Aug. 16, 1927. 1,639,422

E. E. BARNA

ADJUSTABLE WIRE MATTRESS

Filed Aug. 13, 1924

Fig. 1.

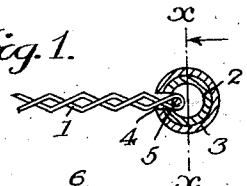


Fig. 2.

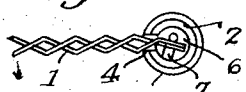


Fig. 3.

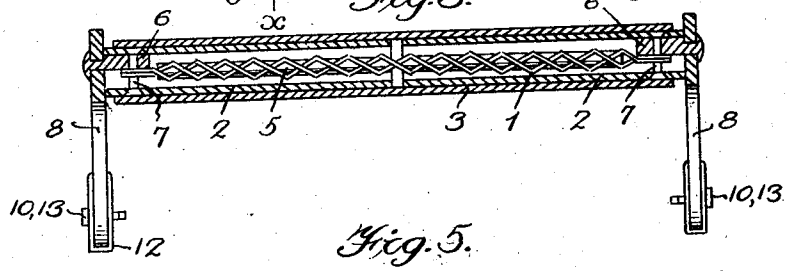


Fig. 5.

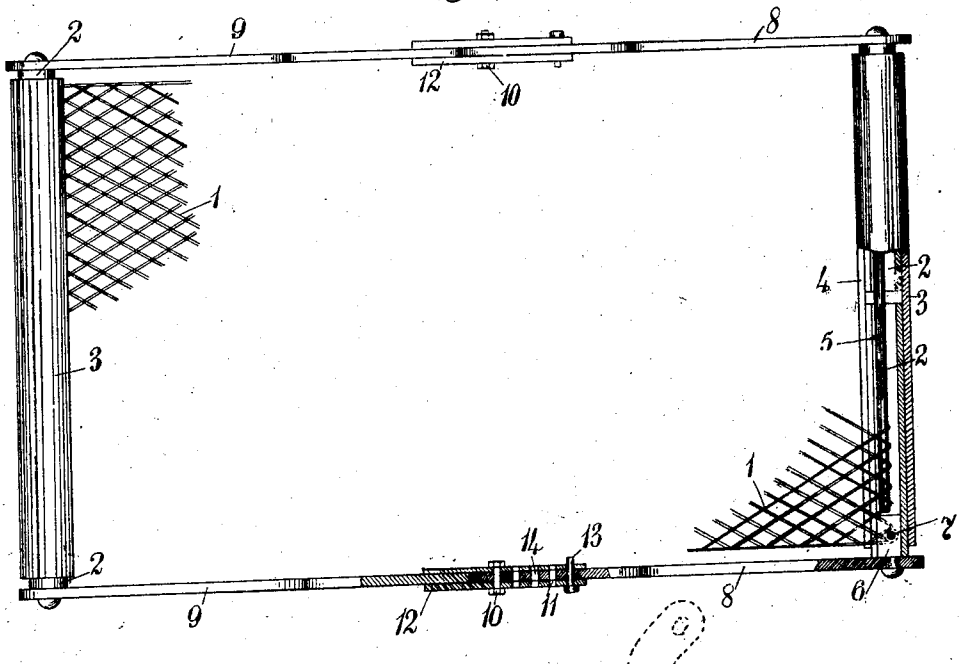
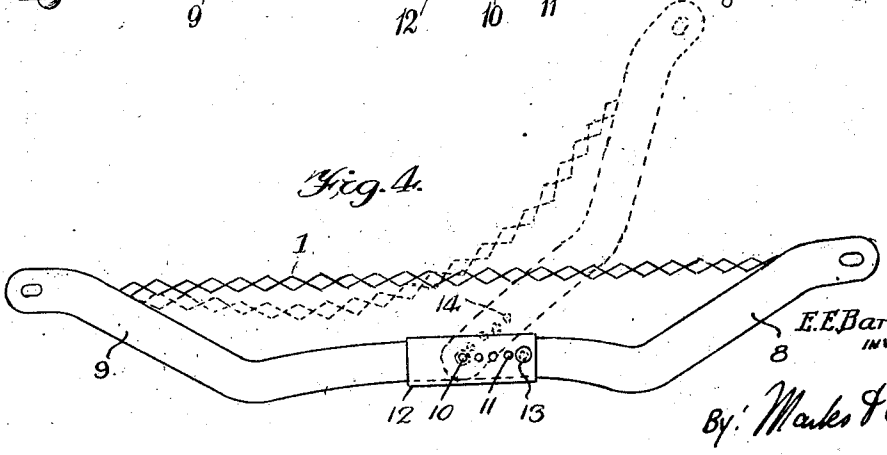


Fig. 4.



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UNITED STATES PATENT OFFICE.

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ADJUSTABLE WIRE MATTRESS.

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It has already been proposed to make a wire mattress adjustable in length and breadth. The short sides of the frame consist in such a mattress of two relatively slidable parts connected by a middle piece, while the wire netting is connected to the rails of the frame by wire staples, which allow of the distance of the wire netting from the rails of the frame being adjusted and thereby the size of the mattress being varied.

From this known arrangement the mattress according to the invention differs in that the matting is fixed directly to the outer ends of the rails of the shorter side of the frame and that the longer frame rails are divided into two parts, so that the netting, after being adjusted to the desired breadth by sliding the parts of the shorter frame rails, is tensioned by the rails of the longer sides of the frame being fixed with respect to one another.

In the accompanying drawing a constructional example of the wire mattress according to the invention is shown.

Fig. 1 being a cross-section through one of the shorter rails of the frame,

Fig. 2 an end view of the same,

Fig. 3 a longitudinal section through one of the shorter rails on line x—x of Fig. 1 looking in the direction indicated by the arrow,

Fig. 4 is a side view of the mattress and Figure 5 is a plan view thereof, partly in section.

According to the invention the netting 1 is attached to the shorter rails of the frame in the following manner: Two pieces of tubing 2 are slidable in the tube 3. The tubular pieces 2 and the tube 3 are provided with longitudinal slots lying one above the other, through which the edge of the netting 1 is inserted, where it is held by means of a wire 5 threaded through its meshes, the diameter of the wire 5 being greater than the width of the slots 4.

Owing to the longitudinal slots, the tubes 2 and 3 have a certain amount of resiliency in their circumferential direction, but the inner diameter of the tube 3 and the outer diameter of the tubes 2 are such that the tubes 2 can be slid into the tube 3 only by the application of great pressures, such as by blows with a hammer. In this way the tubes 2 can be fixed in the tube 3 for normal use whilst being at the same time capable of being adjusted therein to the required width of the netting.

Into the two tubular pieces 2 are inserted the end blocks 6, the rivets 7, with which they are fixed, at the same time holding the corners of the netting, and the block ends projecting out of the tubular pieces 2 are riveted to the longer rails 8, 9 of the frame.

By sliding the tubular pieces 2 in the tube 3 the netting 1 is adjusted to the required breadth. For making the netting capable of being tensioned and for making it variable in length, the longer rails of the frame are made up of the parts 8, 9. These two parts are connected by means of a bolt 10, thus forming a hinge between the two parts. The bolt 10 is inserted through one of the holes 11 in a channel-shaped extension piece 12 of one of the parts 9 of the rail and through a hole near the end of the second part 8 of the rail. On the hinge formed in this manner being straightened, as shown in full lines in Fig. 4, the mattress which has been already adjusted to the desired breadth, is made correspondingly long and tensioned. The tensioned position is reached, as soon as the part 8 of the lateral rail rests on the bottom of the extension piece 12 and this position is maintained by a second bolt 13 being inserted through one of the corresponding holes 11, 14 of the part 12 and of the part 8 of the lateral rail. By inserting the bolt 10 into a hole 11 lying at a greater or less distance from the open end of the channel-shaped extension piece 12, the length of the mattress will be smaller or greater, when the lateral rail is straightened.

What I claim is:—

1. A wire mattress which is capable of being adjusted both in the longitudinal and transverse direction, comprising in combination two longitudinal rails and two transverse rails constituting a frame, the transverse rails each consisting of a tubular part and two tubular members capable of sliding in the same, a longitudinal slot in the tubular part and a longitudinal slot in each of the two tubular members, and the longitudinal rails each consisting of two parts and an adjustable hinge connecting the two parts, and further comprising a wire net, the transverse edges of the net being capable of being inserted in the said slots of the two transverse rails, a wire capable of being threaded through the meshes at the edges of the net within the slotted transverse rails

for retaining them there, and means for attaching the ends of the transverse edges of the net to the exterior ends of the said two slidable members of the transverse rails, whereby the net may be adjusted in width by sliding the slidable members of the transverse rails apart and thereupon tensioned in length by straightening the hinges of the longitudinal rails, as set forth.

2. A wire mattress which is capable of being adjusted both in the longitudinal and transverse direction, comprising in combination two longitudinal rails and two transverse rails constituting a frame, the transverse rails each consisting of a tubular part and two tubular members capable of sliding in the same, a longitudinal slot in the tubular part and a longitudinal slot in each of the two tubular members, and the longitudinal rails each consisting of two parts and an adjustable hinge connecting the two parts, and further comprising a wire net, the transverse edges of the net being capable of being inserted in the said slots of the two transverse rails, a wire capable of being threaded through the meshes at the edges of the net within the slotted transverse rails for retaining them there, a block in each of the exterior ends of the slidable tubular members, rivets for fixing the said blocks to the said external ends and for attaching the ends of the transverse edges of the said net, the said blocks being fixed to the ends of the longitudinal rails, whereby the net may be adjusted in width by sliding the slidable members of the transverse rails apart and thereupon tensioned in length by straightening the hinges of the longitudinal rails, as set forth.

3. A wire mattress which is capable of being adjusted both in the longitudinal and transverse direction, comprising in combination two longitudinal rails and two transverse rails constituting a frame, the transverse rails each consisting of two relatively slidable members and a middle connecting part for the said slidable members and the longitudinal rails each consisting of two parts, a channel-shaped piece forming an extension of one part of each longitudinal rail, holes in the channel-shaped piece, corresponding holes in the other part of each longitudinal rail, a bolt capable of being inserted into any of the said holes and forming an adjustable pivot for the two parts of each longitudinal rail, a second bolt capable of being inserted through any of the corresponding holes of the channel shaped piece and the rail for locking the longitudinal rails when extended, and further comprising a wire net and means for attaching the ends of the transverse edges of the said net to the exterior ends of the said two slidable members of the transverse rails, whereby the net may be adjusted in width by sliding the slidable members of the transverse rails apart and thereupon tensioned in length by straightening the hinges of the longitudinal rails, as set forth.

In testimony whereof I have signed my name to this specification.

EMANUEL ERNST BARNA.