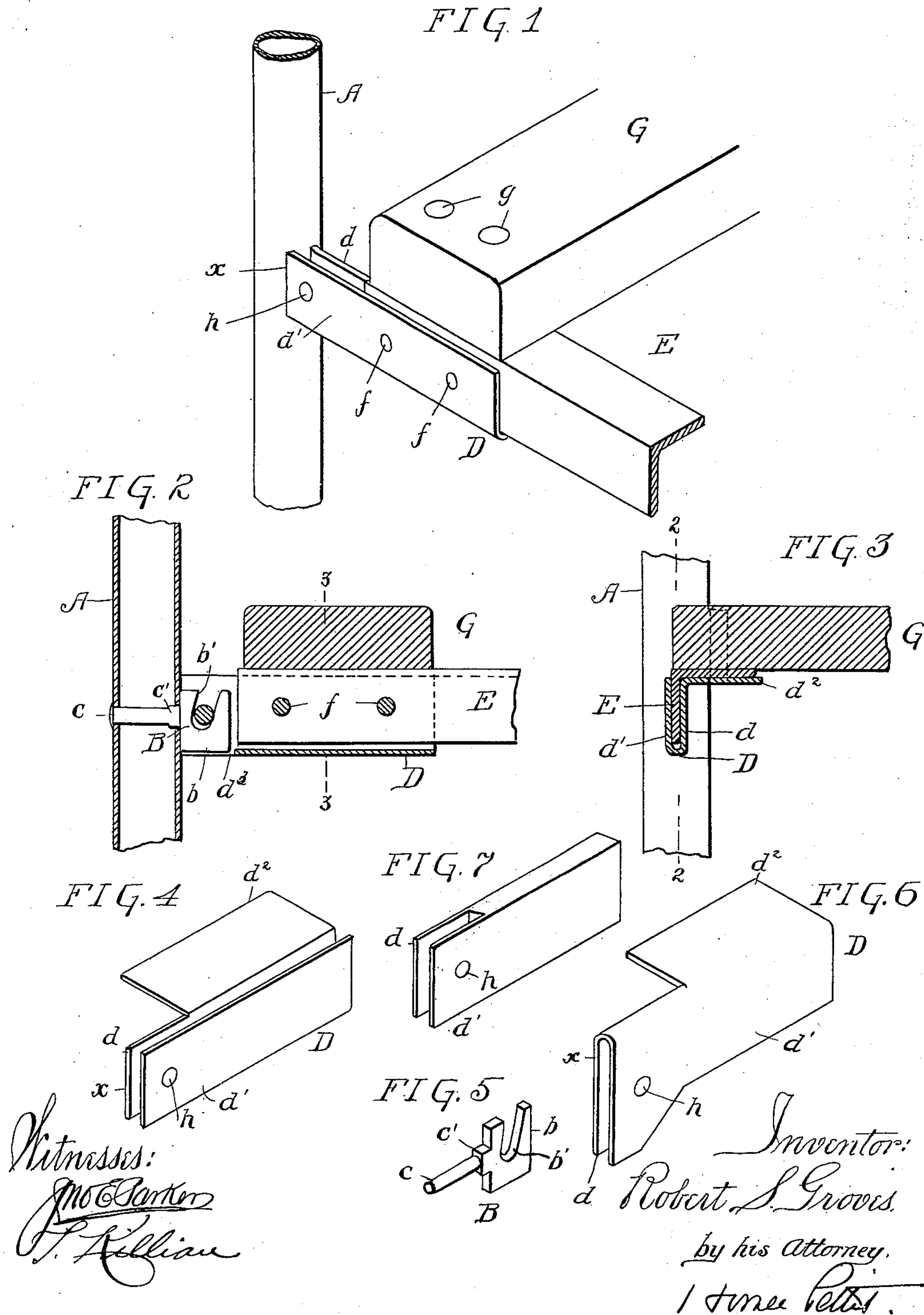


(No Model.)

R. S. GROVES.
SECURING DEVICE FOR BEDSTEADS.

No. 605,869.

Patented June 21, 1898.



UNITED STATES PATENT OFFICE.

ROBERT S. GROVES, OF PHILADELPHIA, PENNSYLVANIA.

SECURING DEVICE FOR BEDSTEADS.

SPECIFICATION forming part of Letters Patent No. 605,869, dated June 21, 1898.

Application filed December 22, 1897. Serial No. 663,063. (No model.)

To all whom it may concern:

Be it known that I, ROBERT S. GROVES, a citizen of the United States, and a resident of the city of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in Securing Devices for Bedsteads or other Articles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to certain improvements in devices for securing together articles of furniture—such as bedsteads, chairs, tables, lounges, and the like—and is especially adapted for securing a spring-supporting frame of a metallic bedstead to the posts or standards which form the head and foot boards of the bedstead.

The principal object of my invention is to provide a simple and economical form of securing device from pressed steel or similar metal in sheet form, principally with a view of overcoming the objections as to cost and inefficiency of the cast-metal and other securing devices now employed for the like purpose.

In the accompanying drawings, Figure 1 is a sectional perspective view of sufficient of a bedstead to illustrate the application of my improved securing device thereto. Fig. 2 is a longitudinal sectional elevation of the same on the line 2 2, Fig. 3. Fig. 3 is a transverse sectional view of the same on the line 3 3, Fig. 2. Fig. 4 is a detached perspective view of the supporting-plate. Fig. 5 is a similar view of the hook or catch carried by the post or standard, and Figs. 6 and 7 are detached perspective views illustrating modifications of the supporting-plate.

Metallic bedsteads, now an ordinary article of merchandise, are usually formed in three main sections so arranged that they may be attached to and detached from each other. These comprise the spring or bed section having side and end rails, to which is secured a spring-mattress, and head and foot board sections, each comprising corner posts or standards connected by metal-work of a more or less ornamental character. The side rails ordinarily are formed of angle-iron, and

at the end of each side rail a cast-iron plate is usually riveted, such plate being provided with devices for attaching it to pins or openings projecting from or formed in the corner-posts.

The cast-iron plates are expensive, brittle, and are difficult to produce in such complete form that they may be immediately put in use without finishing by hand. To overcome these objections, I form the plate from sheet-steel, pressed or stamped into shape, and so produce at a trifling expense a supporting-plate much lighter and stronger than the cast-metal plates ordinarily used and one which is ready for instant use.

Referring to the drawings, A represents one of the corner-posts of a metallic bedstead, preferably in the form of a metallic tube, circular in cross-section, although it may be of square or other form, if desired. To this post is secured a hook or catch B, of a construction more clearly illustrated in Fig. 5, and comprising a flat head *b*, in which is formed an inclined slot *b'* for the reception of a pin carried by the securing-plate. At the rear of the plate *b*, and preferably formed integral therewith, is a riveting-shank *c*, which extends through suitable openings formed in the post or standard, the forward of such openings being rectangular in form to receive the rectangular base *c'* of the riveting-shank and thus prevent any danger of twisting or turning of the hook.

The supporting-plate D is formed of a sheet of steel bent in U-shaped form and forming parallel side walls or flanges *d d'*, separated from each other for a distance slightly greater than the width of the hook-plate *b* and adapted to receive between them the angle or other bar E, which forms the side rail of the bed and extends from end to end thereof, one of such supporting-plates being secured at each end of the side rail. The vertical web of the angle-bar is placed between the two flanges *d d'* and is secured thereto by rivets *f*, while as an additional support one of such flanges *d* is bent at a right angle to form a plate *d²*, which may be secured to the horizontal web of the angle-bar and to the preferably wooden end rail G by rivets *g*. The connecting-web between the flanges *d* and *d'* is cut away for

some distance to the rear of the supporting-plate, so as to permit the free entrance of the hook-plate between the two flanges, and this may be either from top or bottom, the plate proper being in this sense reversible and capable of attachment in either position to the side rail of the spring-supporting structure. The two flanges d d' are united by a pin h , securely riveted in position at a point about midway between the top and bottom of the flanges, and this pin is adapted to enter the inclined slot b' of the hook-plate and, by reason of the inclination of such slot, be forced toward the post or standard A and tightly jam or bind the ends x of the flanges d d' against such post, thereby firmly and rigidly locking the supporting-plate to the posts, the extent or degree of binding contact being in proportion to the force or weight exerted on the supporting-plates.

In Fig. 6 I have shown a slight modification of the structure in which the binding-surfaces x are considerably elongated, and that portion of the plate to which the side rail is secured is bent in slightly-different form, but retains the vertical and horizontal flanges for the reception of the similarly-disposed ribs of the side rail.

In Fig. 7 is illustrated a further modification, in which the supporting-plate is in the form of a block, solid or formed of a number of pieces and provided at its lower end with a slot for the reception of the hook-plate, as in the other cases.

By increasing the size of the supporting-plate the binding-surface x , in contact with the post A, may be increased or decreased very materially, the structure illustrated in Fig. 6 illustrating one form in which this binding-surface is attained with the expense of but very little extra metal.

Although the fastening device herein described is illustrated principally for the securing together of bedstead parts, it will be understood that it may be employed with little

or no modification to chairs, tables, lounges, or other articles of furniture.

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

1. In a securing device, the combination of the hook or catch having an upwardly-projecting slot angularly disposed, a supporting-plate formed of pressed steel bent into substantially U-shaped form and having parallel side walls or flanges, d , d' , to embrace the said hook or catch and a pin transversely disposed secured at its opposite ends in said flanges adapted to said hook or catch, substantially as specified.

2. As a new article of manufacture, a supporting-plate for a bedstead-fastening formed of a sheet of metal pressed or stamped into substantially U-shaped form and having side walls or flanges, d , d' , the connecting metal between the side walls or flanges being cut away for a portion of the length of the plate, and a holding-pin secured to said side walls or flanges, adapted to a catch provided in the bed-post, substantially as specified.

3. The combination of the supporting-post, a flattened hook-plate, b , having an inclined slot therein and provided with a rearwardly-extending rivet-shank squared for a portion of its length and adapted to suitably-shaped openings in the supporting-post, a plate, D, bent up from pressed steel to form two flanges or side walls, d , d' , a pin, h , carried between said flanges or side walls and adapted to enter the inclined slot, b' , and side rails, E, formed of angle-iron and having one web adapted to be secured between said flanges or side walls, d , d' , substantially as specified.

In witness whereof I have hereunto set my hand this 21st day of December, A. D. 1897.

ROBERT S. GROVES.

Witnesses:

HORACE PETTIT,
JNO. E. PARKER.