No. 754,097. PATENTED MAR. 8, 1904.

W. SHANNON.

BED BOTTOM.

APPLICATION FILED AUG. 8, 1902.

NO MODEL.

Fig. 1.

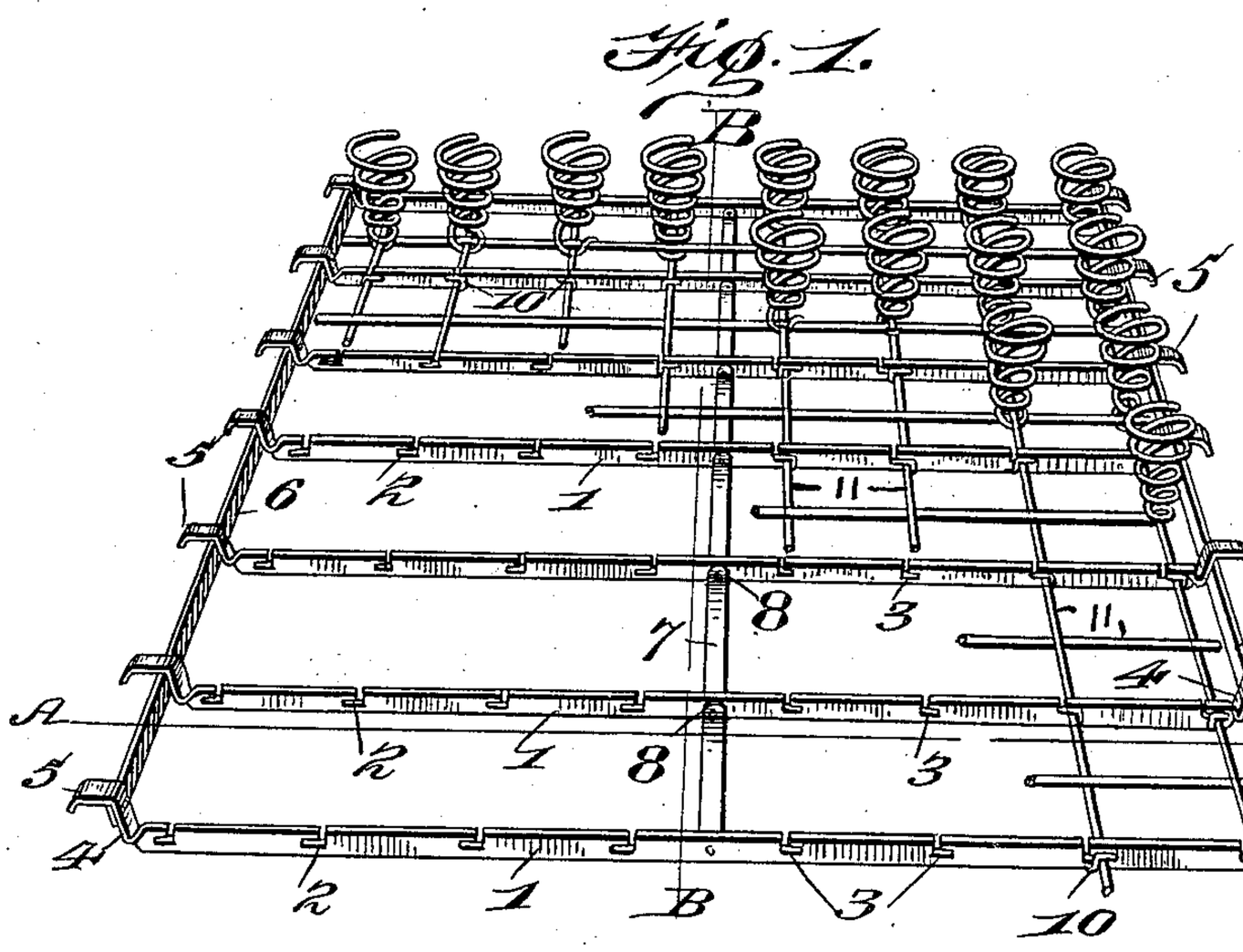


Fig. 2.

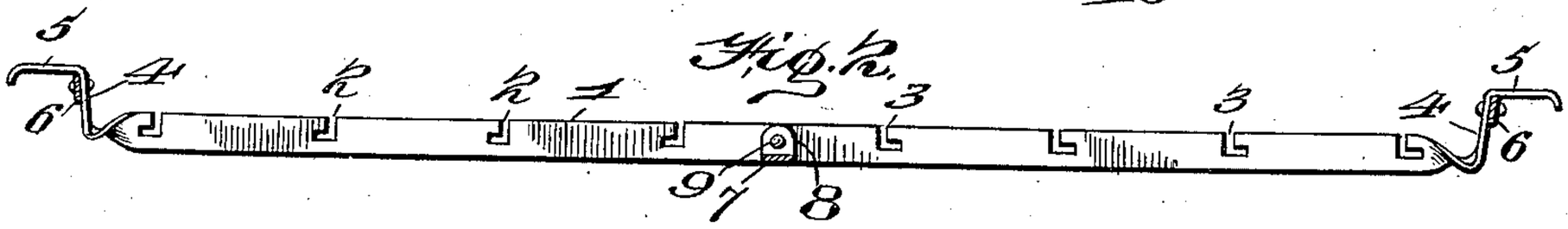


Fig. 3.

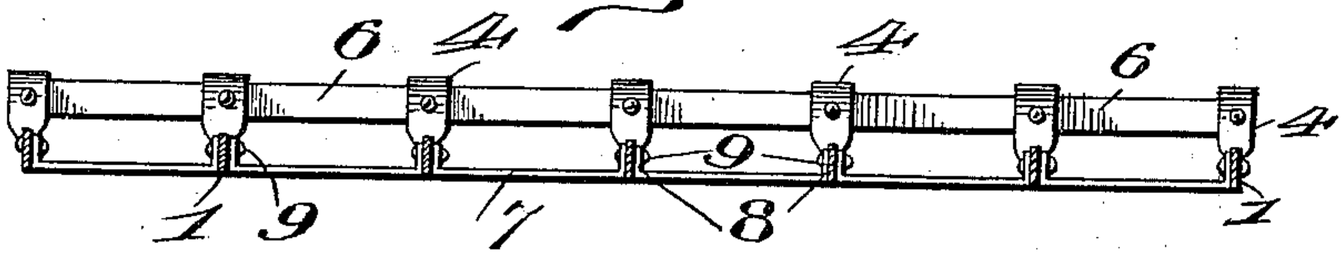


Fig. 4

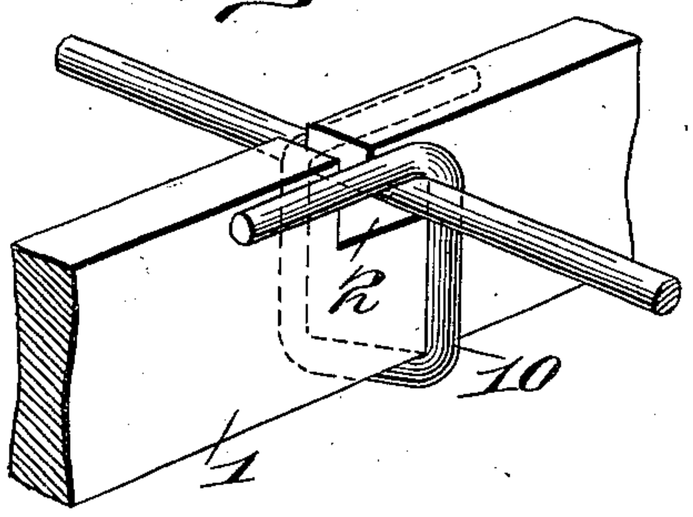
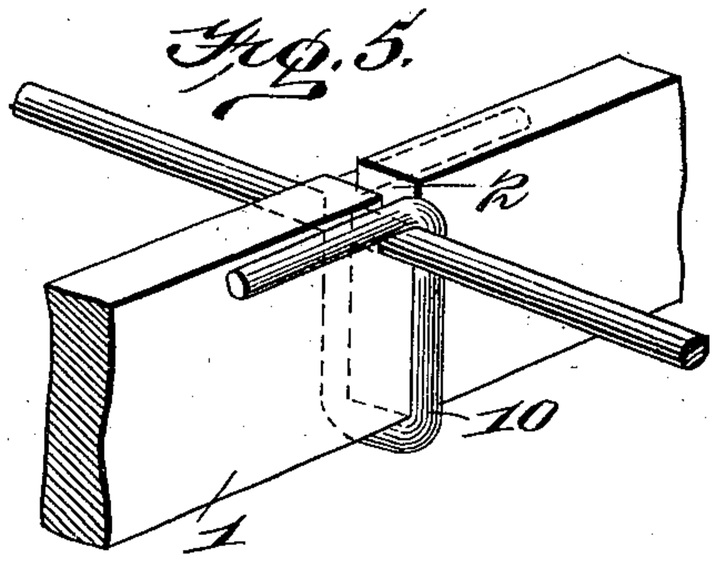


Fig. 5.



Witnesses

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No. 754,097. Patented March 8, 1904.

UNITED STATES PATENT OFFICE.

WOODFORD SHANNON, OF LOUISVILLE, KENTUCKY.

BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 754,097, dated March 8, 1904.

Application filed August 8, 1902. Serial No. 118,933. (No model.)

To all whom it may concern:

Be it known that I, WOODFORD SHANNON, a citizen of the United States, residing at Louisville, in the county of Jefferson, State of Kentucky, have invented certain new and useful Improvements in Supports for Bed-Bottoms, of which the following is a specification, reference being had to the accompanying drawings, forming part thereof.

The bed-bottom hereinafter described is intended more especially for use upon metal bedsteads in connection with wire mattresses built upon cross-wire foundations.

The object of my invention is to reduce the weight and assure rigidity and durability of the wire mattress. The cross-wires of the base of the mattress enter slots in the bed-bottom support, extend at right angles thereto, and act as braces. The structure of the bottom-support is further braced by side bars secured to vertical parts of hangers formed on each slat, and said slats are thereby connected into one integral structure. Each of the bars or slats of the support is provided with a series of slots grouped on each side of the center of the slats. These slots are preferably L-shaped, and those on one side of the center of the slats are directed in opposition to those on the other side of the center of the slats. Wire clips or saddle-wires may be employed as an additional safeguard against displacement of the cross-wire base of the spring-mattress from the slots in the slats.

With these objects in view my invention consists in the parts and combinations of parts hereinafter fully described, and particularly pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of my improved bed-bottom support with the mattress secured thereon, the mattress being broken away. Fig. 2 is a transverse section of the same on the line A A, Fig. 1. Fig. 3 is a sectional view on the line B B, Fig. 1; and Figs. 4 and 5 are enlarged detail views showing use of wire clips or saddle-wires.

1 represents a slat, of which there are a series in each bed-bottom support, said slat being provided with L-shaped slots 2, disposed to one side of its center, and L-shaped slots 3, disposed to the other side of its center, said slots 2 and 3 running in opposite directions. The end of each of the slats 1 is given a half-twist and then bent upward, as at 4, thence outward and downward, so as to form a hook 5. The vertical bends 4 provide for hanging the slats in a plane below their supports and keep them from tipping under the load imposed upon them, so that their greater dimension can be disposed vertically, and thus greatly increase the stiffness. The series of slats 1 are joined together at their ends by means of tie-rods 6, riveted or otherwise suitably secured to the vertical portions 4, as shown in several figures. This mode of attachment brings the tie-rods in planes transverse to the plane of the bottom-support and gives greater rigidity to the support than if the rods were riveted to horizontal portions of the slats.

7 represents braces, the ends of which are upturned, as at 8, through which a rivet 9 is adapted to pass, whereby said braces are secured to the center of said slats, spacing them apart, as clearly shown in Figs. 1 and 3. The peculiar L-shaped slots are cut in series in opposition from the middle of each slat. These slots may be cut either on the upper or lower edge of the slat, preferably on the upper edge, and may be shaped otherwise than illustrated, although such shape is the simplest and most practical. The slots are cut at intervals corresponding to the distance between the longitudinal rods 11 in the bottom of a wire mattress to be used in connection therewith, the extreme distances between the two slots nearest the middle of the bed-bottom being made to conform to the distances between the longitudinal rods 11 nearest the middle of the wire mattress, while from either side of the slots the distance center to center of slots conforms to the distance between corresponding longitudinal rods 11 of wire mattresses.

While the L-shaped slots will ordinarily be sufficient to avoid displacement of the longitudinal rods or cross-wires 11 of the base of the mattress, it may nevertheless be desirable to further secure these cross-wires in the slots by means of wire clips or saddle-wires 10, as shown in Figs. 4 and 5. These wires 10 engage a portion of the slats, preferably by passing beneath the slats, although they might also pass through them, and extending up on opposite sides of the slat and also on opposite

sides of the cross-wires are bent at right angles over said cross-wires in opposite direction and by the opposed directions of these bends are prevented from displacement and will securely hold the cross-wire in the slot, even though it should become forced out of the horizontal portion of the slot into the vertical portion. These wire clips or saddle-wires 10 may also be used in connection with a plain slot, as shown in Fig. 5, if desired, although I prefer the L-shaped slot, as shown in Fig. 4. The horizontal portions of the slots provide means for holding the cross-wires in the slots, and the wire clips or saddle-wires also provide means for accomplishing the same purpose and when used in connection with the L-shaped slots serve the additional function of resisting any tendency in the cross-wires to move out of the horizontal portions of the slots, or if said cross-wires should move into the vertical portions of the slots they prevent the cross-wires leaving the said slots.

The side pieces connecting the slats at the portions 4 are essential parts of the complete device, and connection is made to the vertical members by means of rivets in order that greater rigidity may be secured. The pieces 7, shown in the middle of the bed-bottom, are preferably used, but are not essential. The hooks or hangers 5 are adapted to drop over the outside of the upper edge of the bed-rail, so that said hooks may be omitted and the bottom suspended in any manner found preferable.

By the use of this construction the rigidity of the support and wire mattress is assured by reason of the longitudinal wires in the base of the mattress being passed through the slots 2 and 3, whereby they act as braces and render unnecessary special braces aside from those attached to the vertical portions on the hangers or hooks. I am also enabled by this construction to make the support much lighter by utilizing the longitudinal base-wires of the wire mattress as braces in lieu of the strap steel or iron commonly employed in the manufacture of wire mattresses upon slat foundations.

The support is readily detachable from the wire mattress which it is intended to support, so that the mattress may be used in connection with wood slats upon either metal or wood bedsteads that may not be adapted to receive the special bottom herein described, whereas the ordinary wire mattress built upon slat foundations can only be used in connection with its own special foundation.

In the use of the present device the wire mattress is placed in position upon the slats, and the longitudinal wires thereof are sprung toward the middle of the slats until they drop into the openings of the slats, when they are dropped down upon the bottom of the slots and permitted to spring back into position, whereby they are locked in said slots against vertical displacement. Inasmuch as the slots are arranged in groups upon each side of the center of the slats and extend in opposite directions, the longitudinal rods of the mattress upon each side of the middle of the bed-bottom mutually resist horizontal displacement of any of the longitudinal rods after once being placed in position.

It is of course obvious that my invention is applicable to the spring construction for couches and as a support to the fabric of woven-wire spring-beds.

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

1. A support for spring-mattresses, comprising a series of slats spaced apart, and secured together at their ends and provided with a series of L-shaped slots disposed in opposite directions from the center of the slats.

2. A support for spring-mattresses comprising a series of slats connected together at their ends, vertically-disposed hooks integral with each end of each slat, each slat being provided with a series of L-shaped slots disposed in opposite directions on each side of the center of said slat.

3. A support for spring-mattresses comprising a series of slats joined together at their ends and provided with a series of L-shaped slots disposed in opposite directions on each slat from the center thereof, and a central brace connecting the slats.

4. A support for spring-mattresses comprising a series of slats, vertically-disposed hooked ends integral with each end of said slats, a bar connecting the hooked ends of said slats, central braces connecting the slats, each slat being provided with L-shaped slots in the top thereof extending in opposite directions from the center of the slat.

5. A bed-bottom support, comprising a series of connected slats, each of which is provided with a series of oppositely-disposed slots, a mattress secured thereon, with a cross-wire base entering said slots, and wire clips further securing the cross-wires in the slots.

6. A bed-bottom support comprising a series of slats, bent upon a half-twist at their outer ends, and further bent upward at their outer ends to form suspension-hooks, rods connecting the slots at their outer ends by connection to the vertical members of such suspension-hooks, braces connecting the slats at the middle, and a group of oppositely-disposed slots formed in said slats on each side of the center thereof.

The foregoing specification signed this 5th day of August, 1902.

WOODFORD SHANNON.

In presence of—
L. G. BLUNK,
GOLDIE WAGONER.