

F. M. TINKHAM.  
 FOLDABLE MATTRESS FRAME.  
 APPLICATION FILED MAY 12, 1910

979,227.

Patented Dec. 20, 1910.

Fig. 1.

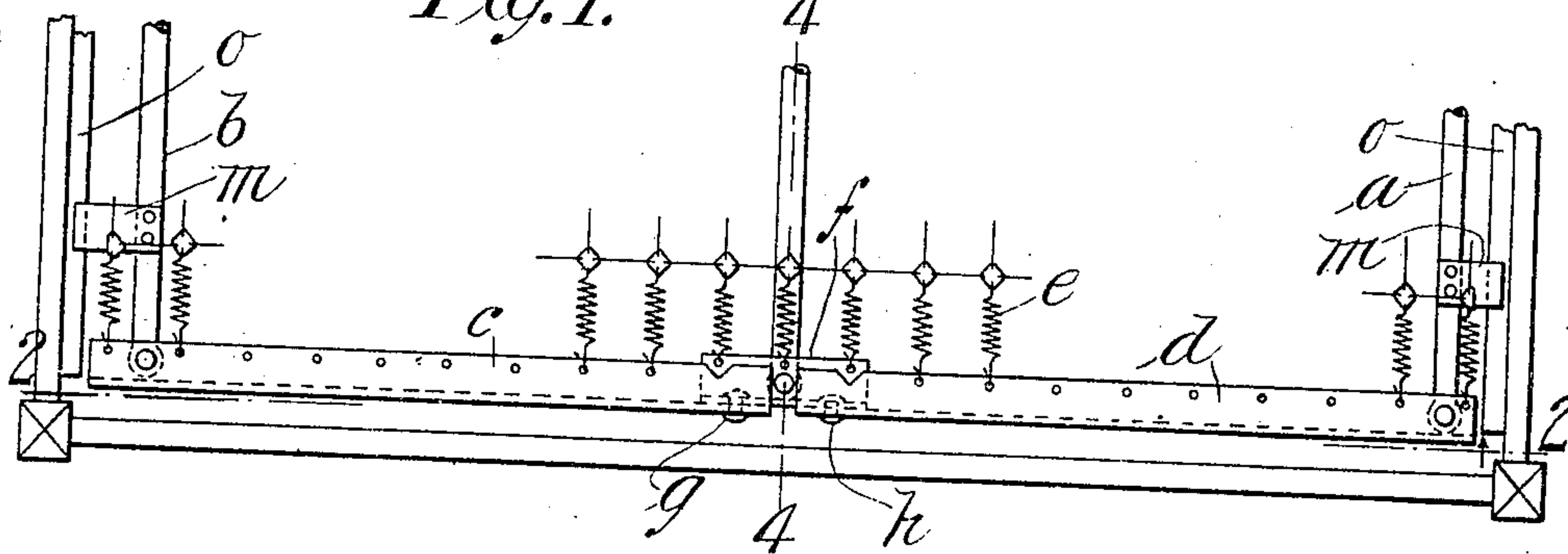


Fig. 2.

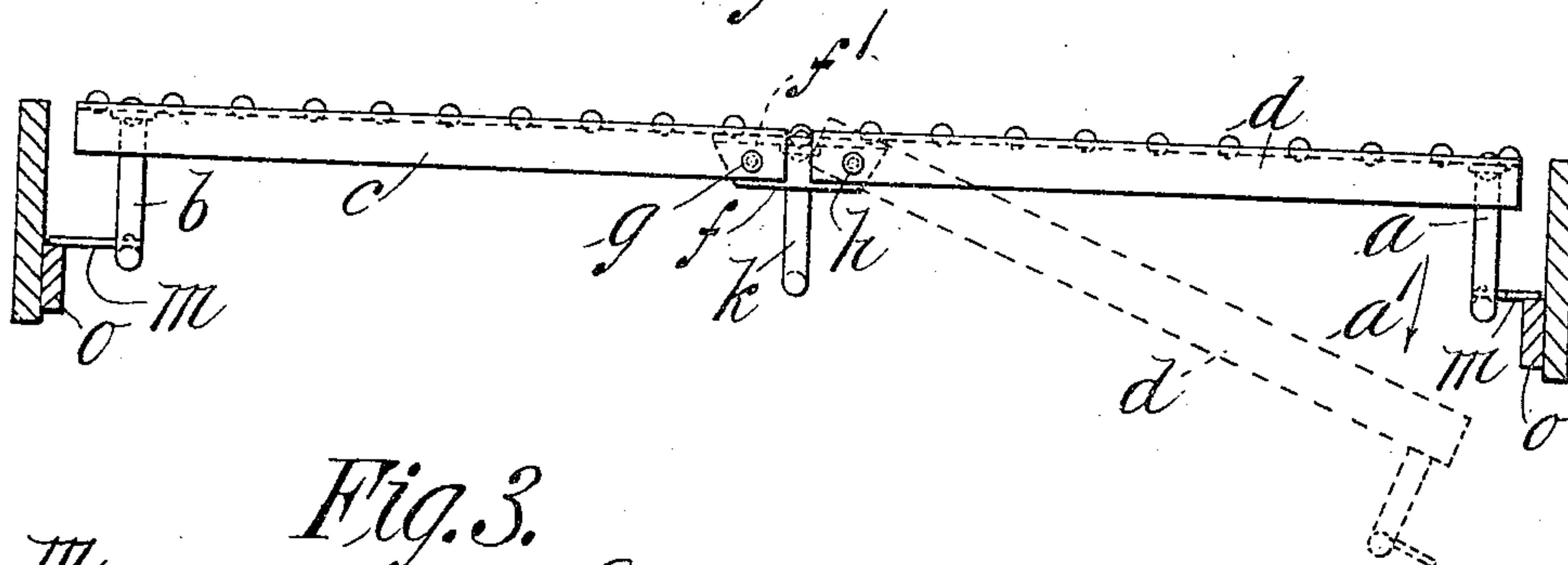


Fig. 3.

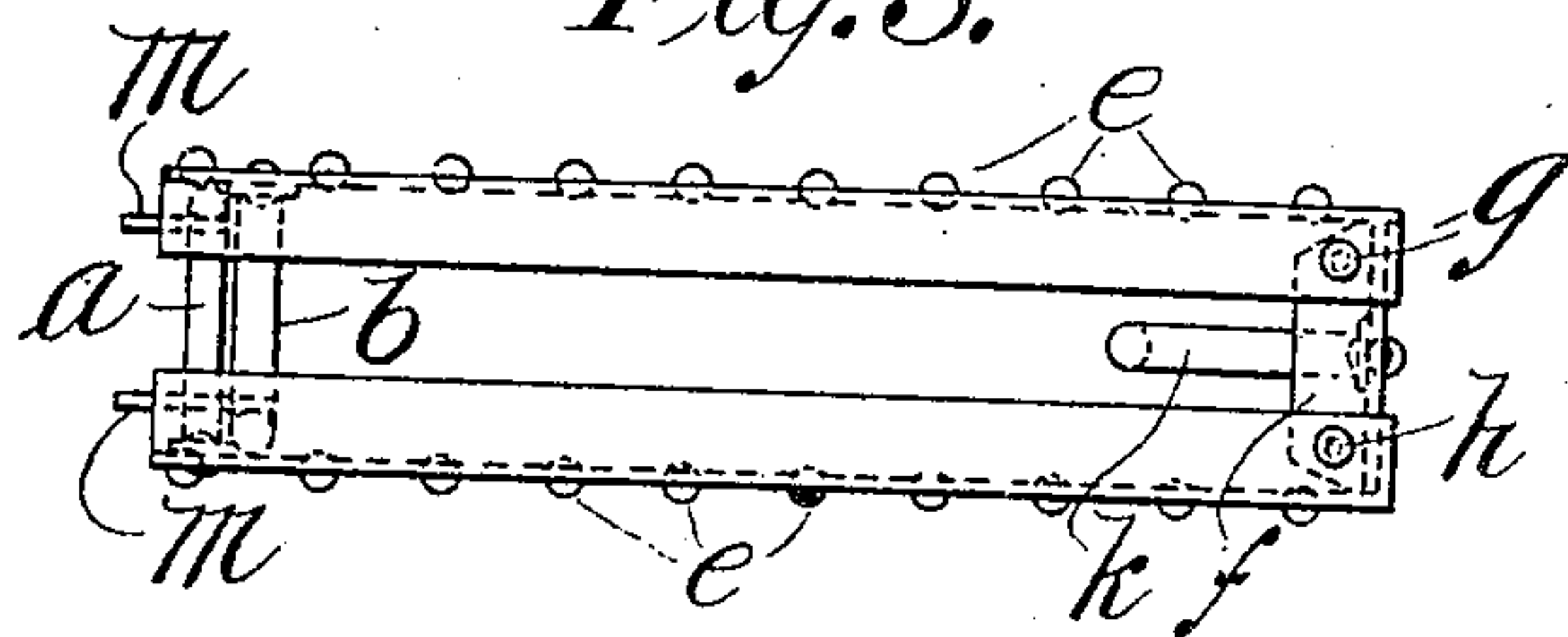


Fig. 4.

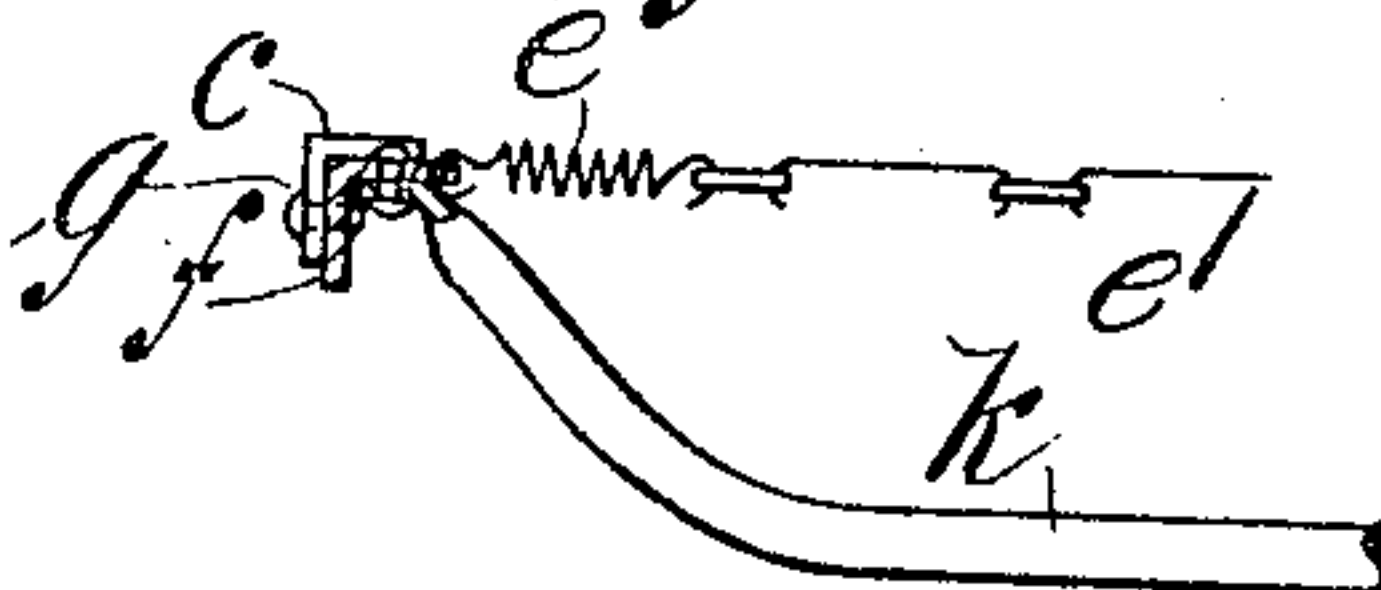
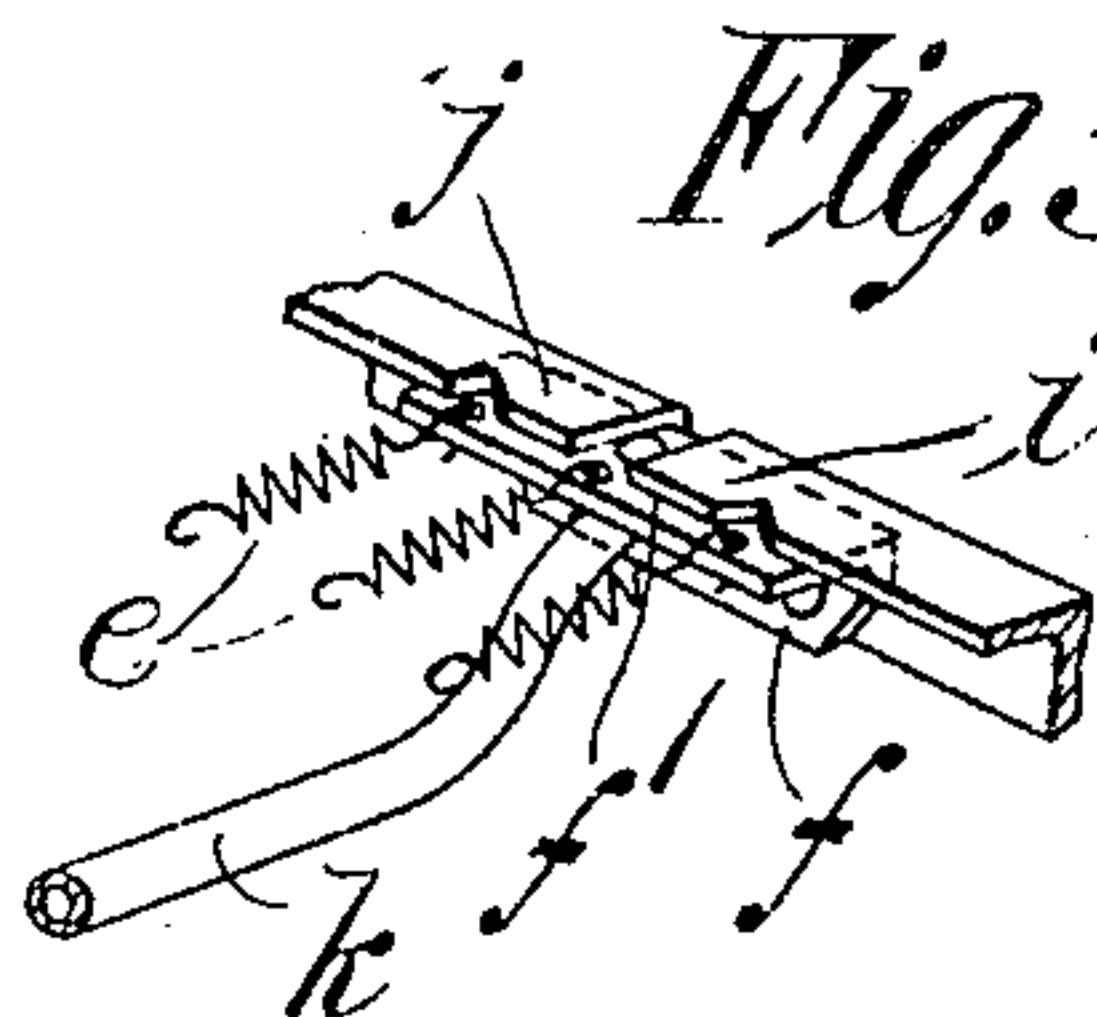


Fig. 5.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

FRANCIS M. TINKHAM, OF SPRINGFIELD, MASSACHUSETTS.

## FOLDABLE MATTRESS-FRAME.

979,227.

Specification of Letters Patent. Patented Dec. 20, 1910.

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To all whom it may concern:

Be it known that I, FRANCIS M. TINKHAM, a citizen of the United States of America, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Foldable Mattress-Frames, of which the following is a specification.

This invention relates to improvements in mattresses and is particularly designed for use in connection with spring mattresses of the foldable type.

The object of the invention is to provide a construction in which, when the frames are folded, the woven wire mattress will lie on the outside of the frames.

Many of the constructions in use at the present time fold the woven wire on the inside of the frames so that when the frames are in open position for use, the weight of the user tends to close the frame again; whereas, in my construction, when the frame is opened the weight of the user tends to maintain the frame in open position and against any possible chance of folding together and so that the frames are in alignment with each other.

The invention consists, broadly—

(1) In pivoting together two frame-like structures of angle-iron on which the woven wire is supported, the pivoted construction consisting, preferably, of a plate of angle-iron so as to nest or fit into the angle-irons of the frames. The side-bars which extend longitudinally of the frames are provided with ears or projections for engaging the side-rail of the bedstead when in use.

(2) In providing a longitudinal bar or rod member that extends from one connecting plate to the other and which serves the purpose of increasing the rigidity of the finished structure, especially at the center point of the frame, and also prevents the wire fabric from drawing the frame-like structures toward each other.

In the drawings forming part of this application,—Figure 1 is a plan view of the improvement showing the same supported on the side-rail of the bedstead in open position. Fig. 2 is an end view of Fig. 1, on the line 2—2 of Fig. 1, the right-hand side of the figure indicating in dotted lines the initial position of one of the frames when starting to fold the same inward. Fig. 3 represents the frames in a folded position and removed from the bedstead for trans-

portation, or for carrying the same from one room to another. Fig. 4 is a sectional detail on the line 4—4, Fig. 1, the section showing the plate of angle-iron to which the end-rails of the frames are pivoted; also one of the tubular bars which extends lengthwise of the frame. Fig. 5 is a perspective view showing clearly the manner of pivoting the end-rails to a common plate.

Referring to the drawings, *a* designates one of the side-bars or braces, and *b* the other extending longitudinally of the foldable frames.

*c* and *d* are end-rails, preferably of angle-iron, to which the wire fabric *e* of the wire mattress is attached, the attachment being made with the horizontal end-rails *c* and *d*.

Located midway of the width of the foldable mattress is a plate *f* of angle-iron to which the inner ends of the end-rails *c* and *d* are pivoted, as indicated at *g* and *h*. It will be noticed that the plate *f* consists of a short length of angle-iron and nests or fits into the right-angle of the two end-rails *c* and *d*, as clearly shown in Fig. 5, so that the ends *i* and *j* of the rails *c* and *d* rest upon or overlap this plate of angle-iron, as shown.

Attached to the plate *f*, is a bar or brace *k*, preferably made of tubular material and extending lengthwise of the portable frame which serves to produce a rigid structure at the middle point of the foldable spring mattress, whereby the end-rails *c* and *d* are prevented from being drawn toward each other by the stretched fabric *e*.

Ears or projection plates *m* for supporting the mattress on the bedstead are riveted to the side-bars or braces *b* that are adapted to engage the inside rail *o* of the ordinary bedstead frame.

From this construction, it will be seen that when the mattress is in an open position, as in Fig. 2, the weight of the user tends to maintain the same in this open position so that there is no danger of its folding up when in use. This will be seen from the fact that the ends *i* and *j* overlap the ends of the angle-plate *f*, and when it is desired to fold the mattress, as indicated in Fig. 3, the end-rails *c* and *d* are folded inward toward each other, as shown by the arrow *a'* in Fig. 2, permitting the coiled springs *e*, or whatever the fabric may be, to fold tightly around the outer end-rails *c* and *d*, and when the end rails *c* and *d* are in alignment the end portions *i* and *j* rest upon the horizontal



web  $f'$  of the angle-plate  $f$ , thus maintaining the end-rails  $c$  and  $d$  in the same horizontal plane.

This construction is one that is convenient to handle and especially to carry up and down stairs in places where the stair-ways or halls are very narrow, and one that is light in weight and yet of great rigidity and strength when in use.

10 What I claim, is:—

1. In a foldable mattress construction, the combination with the side-bars thereof, of end-rails of angle-iron secured thereto and to the horizontal web of which the mattress 15 fabric is attached, a plate of angle-iron nested within and below the horizontal webs of the meeting ends of the end-rails, and to which the end-rails are pivotally connected, whereby when a weight is placed upon the 20 fabric the frame is prevented from folding.

2. In a foldable spring-mattress construction having in combination with the angle-iron end-rails thereof a plate of angle-iron and to which the end-rails are pivotally secured, and side-bars attached to the end-rails, a plate secured to the side-bars for supporting the foldable mattress in a bedstead 25 construction, a fabric being secured to the

horizontal web of the end-rails whereby when the end-rails are folded, the mattress 30 will fold around the end-rails as described.

3. A foldable mattress frame construction having in combination with the end-rails thereof, a fabric secured thereto, of a plate for pivotally connecting said rails together, 35 the horizontal web of said plate being adapted to support the adjacent ends of the end-rails when in an open position, and the fabric lying on the outside of the end-rails when in a folded position. 40

4. In a foldable mattress construction, the combination with the side-bars thereof, of end-rails of angle-iron secured thereto and to the horizontal web of which the mattress 45 fabric is attached, plates of angle-iron nested within and below the horizontal webs of the meeting ends of the end-rails, and to which the end-rails are pivotally connected, whereby when a weight is placed upon the fabric the frame is prevented from folding, and a 50 brace-bar connecting the plates of angle-iron.

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Witnesses:

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