

(No Model.)

L. C. NEFF.
RAIL GRIP JOINT FOR BEDSTEADS.

No. 593,330.

Patented Nov. 9, 1897.

Fig: 1.

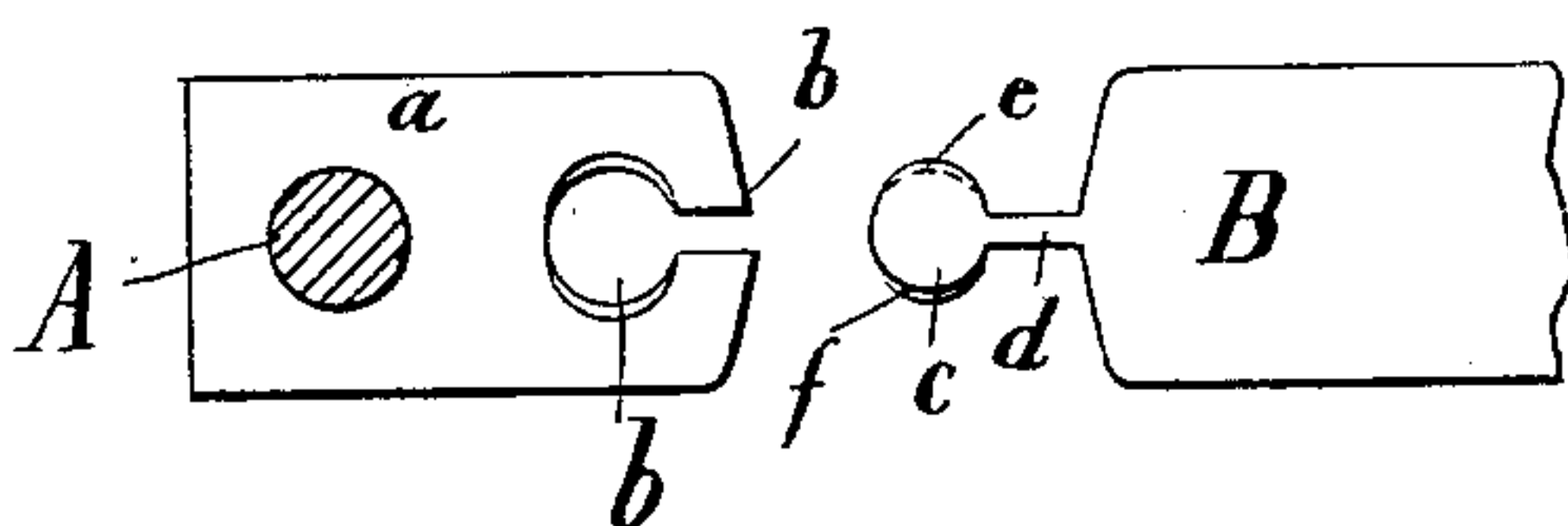


Fig: 2

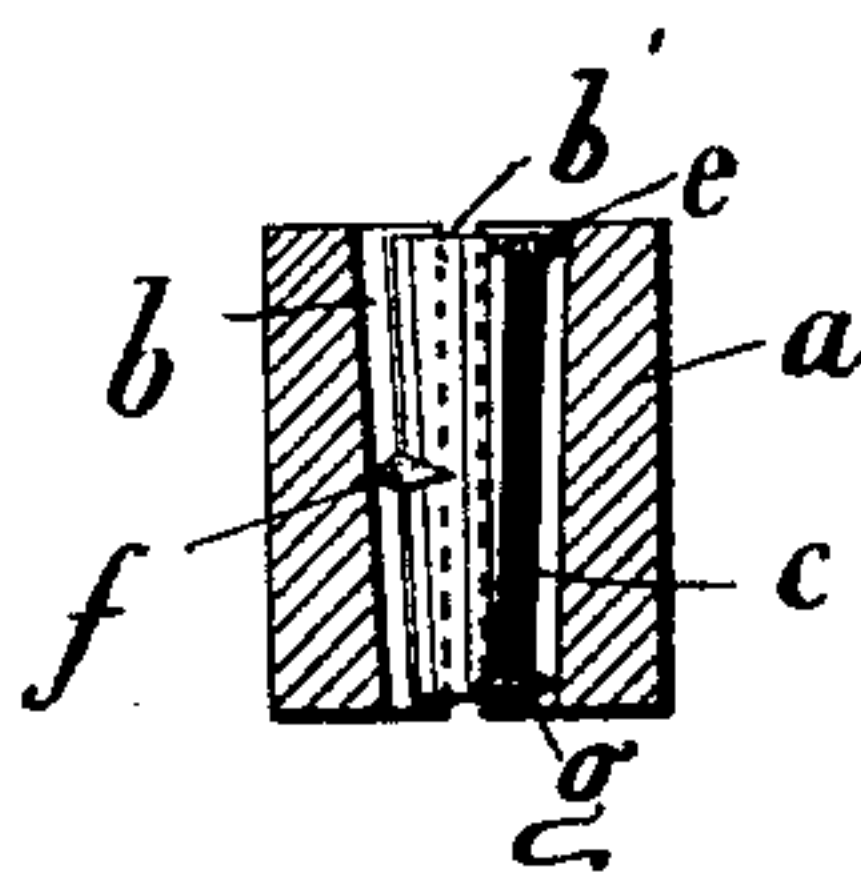
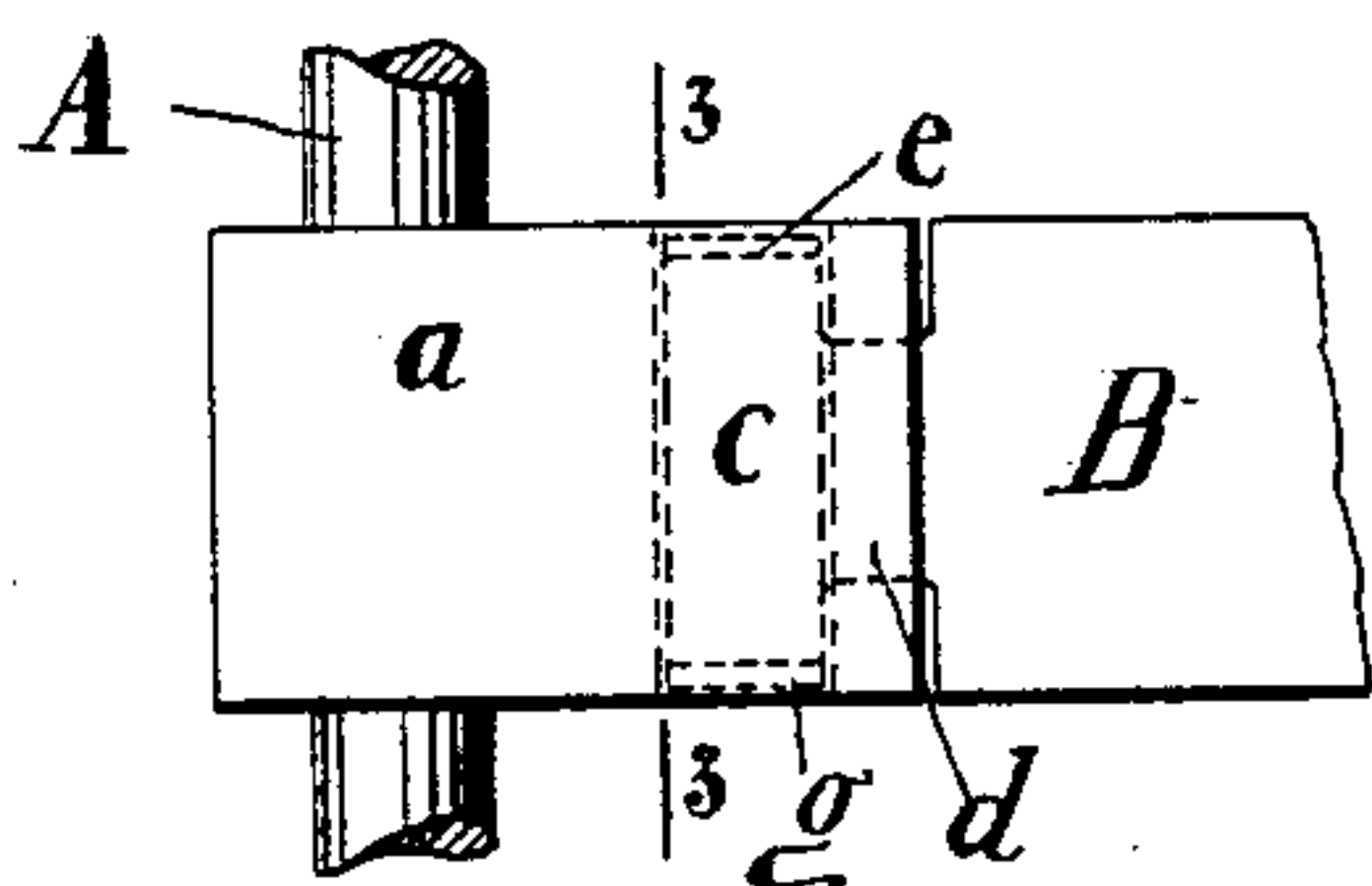


Fig: 3.

Witnesses
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UNITED STATES PATENT OFFICE.

LOUIS C. NEFF, OF BROOKLYN, NEW YORK.

RAIL GRIP-JOINT FOR BEDSTEADS.

SPECIFICATION forming part of Letters Patent No. 593,330, dated November 9, 1897.

Application filed March 8, 1897. Serial No. 626,356. (No model.)

To all whom it may concern:

Be it known that I, LOUIS C. NEFF, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Rail Grip-Joints for Bedsteads, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to an apparatus for attaching the side rail of a bedstead to the head and foot pieces, and is particularly applicable for use in connection with the ordinary metallic bedstead. In this class of bedsteads it has been found impossible to secure a stable connection between these parts, owing to the difficulty encountered in casting the adjacent segments so accurately as to provide abutting surfaces which will be sufficiently true to bind one against the other uniformly throughout. This trouble is greatly augmented by the fins or cakes formed in casting on these various contacting parts.

The object of my invention is to provide a connection without these defects which will obviate all these difficulties and by reducing the various binding-surfaces of the cooperating segments to a minimum form a joint which will render the entire erected structure perfectly rigid and irresponsive to any strain which in the ordinary structure as now in use would occasion oscillation of the head or of the foot piece or of the entire bedstead to a greater or less extent.

The invention consists in the novel features of construction hereinafter set forth and described, and more particularly pointed out in the claims hereto appended.

Referring to the drawings, Figure 1 is a top view of a portion of a metallic bedstead, showing the elements of my device detached from each other. Fig. 2 is a side elevation thereof, showing said elements in their proper binding relation; and Fig. 3 is a cross-section on the line 3 3 of Fig. 2.

Like letters refer to like parts throughout the several views.

My invention is shown and described as applied to a metallic bedstead, although it is obvious that its use is not limited to this construction.

In the drawings, A denotes a portion of the

foot-piece of an ordinary metallic bedstead, and B denotes the side rail thereof.

The foot-piece A has securely attached thereto or made integral therewith a lug or projection *a*, having therein a cavity or socket *b*, extending vertically therethrough, either partially or wholly, and a slot *b'* to admit the connection between the parts *c* and B to enter said socket, as hereinafter described. This socket *b* is preferably made elliptical at its top or mouth and with its sides so inclined that at its base it will form a true circle of a diameter equal to the smallest dimension of said ellipse. The configuration and extent of this cavity or socket, however, are immaterial, as it is obvious that if any part of the side wall thereof be inclined and the whole coincide with its cooperating element the desired effect will be produced.

The side rail B has firmly attached thereto, by means of the web *d*, a head *c*, corresponding, approximately, in configuration with the socket *b*, against the walls of which it is designed to bind. To facilitate its action and to reduce the adjoining binding-surfaces to a minimum, I provide this head *c* at a suitable distance apart with nubs *e*, *f*, and *g*, arranged alternately on opposite sides thereof. The parts B, *d*, and *c* are preferably made integral to insure greater strength and durability.

The operation of the above-described apparatus is as follows: The head *c* having been placed in the cavity or socket *b* and being properly guided by the perpendicular walls of said socket and of the slot *b'*, which is adapted to receive the web *d*, one of the nubs, as *g*, is brought into such frictional contact with an inclined side wall as to impede the downward movement and throw the alternate nub *f* against the opposite side wall of said socket. Two of these nubs being simultaneously in contact with the walls of the socket, the head *c* will drop therein until the tendency of each of the nubs *f* and *g* is to bind at one point only against its respective contacting side. The continuing pressure, however, will operate to throw one of them, as *g*, out of contact with the wall, and with the other *f* as a fulcrum to throw the nub *e* into similar contact therewith, thus dropping the head into said cavity until these two

nubs have a tendency to bind, whereupon, with *f* again as a fulcrum, the point *g* will be brought into its former relation to the side wall and the head will again be dropped.

5 This operation will be repeated, resulting each time in dropping the head farther into the socket, which is of gradually-diminishing dimensions, until all of the points are in such positions that they can no longer oscillate

10 upon any of them as a fulcrum, thereby so binding the various parts as to secure them in this fixed position, making the entire structure perfectly rigid. It is to be observed that there is no binding of parts except between

15 the nubs *e*, *f*, and *g* and the sides of the socket immediately adjoining each, the remaining walls of the socket and of the slot *b'* merely acting as guides and having no other special function. The contiguous vertical

20 surfaces of the lug *a* and of the side rail *B* need not come into contact, although I preferably construct the various parts so that these surfaces will come into such relation as to avoid any ungainliness occasioned by

25 the presence of any considerable crack at each joint.

What I claim as my invention, and desire to have protected by Letters Patent, is—

30 1. In a rail grip-joint for bedsteads, the member *a* provided with a socket *b* of gradually-diminishing dimensions, and a slot *b'*, in combination with a side rail provided with a web *d* and a head *c* having a plurality of

nubs situated alternately on opposite sides thereof, substantially as specified. 35

2. In a rail grip-joint for bedsteads, the member *a* having a socket *b* with an inclined wall and perpendicular guide-walls, a slot *b'*, a member *B* having a web *d* and a head *c* having nubs *e*, *f*, and *g*, situated alternately 40 on opposite sides thereof, substantially as specified.

3. In a rail grip-joint for bedsteads, the member *a* having a socket *b* of gradually-diminishing dimensions, and a slot *b'*, a side 45 rail provided with a head *c* having nubs *e*, *f* and *g* situated alternately on opposite sides thereof, and a web connection *d* between said head and the side rail of the bedstead, substantially as specified. 50

4. In a rail grip-joint for bedsteads, the member *a* having a socket *b* with an inclined side wall and perpendicular guide-walls, a head *c* having a wall vertical at the junction 55 of the neck or web, and nubs *e*, *f* and *g* situated alternately on opposite sides thereof, and a web connection *d* between said head and the side rail of the bedstead, substantially as specified.

In witness whereof I have hereto affixed my 60 signature this 6th day of March, 1897.

LOUIS C. NEFF.

Witnesses:

M. WILSON,
JOSEPH V. FLYNN.