

No. 615,073.

Patented Nov. 29, 1898.

J. P. LEIN.
MATTRESS FRAME.

(Application filed Aug. 7, 1897.)

(No Model.)

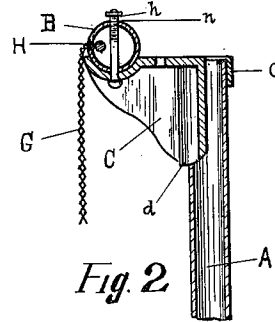
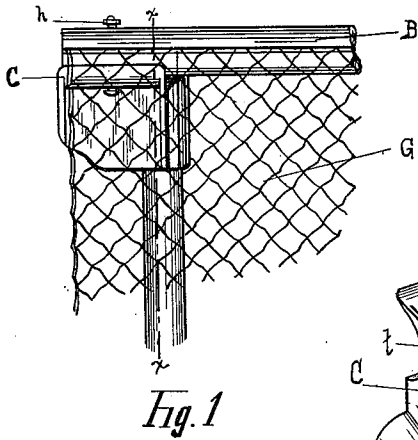


Fig. 2

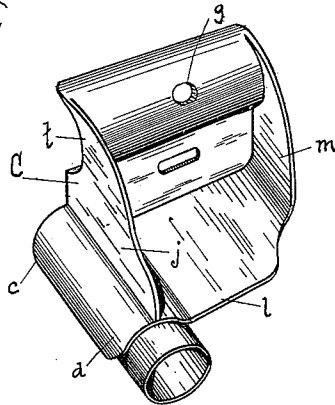


Fig. 3

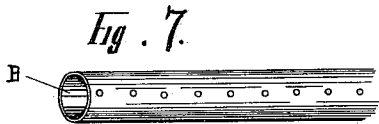


Fig. 7

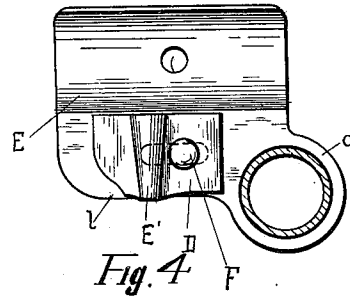


Fig. 4

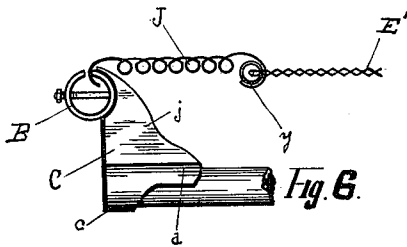


Fig. 6

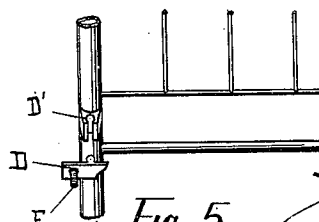


Fig. 5

WITNESSES:

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MATTRESS-FRAME.

SPECIFICATION forming part of Letters Patent No. 615,073, dated November 29, 1898.

Application filed August 7, 1897. Serial No. 647,491. (No model.)

To all whom it may concern:

Be it known that I, JOHN P. LEIN, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented a new and useful Mattress-Frame, of which the following is a full, clear, and concise description.

My invention relates to an improvement in mattress-frames; and its object is to construct a simple and inexpensive frame in which the smallest possible surface will be exposed to the accumulation of dust, dirt, or vermin and in which the weight put upon the mattress shall be so distributed as to be directed against all parts and in which the greater the weight the more firmly will the frame be held together.

The invention also comprehends other features of advantage, which will more fully appear hereinafter.

The invention will be more particularly described with reference to the accompanying drawings, in which—

Figure 1 is a section of a mattress-frame embodying my invention; Fig. 2, a sectional end view on the line X X of Fig. 1; Fig. 3, a perspective of the bracket which I employ; Fig. 4, an enlarged detail of my invention, and Figs. 5, 6, and 7 are enlarged views of modifications of my device.

In the drawings, A represents the side rail of a bed, which may be composed of any desirable or suitable material, but which, as well as the ends of bars B, more fully hereinafter set forth and described, I have found advantageous to manufacture out of ordinary piping of a suitable size. In all instances, however, the ends of this side rail are preferably cylindrical or other suitable shape and adapted to fit into and engage with a bracket C, which I will hereinafter fully describe.

It is to be understood that in the description of my invention, for sake of brevity, I will enlarge upon but one side rail, end bar, and the adjacent connecting devices, it being understood that the other side rail and end bar of the frame are similarly constructed and united.

The bracket C comprises a socket *c*, into which the end of the side rail is adapted to snugly fit, while the upper surface of this

socket extends backwardly a suitable distance, forming an extension *d*, which when the woven-wire fabric is attached to the end bars bears firmly down upon the side rails, as hereinbefore mentioned. Secured to this socket and extending upwardly and outwardly therefrom is a bracket proper, E, which extends approximately at right angles to the general plane of the extension *d* aforesaid and has formed in its outer surface a flat portion and on its upper outer surface a concave portion *f*, which is adapted to receive the sides of the end bar, as shown in the drawings. This concave portion is provided centrally thereof with a circular opening *g*, which is adapted to register with a correspondingly-formed opening in the end of the bar, through which openings a clamping-bolt *h* is adapted to pass.

Secured to the central upper portion of the extension *d* is a brace *j*, which firmly supports the concave portion, groove, or clamp *f* and prevents it from being forced back through the tension of the woven-wire fabric or weight thereupon. Secured to the outer side of the socket *c* and extending parallel with the concave portion or groove is a shoulder *l*, which after extending outwardly a suitable distance is curved upwardly, so as to correspond at the end with the groove and flattened surface and yet form an additional brace at the outer end of the shoulder and groove, thus affording a substantial and satisfactory support to the shoulder and preventing it from being forced backward. This shoulder *l* is adapted to rest upon the side rails of the bed-frame, it being understood that the side rails of the mattress-frame usually rest within the side rails of the bed-frame and extend parallel therewith, thus dispensing with the use of slats and permitting the mattress-frame to rest directly upon the bed-frame.

The end bar B of the frame is preferably formed of a split tube having registering circular openings or bolt-holes *n* passing through approximately at right angles to the general vertical plane of the slot. In assembling the frame the slot is preferably placed at the upper side, and the end of the fabric G passes through the slot into the tube and is there held by slipping a wire rod through the end of the fabric and firmly clamping the sides of

the tube together and also simultaneously clamping the tube to the clamps *f*.

The form of the end bar is immaterial. If preferred, the bar may be a common wooden bar. In this latter instance the bar may be clamped to the clamp *f* as heretofore described for the tube. In some cases I employ a somewhat smaller yet similar split tube, which engages the ends of the fabric and about which the ends of helical springs *J* are tightly secured, while the other ends of these springs pass through openings formed in the end bar *B*, as shown in Fig. 6.

In the operation of the above device the side rails of the frame are slipped into the sockets, from which latter the shoulders of the brackets extend outwardly on each side, and the end bars, having the ends of the woven-wire fabric slipped therein through the slot thereof, are then firmly clamped against the brackets and held in their proper position in the grooves *f*. The frame is then ready for use, and the greater the weight put upon the mattress the more firmly will the several parts of the mattress-frame be drawn together.

It will be seen that the side rails of the bed-frame may be dispensed with without sacrificing the strength of the bed, and, further, but little surface is exposed to the accumulation of dirt or vermin.

Having now described my invention, what I claim as new, and desire to protect by Letters Patent, is—

1. A socket for a mattress-frame comprising a part adapted to engage the upper surface of the side rails of the mattress-frame, a horizontally-extending shoulder formed on one side thereof, a vertically-extending bracket at the outer end of said shoulder, a similar bracket at the point where said socket engages the side rail, and means for securing the end bar of the mattress to the upper ends of said brackets, substantially as described.

2. A socket for a mattress-frame, comprising a part adapted to engage the upper surface of the side rails of the mattress-frame, a horizontally-extending shoulder formed on one side thereof, a vertically-extending

bracket at the outer end of said shoulder, a similar bracket at the point where said socket engages the side rail, and hollowed clamps located in the upper ends of said brackets, said clamps being adapted to receive the end bars of the mattress-frame, substantially as described.

3. In a mattress-frame, the combination of side rails, brackets having sockets engaging the same, clamps on said brackets, a split end rail adapted to fit in said clamps, a fabric having the ends thereof adapted to pass into said split end rail, a rod connected with the end of said fabric and located within said end rail, and means for simultaneously clamping the end rail with the clamp and the fabric within the clamp, substantially as described.

4. In a mattress-frame, the combination of side rails, brackets having sockets engaging the same, clamps on said brackets provided with a concave outer surface, a split end rail adapted to snugly fit within said concave surface, a wire fabric having the ends thereof adapted to pass into the said split end rail, a rod connected with said wire fabric and within said end rail, and means for simultaneously clamping the said end rail with the said clamp and upon the said wire fabric, substantially as described.

5. In a mattress-frame, the combination with the side rails, of sockets adapted to receive said side rails and also the end rails of the frame, split end rails, a fabric having its ends adapted to pass into the split end rails, and one or more bolts adapted to pass through the split end rail transversely and through the sockets, whereby the edges of the split end rail are clamped upon the fabric and the rail is clamped to the socket simultaneously by said bolt or bolts, substantially as described.

In testimony whereof I have hereunto set my hand this 19th day of July, 1897.

JOHN P. LEIN.

Witnesses:

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W. IRVINE.