

(No Model.)

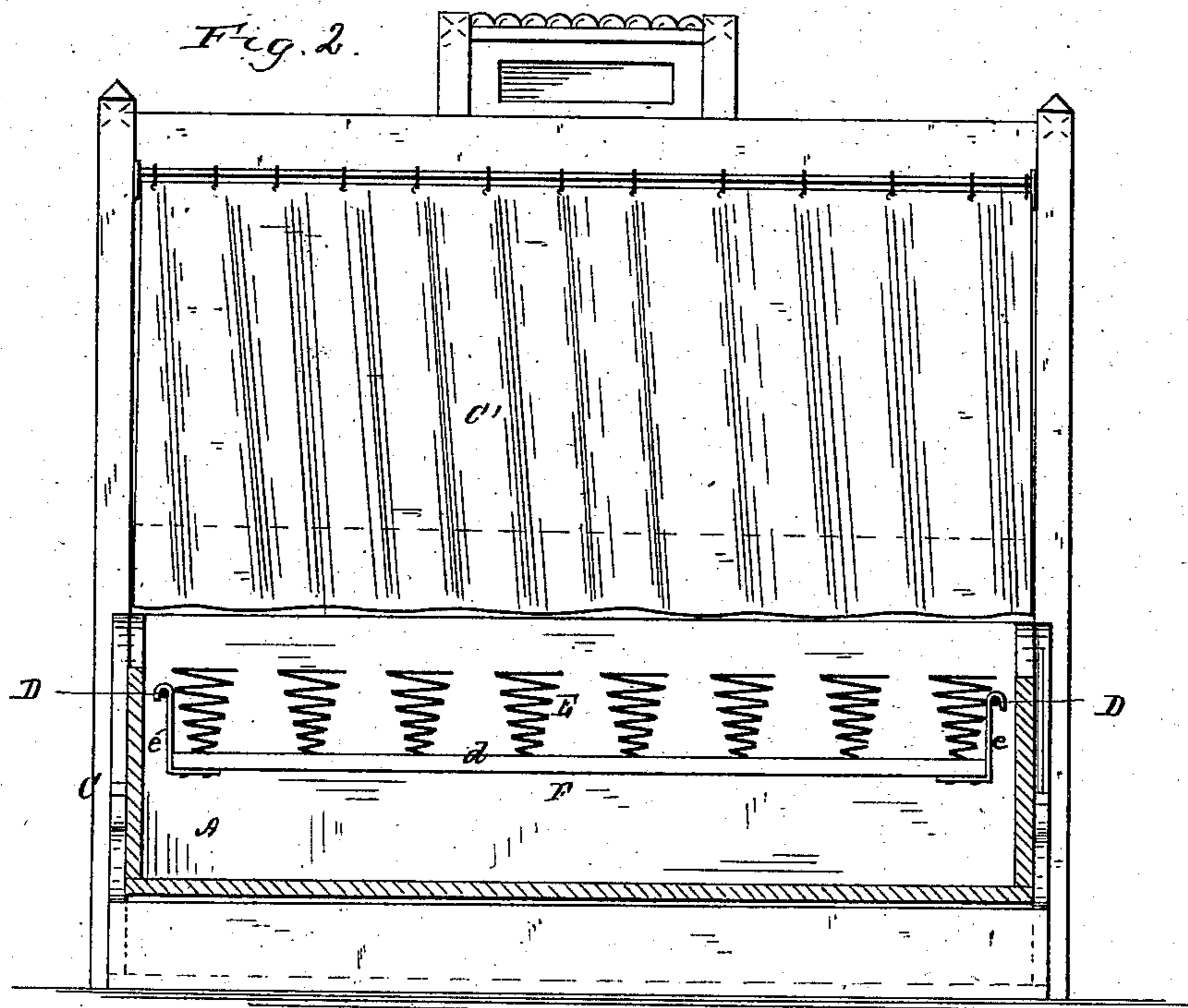
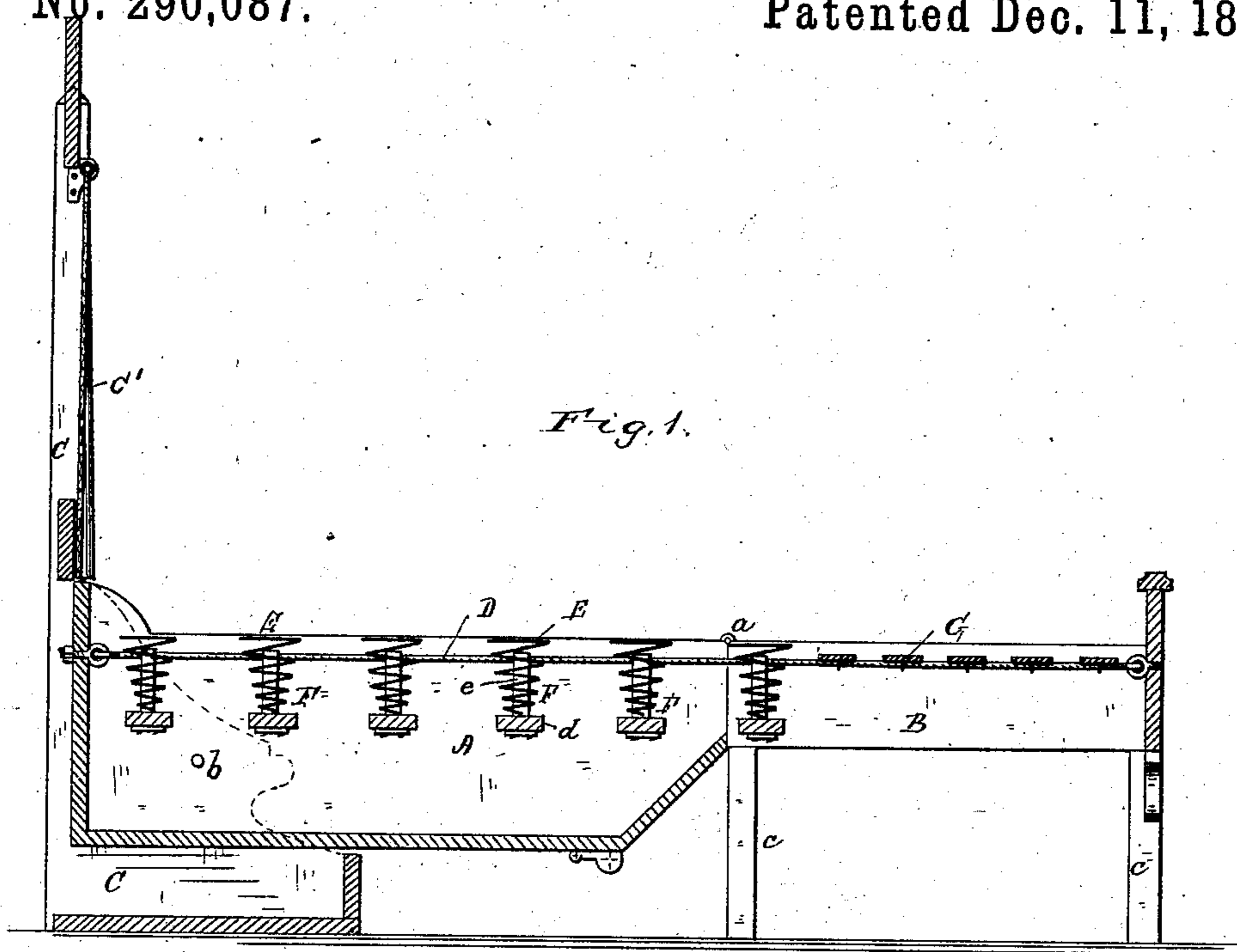
2 Sheets—Sheet 1.

A. F. MILLER.

BED BOTTOM.

No. 290,087.

Patented Dec. 11, 1883.



Witnesses:

H. A. Low
Walter Blandford

Inventor

Albert F. Miller
by Maurice Bailey
his atty.

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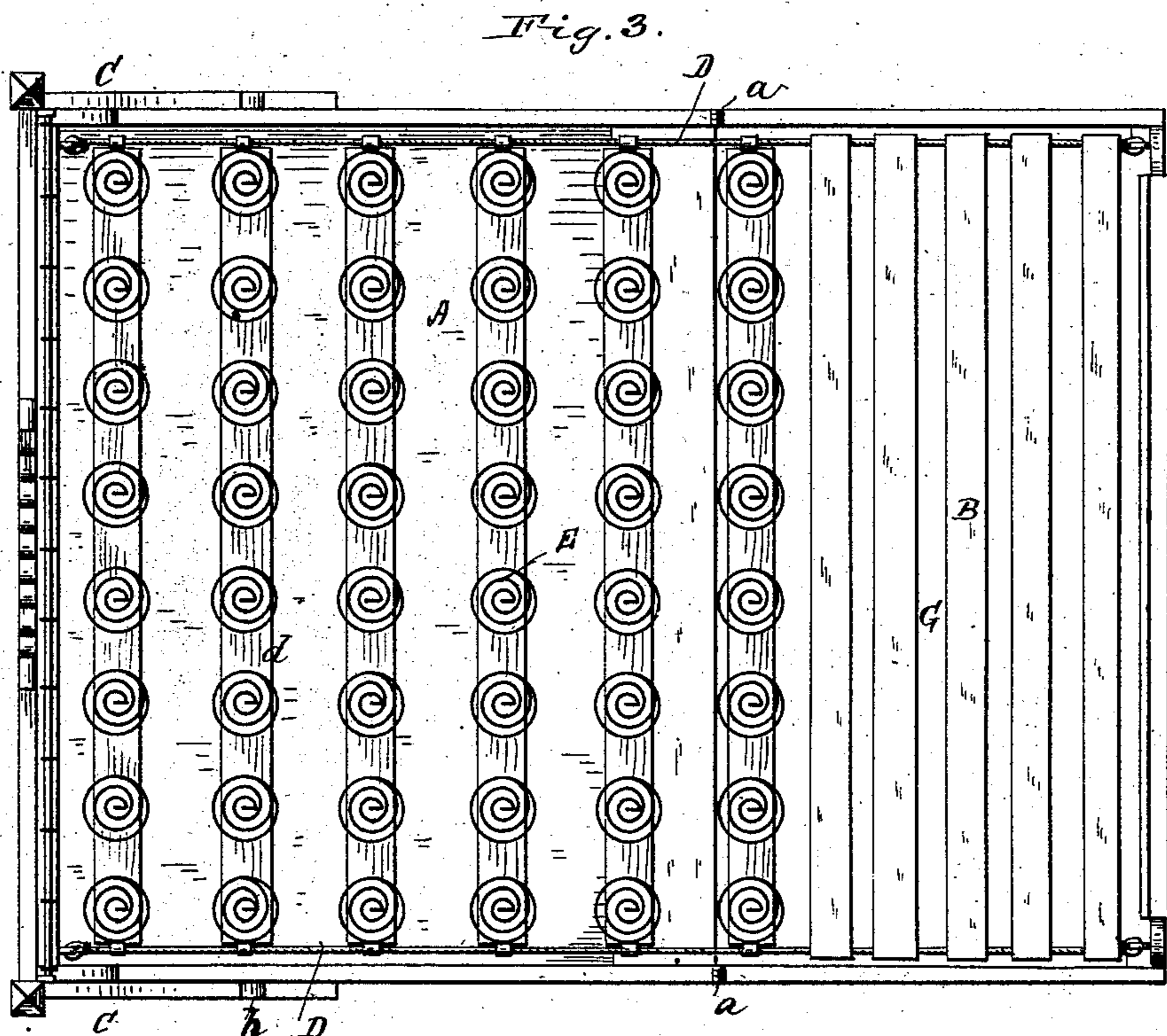
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Witnesses
H. N. Low
Walter Blandford

Inventor
Albert F. Miller
by Maxwell Darby
his attorney

UNITED STATES PATENT OFFICE.

ALBERT F. MILLER, OF CHICAGO, ASSIGNOR TO SANFORD S. BURR, OF
WINETKA, ILLINOIS.

BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 290,087, dated December 11, 1883.

Application filed July 13, 1883. (No model.)

To all whom it may concern:

Be it known that I, ALBERT F. MILLER, of Chicago, Illinois, have invented certain new and useful Improvements in Bed-Bottoms for Folding Bedsteads, of which the following is a specification.

My invention has reference to that part of a bedstead known as the "bed-bottom," upon which the mattress and bedding rest, and has been designed with particular reference to the requirements of folding bedsteads, in which connection I have illustrated it in the drawings accompanying this specification. I combine with the bed-frame of a folding bed side suspension-ropes which are secured to the head and foot of the frame, as hereinafter described, so as to be drawn taut when the bed-frame is unfolded, and mattress-supporting springs supported by stirrups or equivalent means carried by and preferably suspended from said side suspension-ropes. These springs may be placed throughout the whole of the space between the side suspension-ropes; but in practice it will be found sufficient to use them only for the upper part of the bed-bottom—say as far down as the point where the knees of the occupant will come when he is lying down—and the rest of the bed-bottom can be formed of slats resting on or attached to and extending across between the side suspension-ropes. I prefer to arrange the spring-supporting stirrups like the slats just referred to—that is to say, to have them extend transversely of the bed-bottom, so as to preserve unimpaired the flexibility or pliability of the bed-bottom in a longitudinal sense, with a view to adapt it for use in a folding bed, and to permit it to be folded up with the folding bed-frame.

The accompanying drawings, as before stated, represent the application of my invention, in the form which I now prefer, to a folding bedstead.

Figure 1 is a longitudinal vertical central section of the bedstead open. Fig. 2 is a transverse vertical section, and Fig. 3 is a plan, of the same.

The bedstead shown in the drawings comprises a bed-frame composed of two parts, A B, adapted first to fold over onto itself, and then to be turned up into a case, C. For this purpose the two sections are hinged together

at *a*, and the inner section is pivoted to the case at *b*. The outer section, B, is provided, as usual, with hinged legs *c*, which can be folded up when it is desired to fold up the bedstead.

In the upright portion of the case is a curtain, C', which closes an opening in the back of the case, and can be drawn aside whenever required. This curtain can, after the bed is folded up, be used as a cover for the back thereof, if desired.

The bed-bottom hereinbefore referred to is composed of the side suspension-ropes, D, springs E, spring-supporting stirrups F, and slats G. The ropes D are wire ropes, preferably, and are not extensible lengthwise. They form the side edges of the bed-bottom, and are secured at their ends to the head-board and foot-board of the bed-frame. They may, if desired, be combined with means for tightening them. The points at which they are secured are in a plane a little below the hinge-point *a* of the bed-frame sections A B, so that when the bed-frame is unfolded the tension of the ropes will tend to hold it open.

From the side rope, D, are suspended the spring-supporting stirrups F, which in this instance consist of slats *d*, connected at their ends to the ropes D by metal hangers *e*, and these stirrups extend transversely of the bed-bottom, so that the latter will be yielding and pliable when the ropes are off tension, thus permitting it to be folded up along with the mattress and bedding when the bedstead is folded up.

Upon the stirrups are placed springs E, of any suitable or usual type—such, for instance, as the spiral springs represented in the drawings. The springs are attached to or held in place on the stirrup slats *d* in any of the usual known ways, and are so formed and arranged that normally their upper ends, on which the mattress will rest, stand, say, from an inch and a half to two inches above the level of the suspension-ropes D, this, however, depending upon the strength of the springs and the weight to be supported by them.

The springs may extend throughout the whole area of the bed-bottom, if desired; but in practice it will be found sufficient to have them extend down about to the point indicated in the drawings, the remainder of the bed-

bottom below that point being formed of any
suitable instrumentality—as, for instance, of
cross-slats G, resting on and fastened to the
ropes D; or, if desired, canvas or some other
5 material can be stretched over the space occu-
pied by slats G.

Having described my improvements and the
best way now known to me of carrying the
same into effect, what I claim as new and of
10 my invention is—

The combination, with the bed-frame of a
folding bed, of side suspension-ropes secured
to the head and foot of the frame, substantially

as described, so as to be drawn taut when the
bed-frame is unfolded, and bed or mattress sup- 15
porting springs arranged in the space between
said ropes, and supported by stirrups or car-
riers suspended from said ropes, substantially
as hereinbefore set forth.

In testimony whereof I have hereunto set my 20
hand this 10th day of July, 1883.

ALBERT F. MILLER.

Witnesses:

RUFUS C. HALL,

CHARLES R. FRANCIS.