

(No Model.)

2 Sheets—Sheet 1.

F. SCHWEITZER.
FURNITURE CLAMP.

No. 572,725.

Patented Dec. 8, 1896.

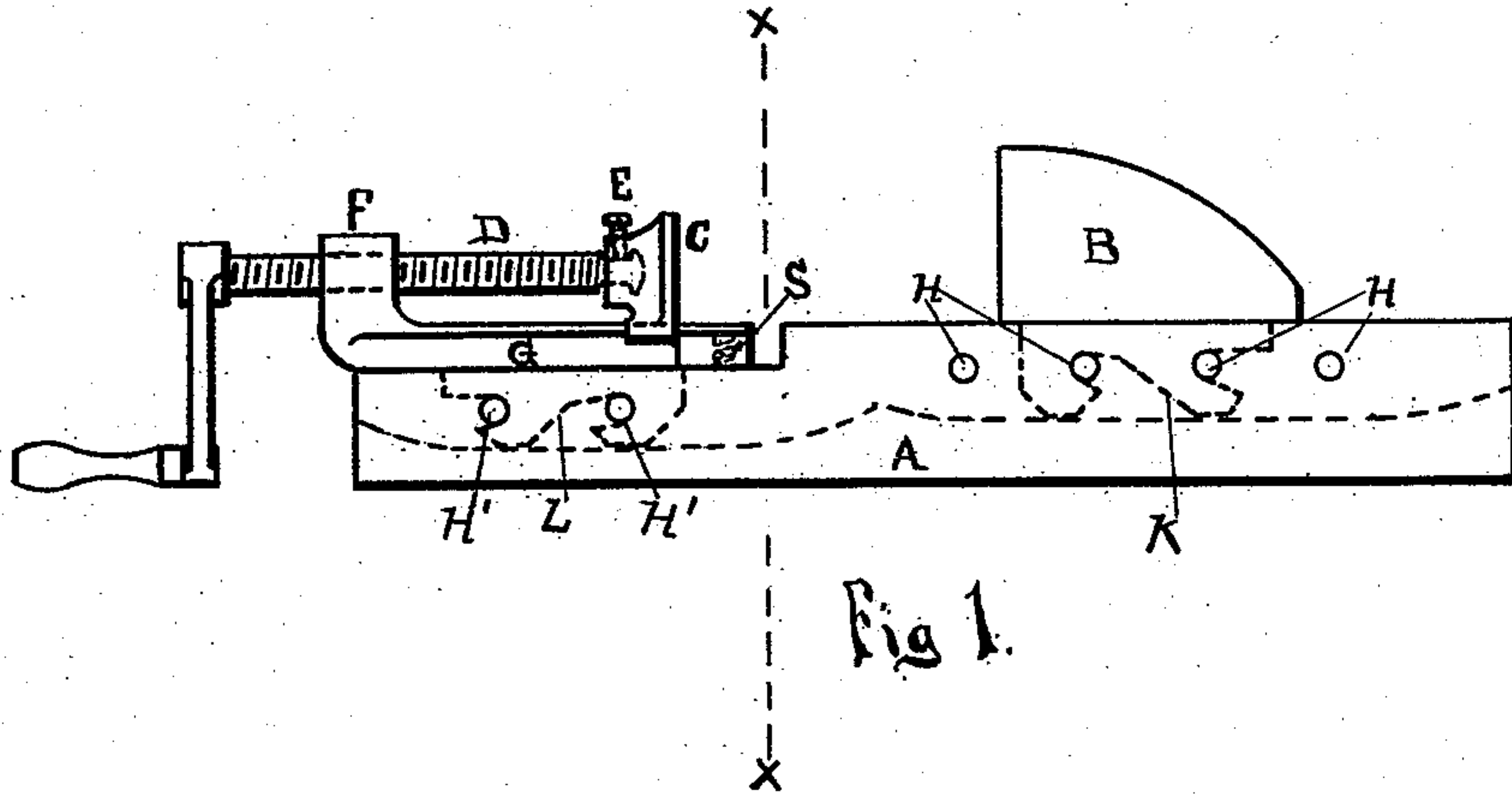


Fig. 1.



Fig. 2.

Witnesses

C. H. H. H. H.
M. Louise Wright

Inventor

Frank Schweitzer
By Edward Taggart
His — Attorney

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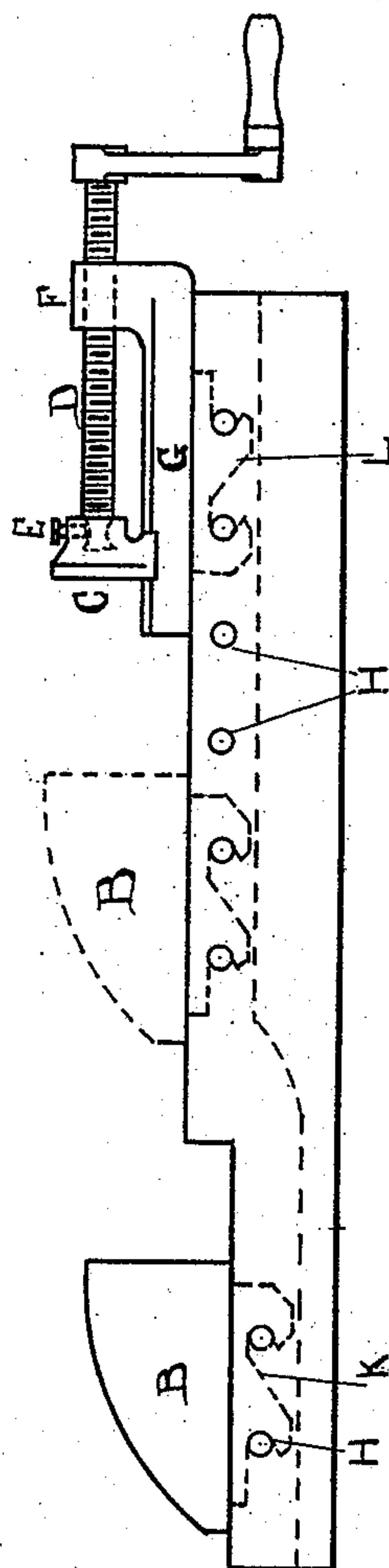


Fig. 3.

Witnesses:

G. Hondelink

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UNITED STATES PATENT OFFICE.

FRANK SCHWEITZER, OF GRAND RAPIDS, MICHIGAN.

FURNITURE-CLAMP.

SPECIFICATION forming part of Letters Patent No. 572,725, dated December 8, 1896.

Application filed June 29, 1895. Serial No. 554,463. (No model.)

To all whom it may concern:

Be it known that I, FRANK SCHWEITZER, a citizen of the United States, residing at the city of Grand Rapids, in the county of Kent and State of Michigan, have invented a certain new and useful Furniture-Clamp, of which the following is a specification.

This invention relates to a new and improved clamp designed for use in putting up furniture and other analogous purposes; and the objects of the invention are, first, to form a clamp which may be readily handled and adjusted to different styles of work; second, to form a clamp in which the clamping device may be readily detached from the bar or support and readily applied to any other bar or support, so that with one set of clamps a great variety of work may be accomplished. These objects I accomplish by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 shows a side elevation of a clamp constructed in accordance with my invention, the same containing an adjustable head-stock with a screw and movable clamp supported thereon and also containing a tail-stock above the head-stock, the tail-stock being adjustable longitudinally upon the bar or support, the dotted lines showing the form of the groove and the hooks which engage with pins passing through the grooves for the purpose of adjusting the head and tail stock. Fig. 2 shows a sectional view on line X X of Fig. 1, the same showing the grooves in which the hooks are adjusted. Fig. 3 shows a side elevation of the clamp with base extended and the tail-stock and head-stock reversed, also indicating by dotted lines the position of the tail-stock when it is desired to bring the same closely to the head-stock.

A represents the bar or support, which is preferably made of wood and provided with a groove for the purpose of receiving the adjusting-hooks of the head and tail stock.

B represents the tail-stock, and G the head-stock.

D represents an ordinary screw provided with a crank or other means for moving the clamping-jaw C for the purpose of clamping the material held between said jaw C and the tail-stock B. The screw D is supported in

the lug F, which lug F is provided with a screw-thread which engages with the screw-thread upon D.

E is a screw used for retaining the screw D in position in the jaw C, the said screw E being placed in position to retain the jaw C and the screw D, and to allow the screw D to be turned in either direction readily in order to give the forward and backward motion to the jaw C.

The head-stock is provided with a metal projection which is provided with one or more hooks L, which are adapted to engage with pins H' H', thereby attaching the head-stock to the bar A.

In order to prevent the head-stock from dropping from the bar when the same is used, I provide a spring S, the same being connected to the head-stock G and pressing against the bar A, so as to retain the head-stock in position until removed by hand. The spring merely prevents the head-stock from dropping out of the bar when the bar is handled. The tail-stock B is also provided with a series of hooks K, which engage with the pins H, the pins H passing through the groove in the bar, the frame and the hooks being shown by dotted lines in Fig. 1 and the groove being shown in cross-section in Fig. 2. The grooves which receive the hooks L and K are in the center of the bar A preferably, as shown in Fig. 2, and in some cases the same groove may be used; but in the example of my invention shown in the drawings the tail-stock B is placed on a line with the top of the head-stock G, so that the movable jaw C moves directly toward the tail-stock B, clamping a piece of furniture between the jaw and the tail-stock.

The number of the pins H H may be increased to any amount, the number depending upon the length of the bar to which the tail-stock is applied, and, if desired, the head-stock may be made adjustable longitudinally upon the bar, although in the example of my invention shown in the drawings the head remains stationary, only the jaw C being movable. The head-stock or tail-stock may be removed immediately from the bar by pressing the same so that the hooked portions will clear the bolts or pins to which they are at-

tached. The same may be then readily lifted out and applied to any other bar provided with suitable grooves and pins.

In using my device as illustrated in Fig. 3 5 the tail-stock may be placed on the lower level, as shown by the solid lines, or may be placed on the upper level, as shown by the dotted lines, said tail-stock being designated in both positions by B. The head-stock is 10 placed upon the upper level and at the end of the bar. The tail-stock being broader or extending farther from the bar than the head-stock enables the operator to clamp an article having a broader perpendicular surface 15 with reference to the bar when the tail-stock and head-stock are reversed or placed in the position shown in Fig. 3. As a rule my invention is desired to clamp casework and othersimilararticles which have considerable 20 length or breadth, so that it is not often that the tail-stock and head-stock are brought near together; but in case it is desirable to bring them in close contact then the tail-stock can be placed on the upper plane, as shown by 25 dotted lines in Fig. 3. In using my invention, and, in fact, in using all clamps of this character, the jaw C being of metal a block of wood is placed in front of it, which may extend and sometimes does extend to or be- 30 yond the head-stock G, so that there is no projection of the head-stock G beyond the jaw

C. This construction of my clamp renders it peculiarly useful when it is desirable to adapt the same to wide or broad stock, and this feature will be found of great advantage, inas- 35 much as it adapts my device to a great variety of work.

Having thus described my invention, what I claim to have invented, and desire to secure by Letters Patent, is— 40

In a furniture-clamp, the combination with a bar having longitudinal grooves formed in one edge, pins passing transversely through said grooves, a head-stock having a projec- 45 tion adapted to rest within either of said grooves and provided with a plurality of hooks adapted to engage the said pins and hold the projection to its seat in the groove, a spring attached to one end of said projection and bearing against the bar and operating to hold 50 the hooks in engagement with the pins, a movable jaw carried by the head-stock, and a tail-stock provided with a projection having a plurality of hooks for engaging said grooves and pins, substantially as described. 55

In witness whereof I have hereunto set my hand and seal in the presence of two witnesses.

FRANK SCHWEITZER. [L. S.]

Witnesses:

EDWARD TAGGART,
CHRISTOPHER HONDELINK.