

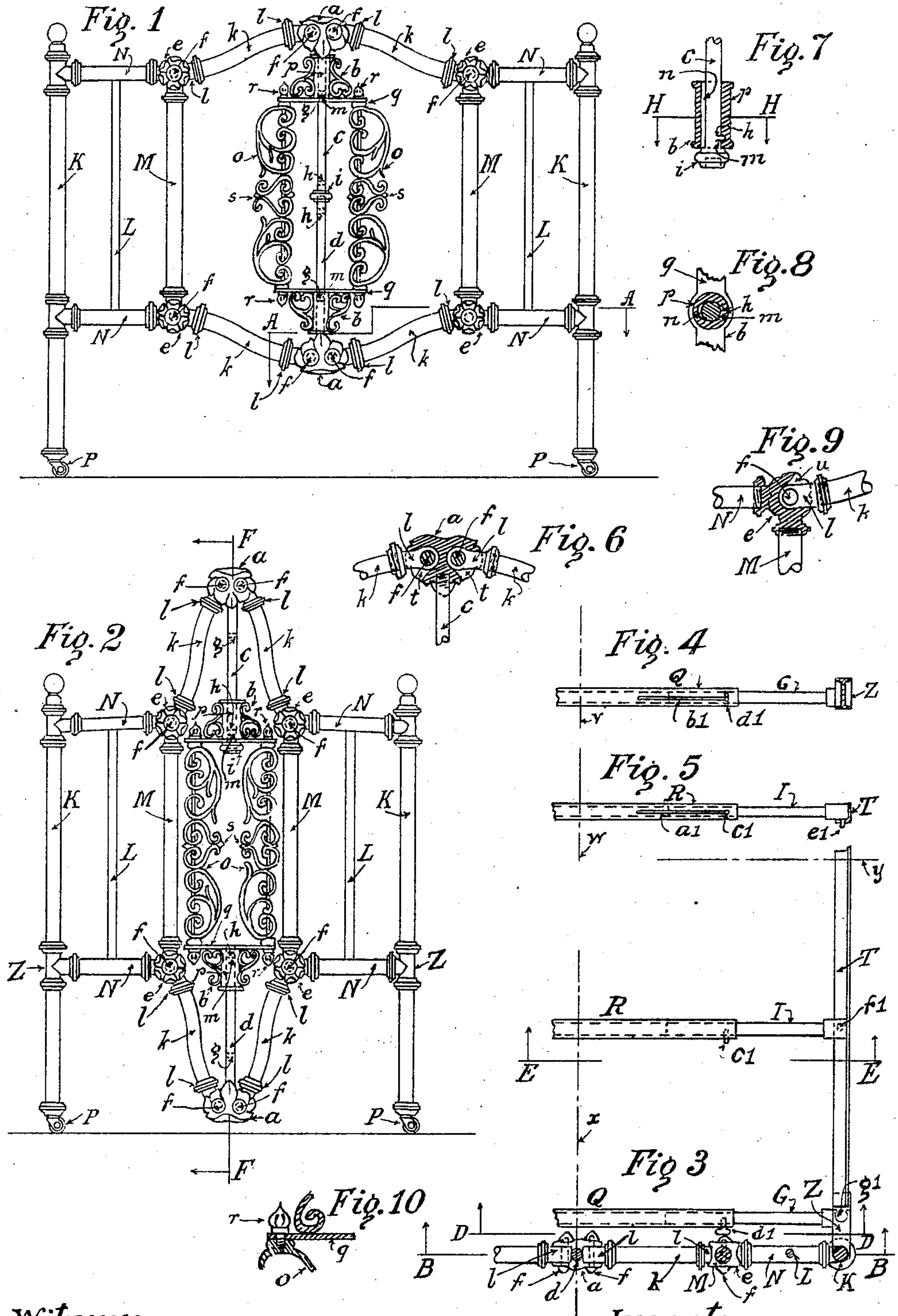
J. A. GRENIER.

BEDSTEAD.

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934,607.

Patented Sept. 21, 1909.



Witnesses,
Patrick J. Magee
Anna M. Voskuhl

Inventor,
Joseph Arthur Grenier

UNITED STATES PATENT OFFICE.

JOSEPH ARTHUR GRENIER, OF BEAVER FALLS, PENNSYLVANIA.

BEDSTEAD.

934,607.

Specification of Letters Patent. Patented Sept. 21, 1909.

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To all whom it may concern:

Be it known that I, JOSEPH ARTHUR GRENIER, a citizen of the United States, residing at Beaver Falls, in the county of Beaver and State of Pennsylvania, have invented a new and useful Bedstead, of which the following is a specification.

My invention relates to improvements in bedsteads having two sides attached to two ends and cross bars between the sides to support the bed; and the objects of my improvement are, first, to make the ends extensible so as to convert the bedstead from double to single or single to double as may be desired; second to make the operation of extending the bed quick and simple; third to make the bed appear as one not extensible; and fourth, to make an extensible bedstead to which the elegance and richness of design sought in fine homes can be applied. I attain these objects by the mechanism illustrated in the accompanying drawing, in which—

Figure 1 is an elevation of the bedstead end extended for double bed; Fig. 2 is an elevation of the bedstead end reduced for single bed; Fig. 3 is a horizontal section on the line A. A. of Fig. 1, the lines *x* and *y* are center lines, and all parts in this figure are symmetrical about these lines; Fig. 4 is a vertical section on the line D. D. of Fig. 3, the line *v* is center line about which the parts are symmetrical; Fig. 5 is a vertical section on the line E. E. of Fig. 3, the line *w* is center line about which the parts are symmetrical; Fig. 6 is a vertical section through the middle-joint in the plane of line B. B. of Fig. 3; Fig. 7 is a vertical section through the cross-head in the plane of line F. F. of Fig. 2; Fig. 8 is a horizontal section on the line H. H. of Fig. 7; Fig. 9 is a vertical section through the corner-joint in the plane of line B. B. of Fig. 3; and Fig. 10 is a vertical section in the plane of line B. B. of Fig. 3, showing one of the pins of the operating panel.

Similar letters refer to similar parts throughout the several views.

The several parts are made of brass or other material befitting the purpose, and of suitable forms, sizes and designs.

The main posts K, which are provided in the usual manner with casters P, the posts L and M and the bars N, with the elbows *e* at the corners adjoining the extensible portion, constitute the lateral rigid portions of the bedstead ends; these parts are screwed

one to another or otherwise secured to each other in any suitable manner. The extensible portion of each end is formed of the parts described as follows: The elbow *e* of the corner-joint is "tapped" on two sides and the post M and the bar N are connected thereto, it has a cavity *u* in which the eye-piece *l* is held by a pin *f* passing through the elbow *e*, the cavity *u* is made so as to allow only the required movement of the eye-piece L in the action of extending or reducing the bedstead, the upper and lower sides of said cavity *u* acting as a stop for said eye-piece *l*.

The "tee" *a* of the middle-joint has two cavities *t* in which the eye-pieces *l* are held by pins *f* passing through the "tee" *a*, the cavities *t* are made so as to allow only the required movement of the eye-pieces *l* in the action of extending or reducing the bedstead,—the upper and lower sides of said cavities *t* acting as a stop for said eye-piece *l*. The swing-arms are formed of a bar *k* having an eye-piece *l* screwed on or otherwise fastened to each end, the eye-piece *l* is made to fit in thickness the cavity *u* or *t*, and has a hole bored through to receive the pin *f*, one end of the arms is connected to the "tee" *a*, and the other end is connected to the elbow *e*. The rods *c* and *d* are screwed in, or otherwise suitably fastened to the "tee" *a*; the rods *c* and *d* have on one side, the bosses *g* and *h*, and the rod C has, at its lower end, the knob *i* in which there is a suitable cavity to receive and conceal the upper end of the rod *d* when the bedstead is extended. The operating panel is formed of two cross-heads *b* and two standards *o*; the sleeve *p* of the cross-head *b* is bored vertically to allow the passage of the rod *c* or *d*, one side has a cavity *m* in which the boss *h* or *g* engages, the other side has a groove *n* to allow the passage of the bosses *g* and *h*. The bar *q* of the cross-head *b* has, at each end, a hole to allow the passage of the pin *r*. The standards *o* are "tapped" at the top and bottom, and the pins *r* are screwed therein so that the standards *o* can be revolved on the axis corresponding to the center line of the pins *r*; or be held firm by the said pins *r* screwed in tightly, making them folding standards. Two ends, as described above, with two sides and other parts described hereafter complete the bedstead as it needs be for the intended purpose.

The sides T, the cross-section of which is L shape, having hitch holes f^1 in their horizontal leg, are connected to the lug Z of the main post K by a tongue and groove connection g^1 . The bars G of the end supports are made of square or round material cast with or otherwise suitably fastened to the said lugs z ; a hole is "tapped" on one side of the bar G to receive the thumb-screw d^1 ; the bar Q is made of hollow material or tubing of such size and form that the bar G will slide closely but freely therein, on one side of the bar Q are slots b^1 of such width as will allow the screw d^1 to slide freely therein, and of such length as will allow only the required movement of the bars G in the action of extending or reducing the bedstead.

The bar R of the intermediate supports is constructed the same as the bar Q described above, and have the slots a^1 of the same dimensions as the slots b^1 . The bars I are made of square or round material of such size as will allow them to slide closely but freely in the bar R, the outward end of the bars I is made to rest on the horizontal leg of the sides T and has a hitch pin or projection e^1 passing through the hitch hole in said horizontal leg. There will be two or more intermediate supports to suit the requirement.

To reduce the bedstead from double to single, loosen the thumb screws d^1 and the pins r by slightly unscrewing them, turn the standards O so that their point S will be toward each other, as shown in Fig. 2, screw the pins in tight, turn the operating panel 180 degrees, when the boss g will be out of the cavity m and be in line of the groove n , draw the "tees", a , farther apart one from the other until the boss h comes opposite the cavity m , turn the operating panel back to its former position when the boss h will engage into the cavity m and lock the mechanism, then screw the thumb-screws d^1 in tight; in this operation, the lateral rigid portions

of the bedstead ends and the sides T will be drawn closer one toward another, the thumb screws d^1 and the pins c^1 will slide to the inward end of the slots b^1 and a^1 , respectively.

I am aware that, prior to my invention, bedsteads, having sides connected to the ends by tongue and groove, and cross bars to support the bed, have been made, I am also aware that patents have been granted for extension bedsteads of the telescopic kind. I therefore do not claim such combinations broadly; but

I claim:

1. In a bedstead the combination with the two lateral rigid portions of the bedstead end having corner-joint elbows of the swing-arms having at each end an eye-piece, the middle-joint tees having each a vertical rod provided with bosses, and the operating panel working in conjunction with said vertical rods; the swing arms being connected in pairs by pins passing through the tees, and one end of each pair being connected by a pin to said elbows forming a flexible connection between the said lateral rigid portions whereby the said lateral portions are drawn closer together or forced farther apart, all substantially as and for the purpose set forth.

2. In a bedstead, the combination with the lateral rigid portions of the bedstead end having corner-joint elbows, the swing arms and middle-joint tees having each a vertical rod provided with bosses, of the cross-heads bored vertically and having a groove and a cavity for guiding said vertical rod and lodging said bosses whereby locking the combination, and the folding standards connected by pins to the cross-heads, substantially as shown and for the purpose described.

JOSEPH ARTHUR GRENIER.

Witnesses:

ANNA M. VOSKUHL,
PATRICK J. MAGEE.