

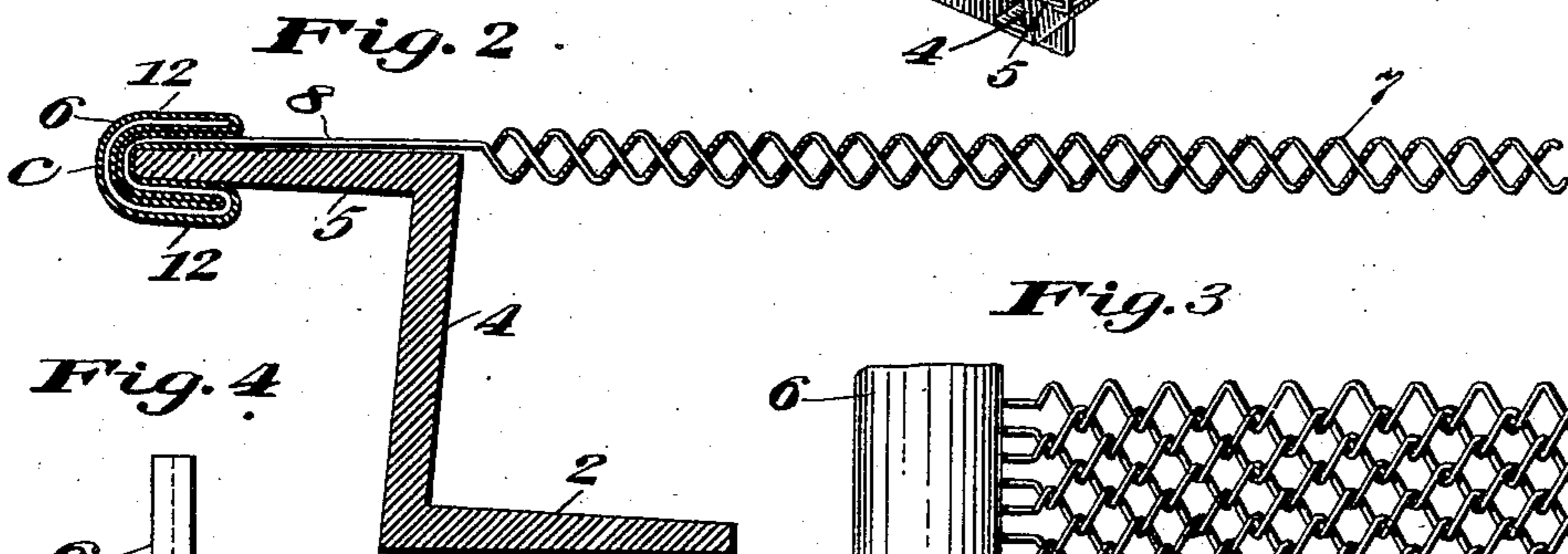
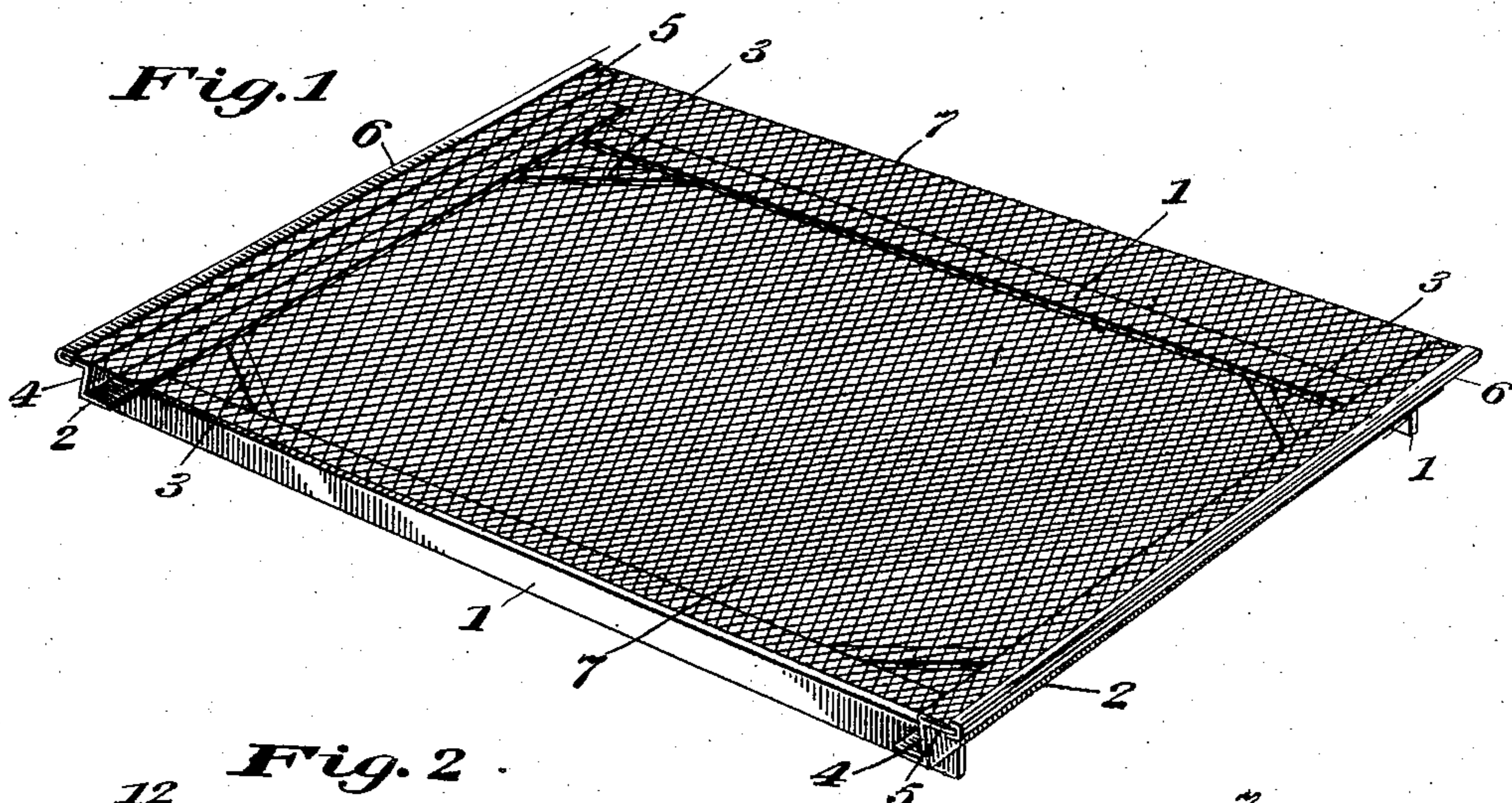
No. 726,064.

PATENTED APR. 21, 1903.

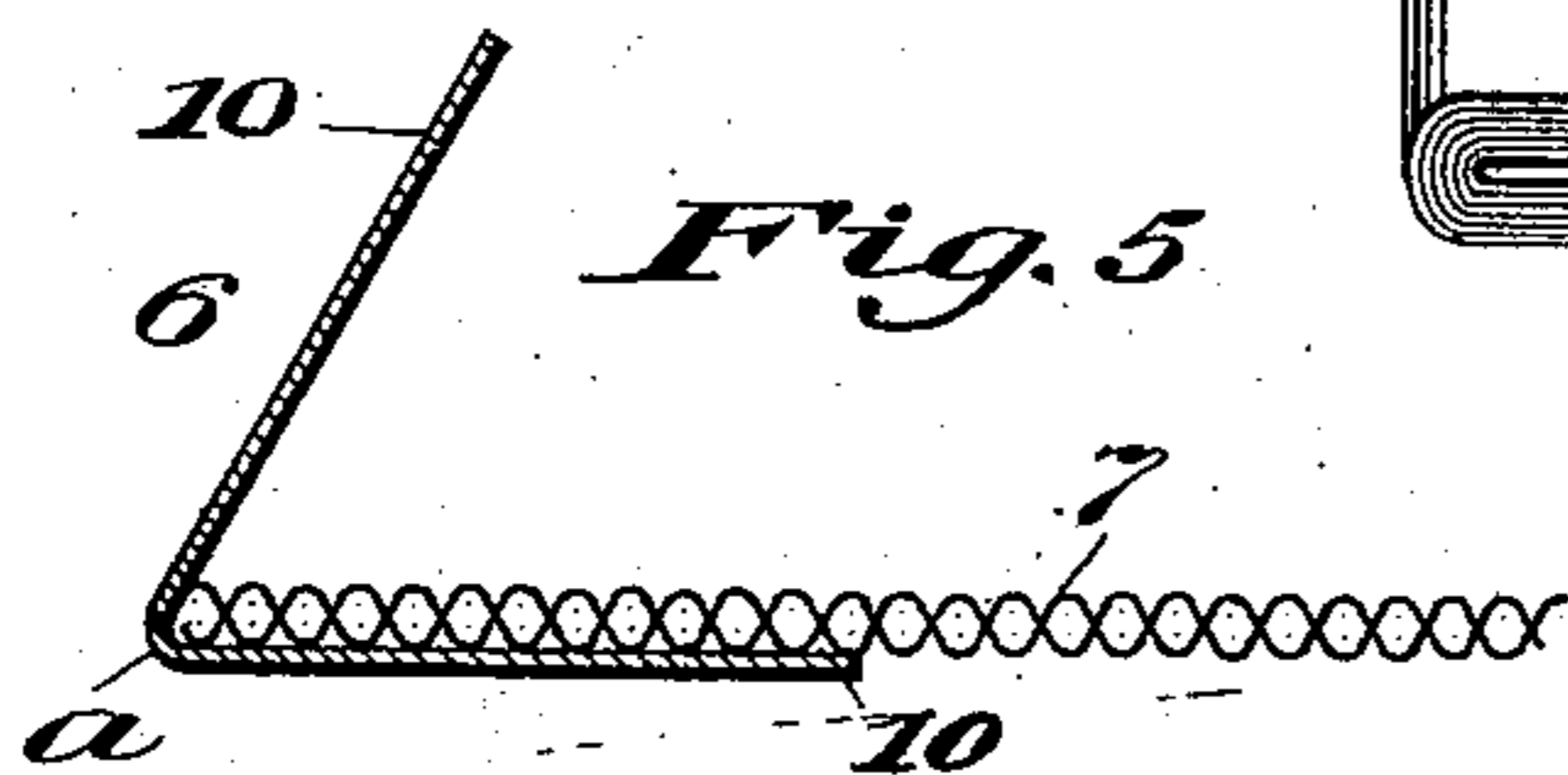
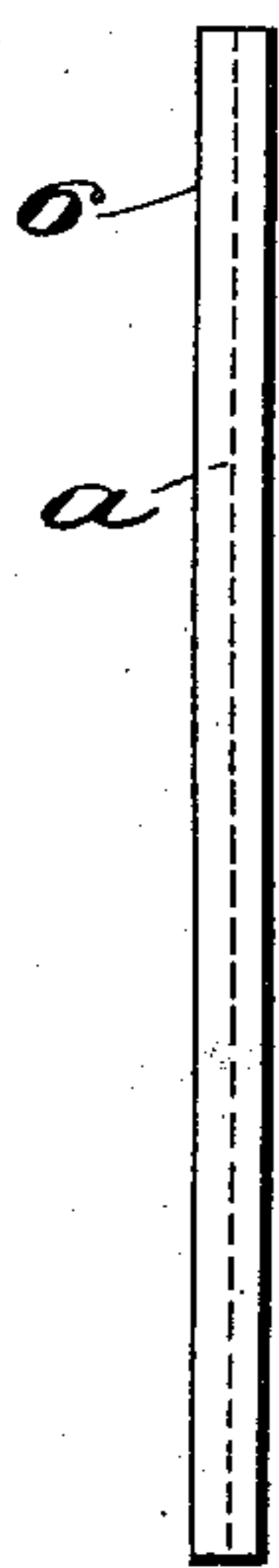
W. D. HUNT.  
BED BOTTOM.

APPLICATION FILED NOV. 18, 1901.

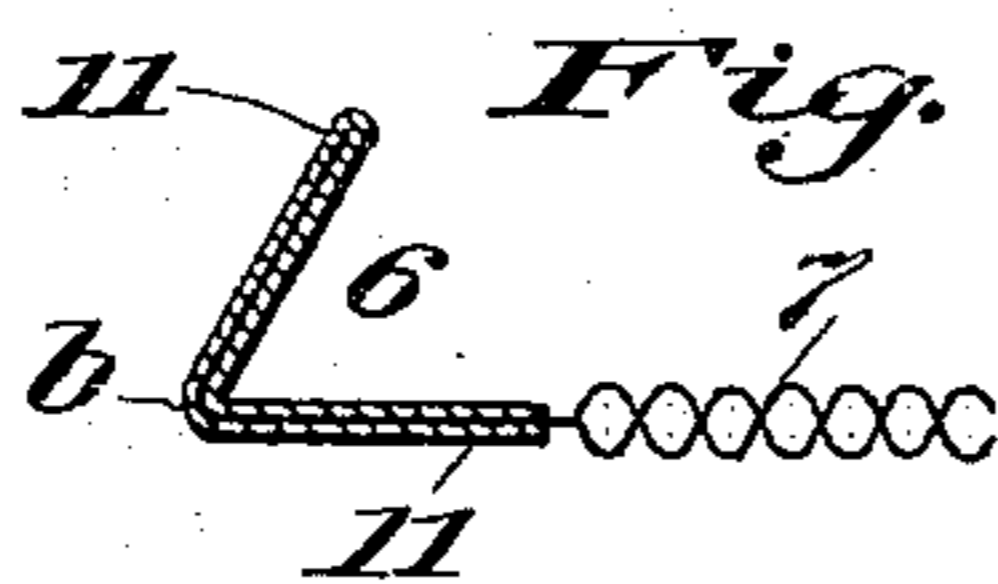
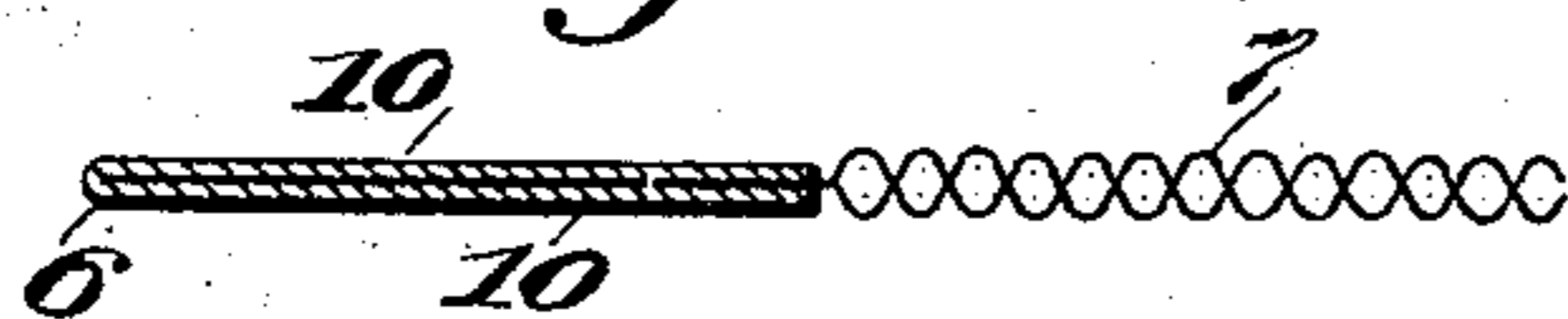
NO MODEL.



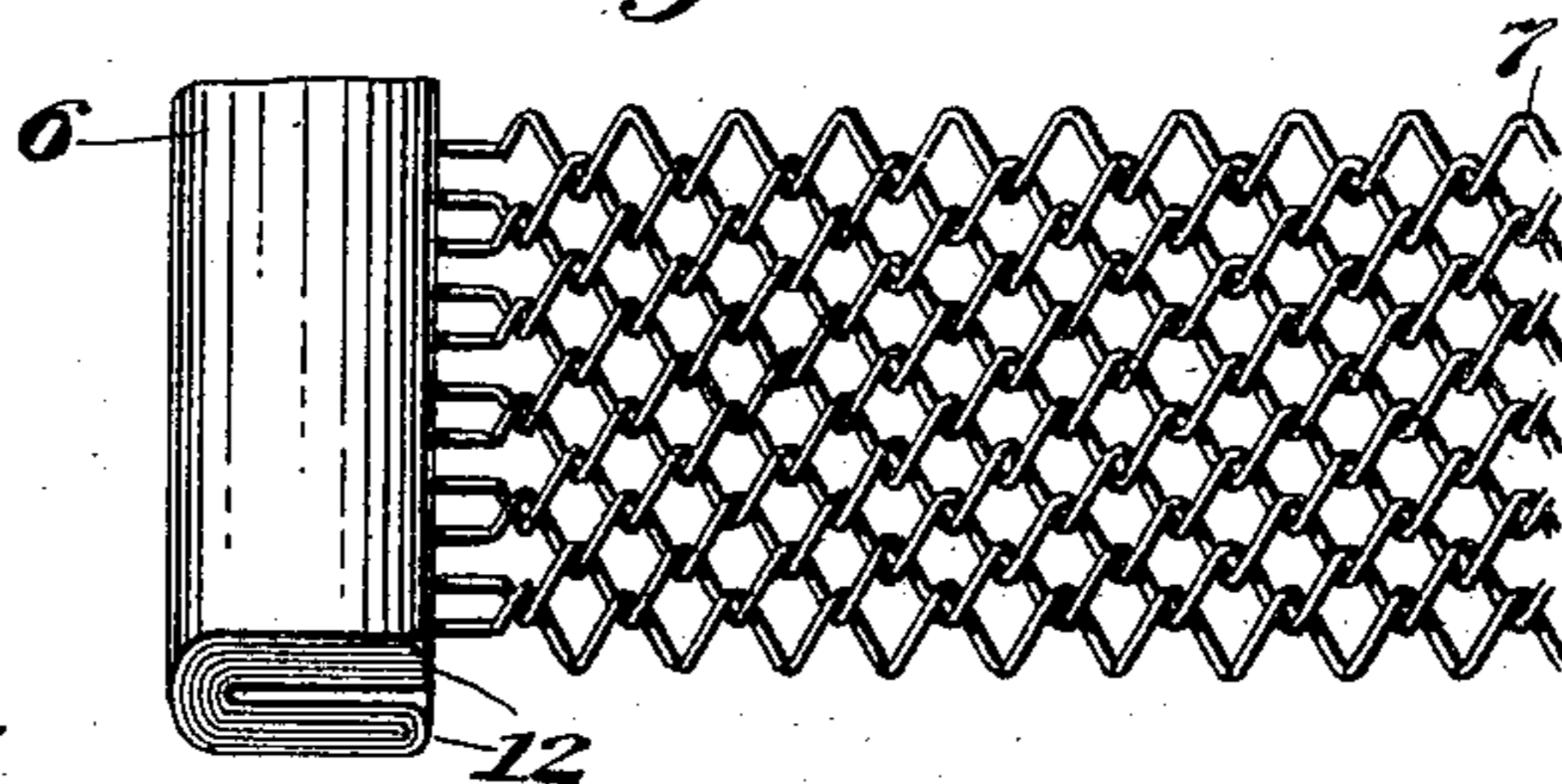
**Fig. 4**



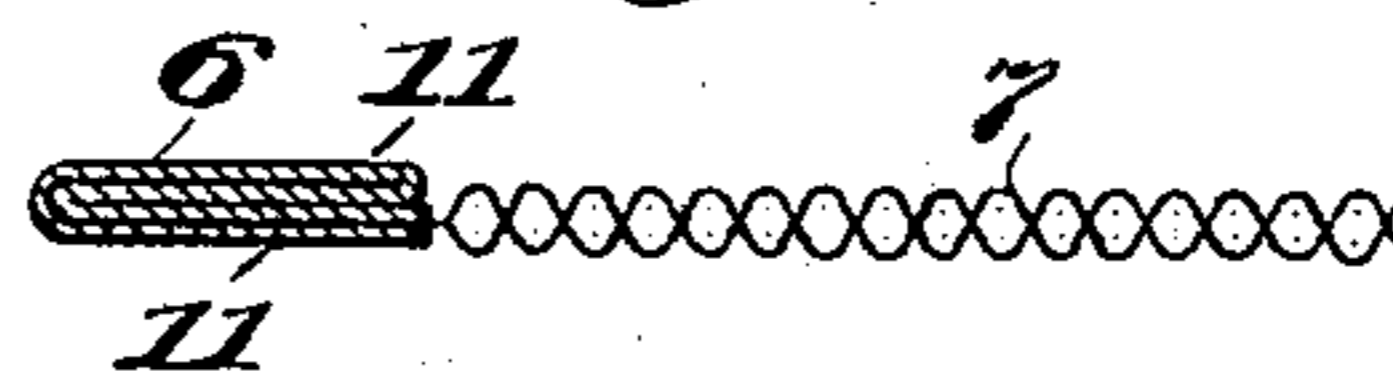
**Fig. 6**



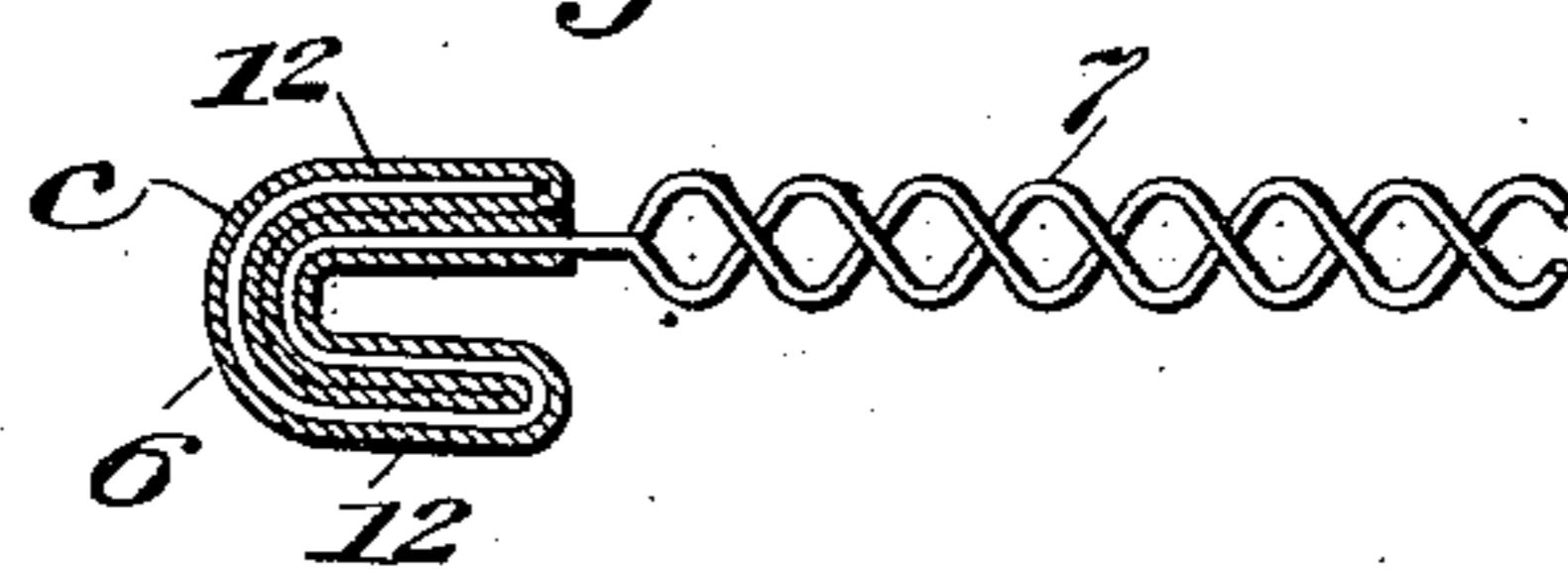
**Fig. 3**



**Fig. 8**



**Fig. 9**



Witnesses  
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Inventor  
*Ward D. Hunt,*  
*by John Elias Jones,*  
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# UNITED STATES PATENT OFFICE.

WARDER D. HUNT, OF CINCINNATI, OHIO.

## BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 726,064, dated April 21, 1903.

Application filed November 18, 1901. Serial No. 82,898. (No model.)

*To all whom it may concern:*

Be it known that I, WARDER D. HUNT, a citizen of the United States of America, and a resident of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Bed-Bottoms, of which the following is a specification.

This invention relates to certain improvements in spring bed-bottoms, and more especially in that class of bed-bottoms or spring-mattresses which are provided with a covering-sheet of woven-wire fabric extended across the top; and the object of the invention is to provide a bed-bottom of this general character of a simple and inexpensive nature having means of an improved nature for holding the woven-wire covering-sheet in position.

The invention consists in certain novel features of the construction and combinations and arrangements of the several parts of the improved spring bed-bottom or mattress whereby certain important advantages are attained and the device is made simpler, cheaper, and is otherwise better adapted and made more convenient for use, all as will be hereinafter fully set forth.

The novel features of the invention will be carefully defined in the claims.

In the accompanying drawings, which serve to illustrate my improvements, Figure 1 is a perspective view showing a spring bed-bottom or mattress constructed according to my invention. Fig. 2 is a sectional view drawn to a larger scale and taken vertically through the woven-wire covering-sheet and its securing means as well as through the end rail of the frame at the end of the bed-bottom or mattress. Fig. 3 is a perspective view showing a fragment at one of the corners of the woven-wire covering-sheet, illustrating the means for securing the said sheet in place upon the frame of the bed-bottom or mattress. Fig. 4 is a view showing a metal strip such as is employed for forming the securing means for holding the ends of the woven-wire covering-sheet to the frame. Fig. 5 is a sectional view taken transversely through said strip and showing the first bend produced therein in the course of attaching the strip to the woven-wire covering-sheet. Fig. 6 is a view similar to Fig. 5, but showing the

strip provided with its second bend. Fig. 7 is a view similar to Figs. 5 and 6, but showing the third bend produced in the metal strip. Fig. 8 is a view similar to Figs. 5, 6, and 7, but showing the strip provided with its fourth bend. Fig. 9 is a view similar to Figs. 5, 6, 7, and 8, but drawn to a larger scale and showing the strip provided with its fifth and final bend, whereby the attaching means is provided for holding the woven-wire covering-sheet in place on the frame of the bed-bottom or mattress.

As shown in the views, the bed-bottom or mattress comprises a metallic frame of rectangular form comprising side bars or rails 1 1, formed of angle-irons, and end rails 2 2, formed from Z-bars, the ends of which are extended slightly beyond the side bars 1 1 at opposite sides of the bed, so as to be adapted to rest upon the bedstead in a well-known way for supporting the bed-bottom or mattress thereon. The side rails and end rails 1 and 2 are secured together in any preferred way and, as shown herein, are provided with braces 3 3 at the corners of the frame. Although I have shown this construction of frame herein, I wish it understood that I do not limit myself to the employment of a frame formed in this manner for the practical application of my improvements, nor do I limit myself to the employment of a metal frame at all, since it is evident that the invention may be applied to bed-bottoms or mattresses having wooden frames as well as to those having frames formed from metal.

In assembling the end rails and side rails of the frame the Z-shaped end rails are secured upon the side rails each with one of its flanges flush upon the upper side of the side rails, so that its web portion 4 is extended vertically up from the side rails, and its upper flange 5 is extended in a horizontal plane across the end portion of the frame, the said upper flanges 5 5 of the respective end-rails 2 2 being, as shown clearly in Fig. 1, directed in opposite directions or toward the ends of the frame and forming parts adapted for the attachment of the woven-wire covering-sheet and which project along the opposite ends of the frame.

7 indicates the covering-sheet of woven-wire fabric; extended across the top of the

frame and provided at its end portions with bindings or reinforces 6, formed, as herein shown, from metal strips attached along said edges and serving for holding the strands of which the woven-wire sheet is formed from unraveling and also covering the raw ends of said strands, so as to prevent them from projecting and catching on the bedding or being otherwise objectionable. As shown in the drawings, these bindings or reinforcing-strips 6 6 have bends formed in them and extended longitudinally along their central parts, so that a U form or hook shape is imparted to them, the free hooked edges of the binding or reinforcing strips projecting toward each other and underneath the woven-wire covering-sheet 7, so as to be in position to be engaged under the projecting parts or flanges 5 of the opposite end rails of the frame for holding the said covering-sheet securely in place thereon, the tension of the coiled-wire strands of which the covering-sheet is formed being sufficient to hold the hook-shaped bindings or reinforcing-strips engaged with the oppositely-directed parts or flanges 5 5 of the respective end rails, as will be readily understood. Each of the bindings or reinforces 6 6 along the end edges of the woven-wire covering-sheet is formed from an elongated strip or piece of sheet metal, such as is shown in detail in Fig. 4, this strip having a central crease or bend produced in it, as shown at *a* in Fig. 5 and indicated in dotted lines in Fig. 4, this central bend or crease giving to the strip a V shape in cross-section, as clearly shown in Fig. 5. The end of the woven-wire covering-sheet 7 is then inserted between the two plies 10 10, produced by the central bend *a* in said strip, after which the two plies 10 10 are pressed flat upon each other, as indicated in Fig. 6, the end of the woven-wire sheet being thereby flattened out and held between said plies 10. A second central crease or bend *b* is then produced in the folded strip 6, as indicated in Fig. 7, and the two plies 11 11, produced in the strip by said second bend or crease, are also pressed flat upon each other, as shown in Fig. 8, whereby it will be seen that the end of the woven-wire sheet 6 is securely held between the plies of the folded strip and the rough ends of its strands are completely covered up, there being upon one side of the end portion of the woven-wire sheet a single thickness of the sheet metal of which the binding-strip is formed and on the other side of said sheet three thicknesses of such sheet metal, produced by the bending over or lapping of the folded metal strip over upon itself at that side. By this construction the reinforce is made of increased strength at the side at which there are three thicknesses of the sheet metal, as will be evident. A third and final central crease or bend *c* is then produced in the folded strip, as shown in Figs. 2 and 9, and the two plies 12 12 thus formed are caused to be extended in parallel

directions one above the other, so that a U form or hook-shape is imparted to the folded strip secured upon the end of the woven-wire sheet 7 by means of its several bends. Owing to the several plies of which the completed binding or reinforce is formed, it will also be evident that the said binding or reinforce is possessed of considerable strength and stiffness, so as to adapt it for use as a means for attaching the woven-wire covering-sheet 7 to the ends of the frame of the mattress or bed-bottom. In producing the third and final bend or crease in the metal reinforce or binding-strip the said bend or crease is so formed that the thicker and stronger side of the reinforce, which is formed, as above stated, of three thicknesses of sheet-metal, is extended upon the outer or convex surface of the hook-shaped folded strip, while the single thickness at the other side of the strip is caused to extend inside of the hook-shaped strip, as clearly shown in the drawings. The U-form or hook-shaped attaching means thus produced along the opposite ends of the woven-wire covering-sheet are adapted for ready engagement with the overhanging projections at the ends of the frame and formed of the horizontal upper flanges of the Z-bars of which the end rails of said frame are formed, and when said attaching means are engaged with said overhanging parts the resiliency of the coiled wires of which the strands of the woven-wire sheet 7 are formed will serve to hold said sheet securely in position on the frame. Since the thicker and stronger side of the folded metal strip is at the outer or convex side of the hook-shaped folded strip, it is evident that such thicker and stronger portion will serve to hold the end of the woven-wire sheet securely and firmly upon the metal or other frame of the bed-bottom and will serve to prevent the end of the woven-wire sheet from being pulled out of engagement between the plies of the folded strip, as it would otherwise be liable to do if the weaker single-ply side of the folded strip were arranged outermost. When the woven-wire covering-sheet has been attached to the end rails of the frame, as above set forth, it may in some cases be desirable to flatten out the coils of said sheet at the points where they overlie the horizontal upper flanges 5 5 of the Z-shape end rails of the frame, as indicated at 8 in Fig. 2. The central portion of said sheet 7 between the flanges 5 is also supported above the planes of the side rails 1, so as to be free for vertical movement under downward strain.

From the above description of my improvements it will be seen that the improved bed-bottom or mattress is of an extremely simple and inexpensive nature and is especially well adapted for use, since the bindings or reinforces at the ends of the woven-wire covering-sheet not only cover the raw ends of the strands and prevent them from fraying, but also form a very strong and secure means for attach-

ing the woven-wire covering-sheet to the frame and also impart a very finished appearance to the bed-bottom. It will also be obvious from the above description that the improved bed-bottom or mattress is capable of very considerable modification without material departure from the principles and spirit of the invention, and for this reason I do not wish to limit myself to the employment of my improvements in connection with any particular style or kind of frame, nor do I wish to be understood as limiting myself to the exact construction and arrangement of the improved attaching means for holding the ends of the sheet of woven-wire fabric in place on such frame.

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

1. In a mattress, bed-bottom or the like, the combination of a frame comprising side rails, and end rails formed of bars with upper and lower flanges, each end rail being held with one of its flanges flush on the side rails and with its other flange above said rails and directed away from the end of the frame and a covering-sheet having parts for engagement with the oppositely-directed upper flanges of said end rails for the attachment of said sheet to the frame, substantially as set forth.

2. A mattress, bed-bottom or the like comprising a covering-sheet of woven fabric, bindings extended along the ends of said covering-sheet to cover the raw ends of the strands thereof and each formed of a metal strip having a central bend whereby two plies are produced between which the raw ends of the strands of said sheet are held, each strip

being also provided with a portion lapped or folded over upon itself to produce at one side a portion of greater thickness and having a hook shape in cross-section, the thicker portion of the folded strip being arranged upon the outer or convex side of the hook-shaped folded strip and the end portion of the covering-sheet being extended between the plies of the thicker portion of the binding and a frame having portions engaging with the hook-shaped bindings the covering-sheet being extended across the frame between said bindings when the bindings are engaged on the frame, substantially as set forth.

3. A mattress, bed-bottom or the like comprising a covering-sheet of woven-wire fabric having bindings extended along its ends to cover the ends of its strands, each binding being formed of a metal strip bent to form two plies between which the raw ends of the strands of the covering-sheet are held and having a portion bent or lapped over upon itself to produce at one side of the folded strip a portion of greater thickness and being made hook-shaped in cross-section with its thicker portion upon its outer or convex surface, the ends of the woven-wire sheet being extended between the plies of the bent or lapped portions of the bindings and said sheet being extended across the space between the bindings in position to cover a frame to which the hook-shaped bindings are adapted for attachment, substantially as set forth.

Signed at Cincinnati, Ohio, this 13th day of November, 1901.

WARDER D. HUNT.

Witnesses:

JOHN ELIAS JONES,  
HARRY DREILING.