, OF NEW YORK, N.Y.

IMPROVED CARPET-STRETCHER.

Specification forming part of Letters Patent No. 58,831, dated October 16, 1866.

To all whom it may concern:

Be it known that I, Henry Hungerford, of the city of New York, in the county of New York, and State of New York, have invented certain new and useful Improvements in Carpet-Stretchers; and I do hereby declare that the following is a full, clear, and exact description thereof, and of their mode or manner of operation, reference being had to the accompanying drawings and to the letters of reference marked thereon, and making a part of this specification.

My invention or improvements in carpetstretchers are such that the article is much reduced in size and is much easier handled and operated, is more simple in construction, and can also be used equally well and conveniently in both large and small rooms.

Figure 1 shows my improved carpet-stretcher arranged ready for use and in two positions. Fig. 2 shows the two faces or opposite sides of the pressure-foot or stretcher. Fig. 3 shows the whole stretcher folded together or upon itself.

Carpet-stretchers as heretofore used have been constructed with reference to or upon the plan of using the side of the room in which the carpet is to be put down as the point or place of resistance, against which the stretcher acts, and consequently all such stretchers have necessarily been so constructed as to have length sufficient, either by means of folding or extending joints or pieces, to reach nearly across the longest direction of ordinary rooms. This necessity has demanded the employment of a number, generally not less than three to five pieces, hinged to and folding upon each other, and generally also with some provision for further extension when needed, and the article has thereby been rendered quite heavy and cumbersome to handle and operate; and it has also been found practically difficult to so arrange such stretchers that they could easily and conveniently be used in small rooms.

By my improvements in the construction and arrangement of carpet-stretchers I am enabled to use the floor of the room, and in any part of the room, as the place of resistance, against which the stretcher may act, and I am thus able to much reduce the length and bulkiness of the article, as it is not required to be

anylonger for use in one room than in another; and it can, therefore, be made of such a size as to be easily and conveniently operated in a small room, and that size will be sufficient for larger rooms. I am also enabled to dispense with all arrangement or construction for extension, none such being required.

The entire stretcher, as improved by me, consists, in fact, in addition to the pressure-foot that takes hold of and stretches the carpet and the ratchet that holds the pressure-foot in any position, of but three pieces or lengths, one of which is divided lengthwise so as to spread apart like legs; and the whole article, when extended, need not be over about six feet long, and, as ordinarily used, will be only about four and a half or five feet long.

The central piece, A, is made rather heavier than the others, and is usually about two and a half or three feet long, by two or three inches wide, and an inch or an inch and a half thick. One end of this piece is partially wedge-shaped, and is shod with iron a, to take into the rack or pawl b, to hold the pressure foot in any given position. Upon the under side of such central piece, and near one end, is hinged the arm B, which carries the pressure foot C. The arm B is usually of such a length that when folded upon the part A, as shown in Fig. 4, it will project even with but not beyond the end of A.

To the other end of such central piece and on each side thereof are hinged the legs D and E, which are of the same length as such central piece, but of only one-half the breadth; and these are so hinged that they can fold back upon each side of such central piece, as shown in Fig. 4.

Upon the under side and at the outer end of these legs D and E are fixed strong sharp projections or spurs $c\,c$, which pass through the carpet and enter the floor and make the points of resistance against which the stretcher acts, the pressure-foot C being free to move as heretofore.

When the stretcher is to be used the legs D and E are spread apart, as shown in Fig. 1, and the spurs c c are slightly pressed into the floor, the parts A and B being placed as shown in the same figure. As the part A is pressed down the spurs c c take more firm hold, and prevent

the stretcher yielding in that direction, and causing the carpet to be stretched by means of the pressure-foot C in the opposite direction.

The length of the legs D and E is such that their lower ends can be spread from each other about the width of ordinary Brussels carpeting, or sufficiently far so that the points cc will not interfere with any required tension of the carpet in the line of the pressure-foot C, which is midway between such points cc. The spreading of the legs D and E also renders the stretcher more firm and less liable to topple over when strained.

By having also two points of support or resistance, so situated in respect to each other, the pressure-foot can be moved sidewise in either direction until the piece A shall be in a straight line with either of the legs D or E, and the carpet can thus be stretched both lengthwise and sidewise at one and the same time.

The pressure-foot C is also made with two faces, each armed with points of different lengths and shape, and so arranged as to be capable of being reversed, according to the kind of carpet on which to be used. For ingrain, three-ply, and other light carpetings, the points upon the pressure-foot are required to be more numerous and shorter and blunter, so as to rather take hold of or act upon the surface of the carpet, and not pass through into the floor or material underneath. For such car-

petings the surface F is adapted, and on such surface the hinge is sunk a little, so as not to interfere with the action of the points. The other surface, G, is designed for heavier, thicker carpetings, as tapestry and velvet, and the like, and the points on such surface may be fewer in number, and are longer and sharper, so as to pass through the raised or cut portions and take hold of the body of the carpet in stretching. The opposite hinges dd' are fastened by the same rivets, and connect with the hinge on the arm B by the detachable pin f.

What I claim as my invention, and desire

to secure by Letters Patent, is-

1. The arrangement of the legs D and E, in combination with the pieces A and B, combined and operating substantially as and for

the purposes set forth.

2. The construction of the pressure-foot C substantially as described, so that the same can be reversed in position and be adapted to take hold of or act upon carpets or cloths of different kinds, as and for the purposes set forth.

3. A carpet-stretcher constructed and operating substantially as and for the purposes set forth.

HENRY HUNGERFORD.

Witnesses: S. D. Law, W. R. Ronalds.