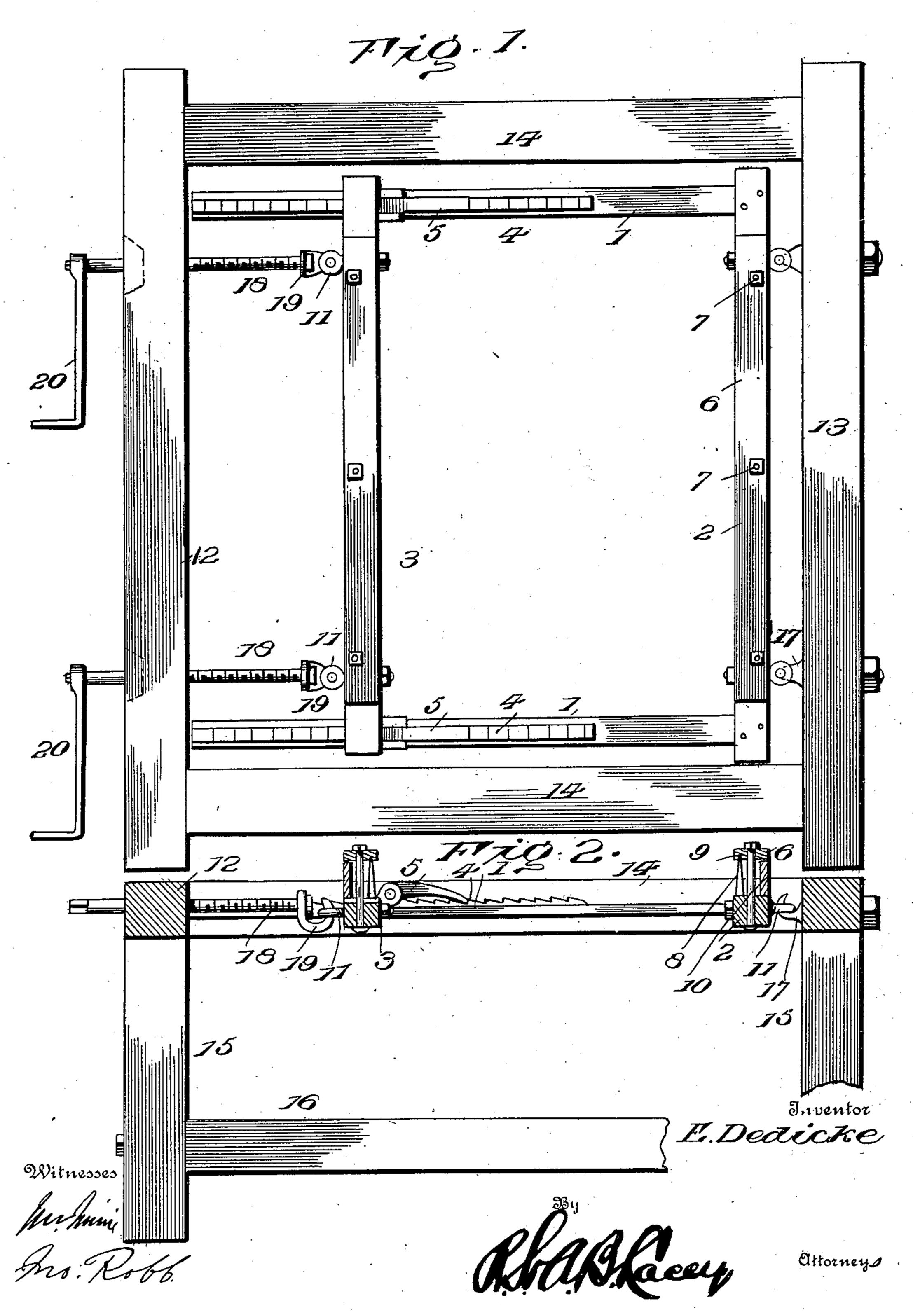
E. DEDICKE.

STRETCHER FOR FELT, FABRIC, OR THE LIKE.

APPLICATION FILED JAN. 10, 1902.

NO WODEL

2 SHEETS-SHEET 1.

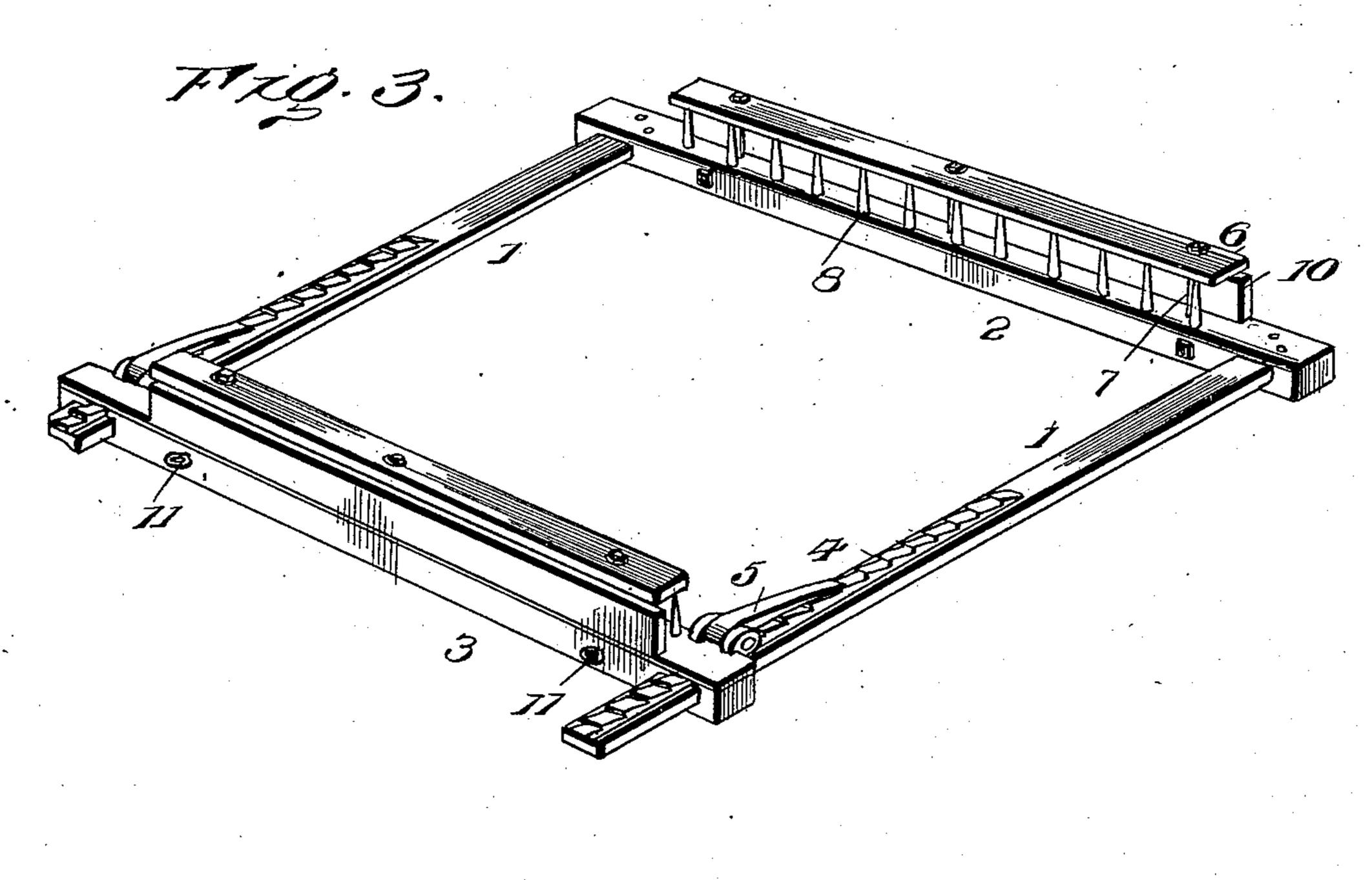


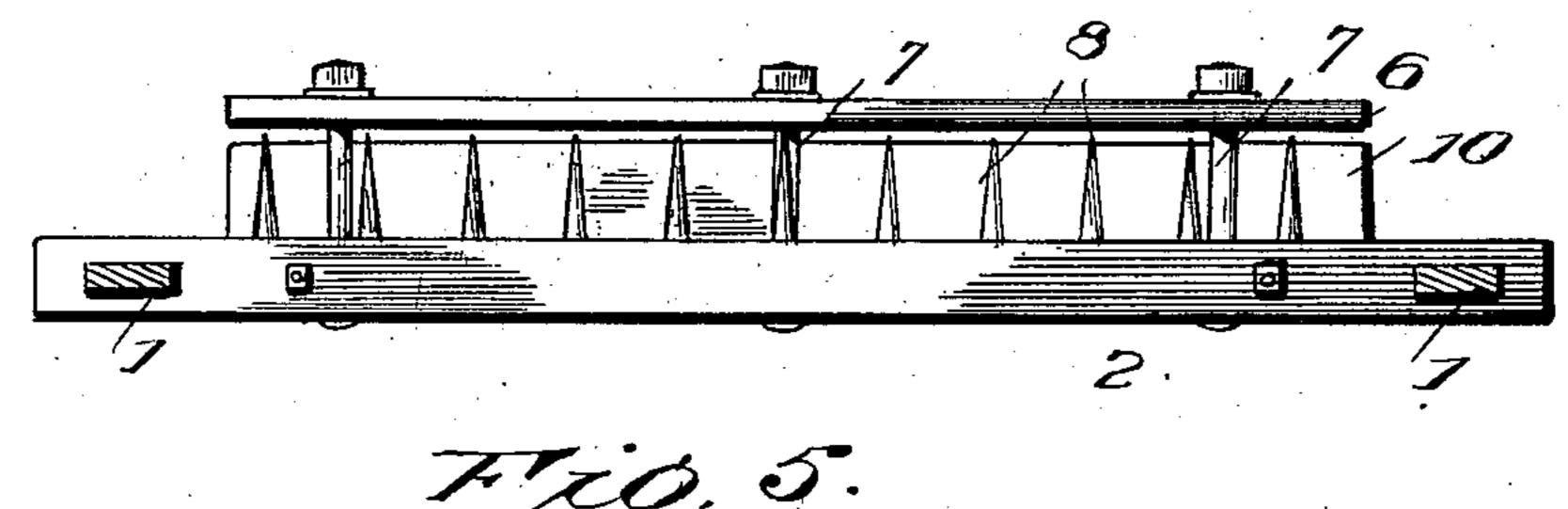
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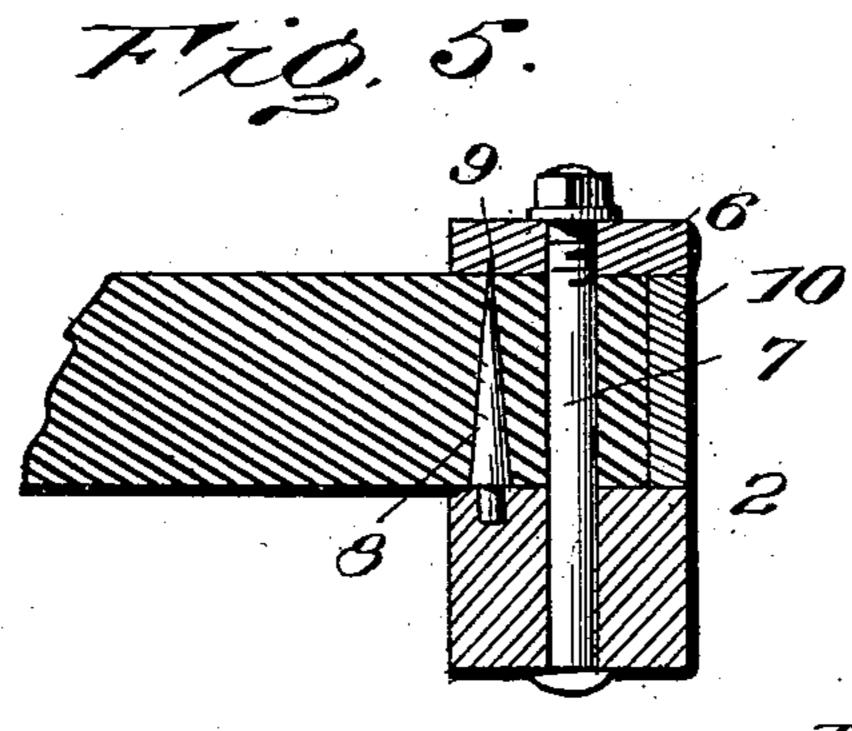
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2 SHEETS-SHEET 2.







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United States Patent Office.

EDUARD DEDICKE, OF DOLGEVILLE, NEW YORK.

STRETCHER FOR FELT, FABRIC, OR THE LIKE.

SPECIFICATION forming part of Letters Patent No. 728,682, dated May 19, 1903.

Application filed January 10, 1902. Serial No. 89,202. (No model.)

To all whom it may concern:

Be it known that I, EDUARD DEDICKE, a citizen of the United States, residing at Dolgeville, in the county of Herkimer and State of 5 New York, have invented certain new and useful Improvements in Stretchers for Felt, Fabric, or the Like; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will en-10 able others skilled in the art to which it appertains to make and use the same.

This invention aims to provide means for stretching goods, and particularly felt designed for the hammers of pianos, so as to 15 take out the fulling wrinkles and provide a smooth surface and even texture, which is most desirable in this class of work.

cially for stretching piano-hammer felt, it 20 may be used for stretching felt or material of any kind.

The felt after being pulled and prior to drying is stretched and remains under tension during the drying process and is not released 25 from tension until thoroughly dried, and in order that the work may be economically effected a plurality of frames are provided for cooperation with a single straining device, each frame being constructed for main-30 taining the felt under tension when strained.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to 35 the following description and drawings hereto attached.

While the essential and characteristic features of the invention are susceptible of modification, still the preferred embodiment of the 40 invention is illustrated in the accompanying drawings, in which—

Figure 1 is a top plan view of the invention, showing the stretcher-frame applied to the straining device. Fig. 2 is a vertical sec-45 tion. Fig. 3 is a perspective view of the stretcher-frame. Fig. 4 is a transverse section. Fig. 5 is a detail section of an end bar, showing a piece of piano-hammer felt clamped thereto.

50 Corresponding and like parts are referred to in the following description and indicated

in all the views of the drawings by the same reference characters.

The stretcher-frame consists of longitudinal bars 1, a fixed end bar 2, and a movable 55 end bar 3. The longitudinal bars I are firmly connected at one end to the fixed bar 2 and move freely through openings near the ends of the adjustable bar 3. Ratchet-teeth 4 are provided upon each of the longitudinal bars 60 1 and are adapted to be engaged by dogs 5, carried by the movable bar 3, so as to hold the latter in an adjusted position when the felt or goods is subjected to tension. The end bars 2 and 3 are provided with clamps for 65 gripping the edge of the felt to be stretched, and inasmuch as each of the clamps is constructed substantially alike a detailed de-While the device is designed most espe- | scription of one only will be given. The clamp-bar 6 is connected by bolts 7 or anal- 70 ogous fastenings to the end bar, the felt or goods being gripped between the said bar 6 and the end bar to which it is connected. A series of pins 8 project from the end bars and are adapted to enter openings 9 in the clamp- 75 bar 6, and these pins penetrate the felt and prevent slipping thereof. By having the points of the pins 8 enter openings 9 in the clamp-bar 6 said pins are supported at each side of the felt and are not liable to be 80 wrenched from their bearings when the felt or goods is subjected to strain. A strip 10 extends along the outer edge of each end bar and constitutes a stop to limit the movement of the clamp-bar 6 toward its coöperating end 85 bar and also insures a straight edge to the felt or goods to be stretched, since the goods has its edge crowded against the inner side of the stop. Each of the end bars is provided with eyes 11 or like attaching devices for a 90 purpose presently to be explained.

The straining device consists of a substantial frame comprising oppositely-disposed beams 12 and 13 and tie-beams 14. The frame comprising the beams 12, 13, and 14 is 95 mounted upon a stand comprising cornerposts 15 and longitudinal and transverse ties 16. Hooks 17 are applied to the beam 13 and are positioned so as to engage with the eyes 11 of the end beam 2. Tension-screws 100 18 have screw-thread connection with the beam 12 and are provided at their inner ends

with hooks 19, having a swivel connection therewith, and their outer ends are made angular to receive a crank-handle 20 or other means whereby rotation is imparted to the 5 tension-screws for effecting a longitudinal movement thereof. The hooks 19 are located so as to make connection with the eyes 11 of the movable end bar 3. Within the purview of the invention the parts 11, 17, and 19 may 10 be replaced by equivalent means, which will enable the end bars of the stretcher-frames to make firm and detachable connection with the beams 12 and 13 of the straining device.

The felt or material to be stretched has its 15 opposite ends engaged with the end bars 2 and 3 of the stretcher-frame by the clamp devices shown or any equivalent thereof, after which the stretcher-frame is fitted to the straining device, its end bars being connected 20 with the end beams 12 and 13 in such a manner as to admit of positive movement of the end bar 3 upon actuation of the set-screws 18. As the end bar 3 is drawn away from the end bar 2 the felt is strained or stretched, and the 25 dogs 5, riding over the ratchet-teeth 4 and engaging therewith, hold the bar 3 when

moved outward, hence prevent any rebound of the end bar 3 when the set-screws 18 are slackened and the stretcher-frame moved 30 from the straining device. The frame with

the felt or goods stretched thereon is set aside

until the felt is thoroughly dried, and in the meantime other frames are used in connection with the straining device, thereby obviating the great cost which would be entailed 35 if each stretcher-frame were provided with straining means.

Having thus described the invention, what is claimed as new is—

In a machine for stretching piano-felt or 40 like material, the combination of a straining mechanism comprising oppositely-disposed beams and tie-beams, hooks applied to one of the beams, other hooks, tension-screws fitted to the opposite beam and having a 45 swivel connection with the last-mentioned hooks, a stretcher-frame independent of and adapted to be fitted to the frame of the straining mechanism, and comprising longitudinal bars, a fixed end bar and a movable end bar, 50 eyes applied to the end bars to receive the aforesaid hooks, ratchet-teeth fitted to the

stantially as set forth. In testimony whereof I affix my signature in presence of two witnesses.

longitudinal bars, and dogs applied to the

end portions of the movable end bar for co-

operation with the said ratchet-teeth, sub- 55

EDUARD DEDICKE.

Witnesses:

H. M. GIBSON, ALBERT L. LEAVITT.