

I. CHORLTON & G. L. SCOTT.
METALLIC OR SPRING MATTRESS.

No. 418,446.

Patented Dec. 31, 1889.

Fig. 1.

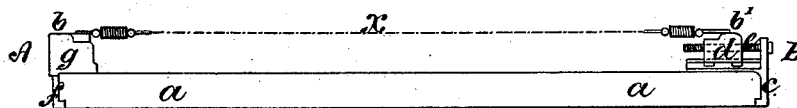


Fig. 2.

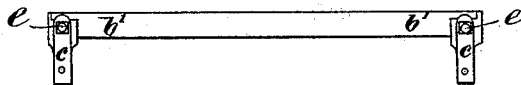
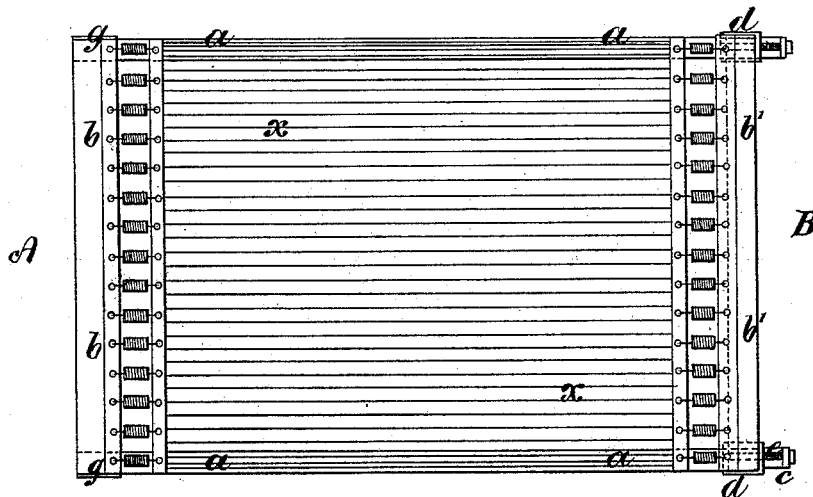


Fig. 3.



Witnesses

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C. L. Richards

Inventors

I. Chorlton & G. L. Scott

By their attorneys

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(No Model.)

2 Sheets—Sheet 2.

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Fig. 4.

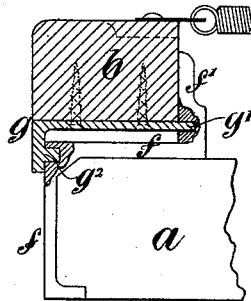


Fig. 5.

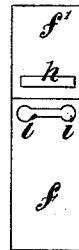
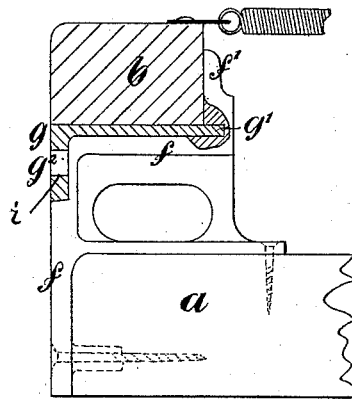


Fig. 6.



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UNITED STATES PATENT OFFICE.

ISAAC CHORLTON AND GEORGE L. SCOTT, OF MANCHESTER, COUNTY OF LANCASTER, ENGLAND.

METALLIC OR SPRING MATTRESS.

SPECIFICATION forming part of Letters Patent No. 418,446, dated December 31, 1889.

Application filed October 24, 1888. Serial No. 288,998. (No model.) Patented in England February 4, 1885, No. 1,521.

To all whom it may concern:

Be it known that we, ISAAC CHORLTON and GEORGE LAMB SCOTT, subjects of the Queen of Great Britain and Ireland, residing at Manchester, county of Lancaster, England, have invented certain Improvements in Metallic or Spring Mattresses, (for which we have obtained a patent in Great Britain, No. 1,521, dated February 4, 1885,) of which the following is a specification.

Our invention relates to the mattresses which are composed of woven or linked wires or chains, or combinations of links, chains, and springs, or similar parts strained upon rectangular wooden frames; and the objects of our invention are to improve the means for securing together the members of the frame.

The frame of the mattress as at present ordinarily constructed consists of two side rails and two end bars, the latter being superimposed on the former and the parts being secured together by means of bolts which pass through the bars and the rails. When so constructed the frame is deficient in diagonal rigidity, and there is an absence of means for readily tightening the surface. To connect together the parts of the frame, we employ metal plates or brackets, which are formed to lock together, one plate or bracket being secured to the side rail and the other plate or bracket to the end bar at each corner, so that the members of the frame can be quickly put together without the employment of bolts. The said plates or brackets are made to slide in or upon each other, and projections on one part enter recesses in the other, or each part may have a projection and a recess, so that when the mattress is strained the parts are firmly locked together, and at the same time the members of the frame are maintained at right angles one with another, so that the frame has diagonal rigidity. The said plates or brackets strengthen and give a finish to the ends of the members of the frame and may be made ornamental in appearance, or they may be made as angle-brackets to fit against two or more surfaces at right angles with each other; and in order that our said invention may be properly understood we will now proceed more particu-

larly to describe the same, with reference to the accompanying two sheets of drawings.

Figure 1 represents a side view of a mattress-frame. Fig. 2 is an end view. Fig. 3 is a plan view. Fig. 4 is a sectional view, on a larger scale, of the interlocking shoes. Fig. 5 is an end elevation of the part which is carried by the side rail. Fig. 6 is a sectional view showing each shoe provided with a projection and a recess.

The frame (having the aforesaid fixed locking-plates applied at the end marked A and the sliding parts with adjustable bar at the end marked B) consists of four wood rails, *a* *a* being the side rails, and *b b'* the end rails. The rail *b* is mounted upon or secured to the ends of the rails *a* by means of interlocking metal fittings hereinafter particularly described. The rail *b'* is arranged to slide upon the rails *a*. To one end of each rail *a* we secure a metal fitting *c*, which sits upon the rail and also extends across the end of the same. This fitting is formed with a T-headed guide *c'*. (Represented in cross-section by Fig. 5.) Each end of the rail *b'* is secured within a metal shoe *d*, which is formed with projections which are adapted to fit and slide upon the part *c'*. A screw *e* passes through the upper end of *c* and engages with a screw-thread formed in the shoe *d*. The metallic elastic mattress of any well-known form—such as of woven wire—is indicated conventionally by the lines *x*, and is secured to the two rails *b b'*, as shown in Figs. 1 and 3. By turning the screws this mattress *x* can be tightened to any required extent. In the example the mattress consists of a sheet connected with the end rails by means of interposed spiral springs; but this may be varied. The connection of the rail *b* with the opposite ends of the rails *a* is illustrated by Figs. 4 and 5, the former being a section of the rail *b* and a side view of the rail *a* at the end, and the latter an end view of one of the shoes of the rails *a*. To the end of each of the rails *a* is screwed or secured a metal fitting *f*, which extends across the end of the rail and is formed with an upward projection *f'*. Each end of the rail *b* is provided with a metal shoe *g*, which is formed with a toe *g'*, which enters

a recess h in the projection f' , and with projections g^2 , which enter recesses i in the end of the fitting f . In Fig. 6 the projection g^2 , instead of being upon the shoe g , is on the fitting f and enters a recess i , formed in the shoe g . To secure the parts together, it is only necessary to place one upon another and then to slide the shoes g upon the fittings f until the projections have entered the recesses.

10 The parts will then be firmly locked together, the strain upon the mattress x preventing the parts from coming asunder. The fitting connecting the parts together maintains the rectangular form of the frame.

15 What we claim is—

1. In a mattress-frame, a shoe f , secured to one end of each side rail a and having a recess h , in combination with a shoe g , carrying the fixed end bar b and provided with toe g' ,

said shoes also having one the projection g^2 20 and the other the recess i , substantially as set forth.

2. In a mattress-frame, the device consisting of a shoe f , secured to one end of each side rail a and having recesses h and i , in 25 combination with shoes g , carrying the fixed end bar b and having toes g' and projections g^2 to enter the recesses h and i , substantially as described and shown.

In testimony whereof we have signed our 30 names to this specification in the presence of two subscribing witnesses.

ISAAC CHORLTON.
GEORGE L. SCOTT.

Witnesses:

DAVID FULTON,
J. ENTWISLE.