

L. DOWNING.

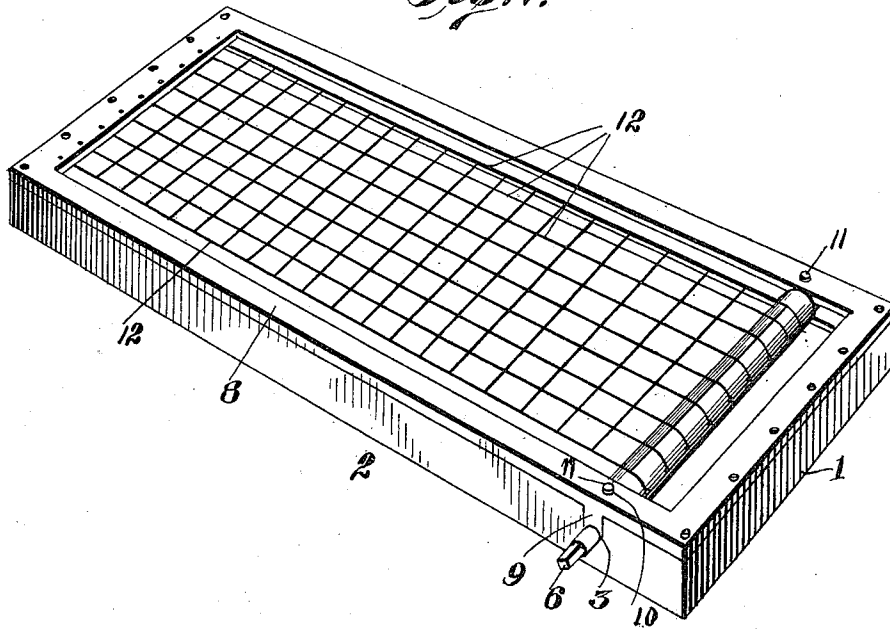
BED SPRING.

APPLICATION FILED JAN. 25, 1910.

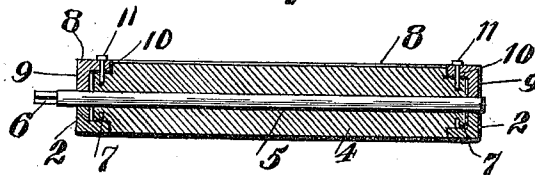
974,758.

Patented Nov. 1, 1910.

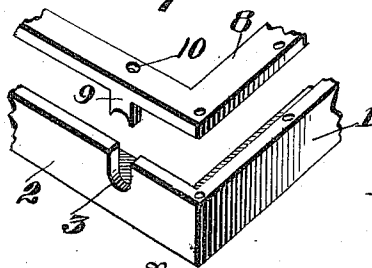
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses  
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# UNITED STATES PATENT OFFICE.

LETTIE DOWNING, OF FRANKTOWN, COLORADO.

BED-SPRING.

974,758.

Specification of Letters Patent.

Patented Nov. 1, 1910.

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*To all whom it may concern:*

Be it known that I, LETTIE DOWNING, a citizen of the United States of America, residing at Franktown, in the county of Douglas and State of Colorado, have invented certain new and useful Improvements in Bed-Springs, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to spring mattresses and the principal object of the same is to provide novel means for retaining the tightening roller within the mattress supporting frame, and also provide means whereby reverse movement of said roller is prevented.

In carrying out the object of the invention generally stated above it will be understood, of course, that the essential features thereof are necessarily susceptible of changes in details and structural arrangements, one preferred and practical embodiment of which is shown in the accompanying drawings wherein:—

Figure 1 is a perspective view of a spring mattress and its supporting frame showing the manner of rotatably retaining the tightening roller in position and also means for preventing reverse movement of said roller. Fig. 2 is a transverse sectional view taken on the line 2—2, Fig. 1. Fig. 3 is a fragmentary detail perspective view of the mattress supporting frame and the frame that retains the tightening roller in operative position.

Referring to the accompanying drawings by numerals, 1 designates the rectangular mattress supporting frame, the side members 2 of which are each provided with a bearing slot 3 adjacent one end thereof, said slots of said side members being oppositely disposed. A tightening roller 4 is mounted on a shaft 5 the ends of which are rotatably mounted in said slots 3, one end of said shaft projecting beyond one of the side members and being squared as indicated at 6 so that it may be readily grasped by a suitable turning tool to rotate the roller 4. Adjacent each end, said roller 4 is provided with regularly spaced apart circumferential slots 7.

A flat rectangular frame 8 preferably formed of metal is suitably fastened over the upper edge of the mattress frame 1, the side members of said frame 8 adjacent one end thereof being each provided with a pendent bearing lug 9 which is of a size to be snugly

fitted within the slots of the side members of the mattress frame 1 and contacts with the ends of the shaft 5 to rotatably hold said shaft in said slots. Said side members of the frame 8 are also provided with an opening 10 arranged so that they are directly over the circumferential opening 7 of the roller 4, to permit locking pins 11 to be passed through the openings 10 of the frame 8 and selectively engage with the openings 7 of the tightening roller 4 to prevent reverse movement of said roller.

A mattress 12 has one end fastened to roller 4 its other end being suitably fastened to one of the end members of the frame 8.

It will be seen from the foregoing that the frame 8 may be readily removed from the mattress frame by removing the screws or other fasteners that hold the same upon the upper edge of the mattress frame, so that the tightening roller can also be removed from its bearing slots. It will also be seen that by means of a bearing lug 9 the tightening roller is prevented from wobbling while in its operative position, and by means of the locking pins 11 simple but effective means are provided for locking the tightening roller in the desired mattress holding position.

As is shown more clearly in Fig. 2, the mattress supporting frame 1 and the supplemental frame 8 are of angle material, and when assembled form a housing for the shouldered ends of the roller 4 in which the openings 7 are formed, the inner edges of said housing contacting with the shoulders of said roller, so that lateral movement of said roller is prevented.

What I claim as my invention is:—

1. A device of the character described comprising a mattress supporting frame provided with oppositely disposed bearing slots, a shaft rotatably mounted in said slots, a roller fast on said shaft, a frame fitted over the upper edge of said mattress supporting frame and provided with pendent bearing lugs adapted to be fitted within said bearing slots to retain the said shaft therein, and means for preventing reverse movement of said roller.

2. A device of the character described comprising a mattress supporting frame provided with oppositely disposed bearing slots, a roller journaled in said slots, a supplemental frame fitted over said mattress supporting frame and provided with bear-

ing lugs adapted to be fitted within said bearing slots to hold the roller therein, and locking pins adapted to be passed through said supplemental frame and engaged with  
5 said tightening roller to prevent reverse movement thereof.

3. A device of the character described comprising a mattress supporting frame, a tightening roller journaled in one end thereof,  
10 of, a supplemental frame fitted over the upper edge of said mattress supporting frame and provided with means for engagement with said roller to retain the same to its journaled position in said mattress sup-  
15 porting frame, and roller locking means carried by said supplemental frame.

4. A device of the character described comprising a mattress supporting frame, a tightening roller journaled therein and pro-  
20 vided with circumferential end openings, a supplemental frame fitted over the upper edge of said mattress supporting frame and adapted to retain said roller to its journals, and locking pins adapted to be passed  
25 through said supplemental frame and selectively engaged with the circumferential openings of the tightening roller to prevent reverse movements thereof.

5. A device of the character described  
30 comprising a mattress supporting frame having oppositely disposed vertically ar-

anged bearing slots adjacent one end thereof, a shaft rotatably mounted in said slots, a tightening roller fast on said shaft and provided with circumferential end openings, 35 a supplemental frame removably fitted over the upper edge of said mattress supporting frame and provided with oppositely disposed pendent bearing lugs adjacent one end thereof adapted to be fitted in the bear- 40 ing slots of the mattress supporting frame over the said shaft, and locking pins adapted to be passed through said supplemental frame and selectively engaged with the circumferential openings of said tightening 45 roller.

6. A device of the character described comprising a mattress supporting frame and a supplemental frame therefor, said frames formed of angle material to provide a hous- 50 ing, a shaft journaled in one end of said mattress supporting frame and held in position by said supplemental frame, and a tightening roller on said shaft provided with end shoulders that extend into said 55 housing.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

LETTIE DOWNING.

Witnesses:

WILLIAM C. JONES,  
A. C. DAKAN.