

(No Model.)

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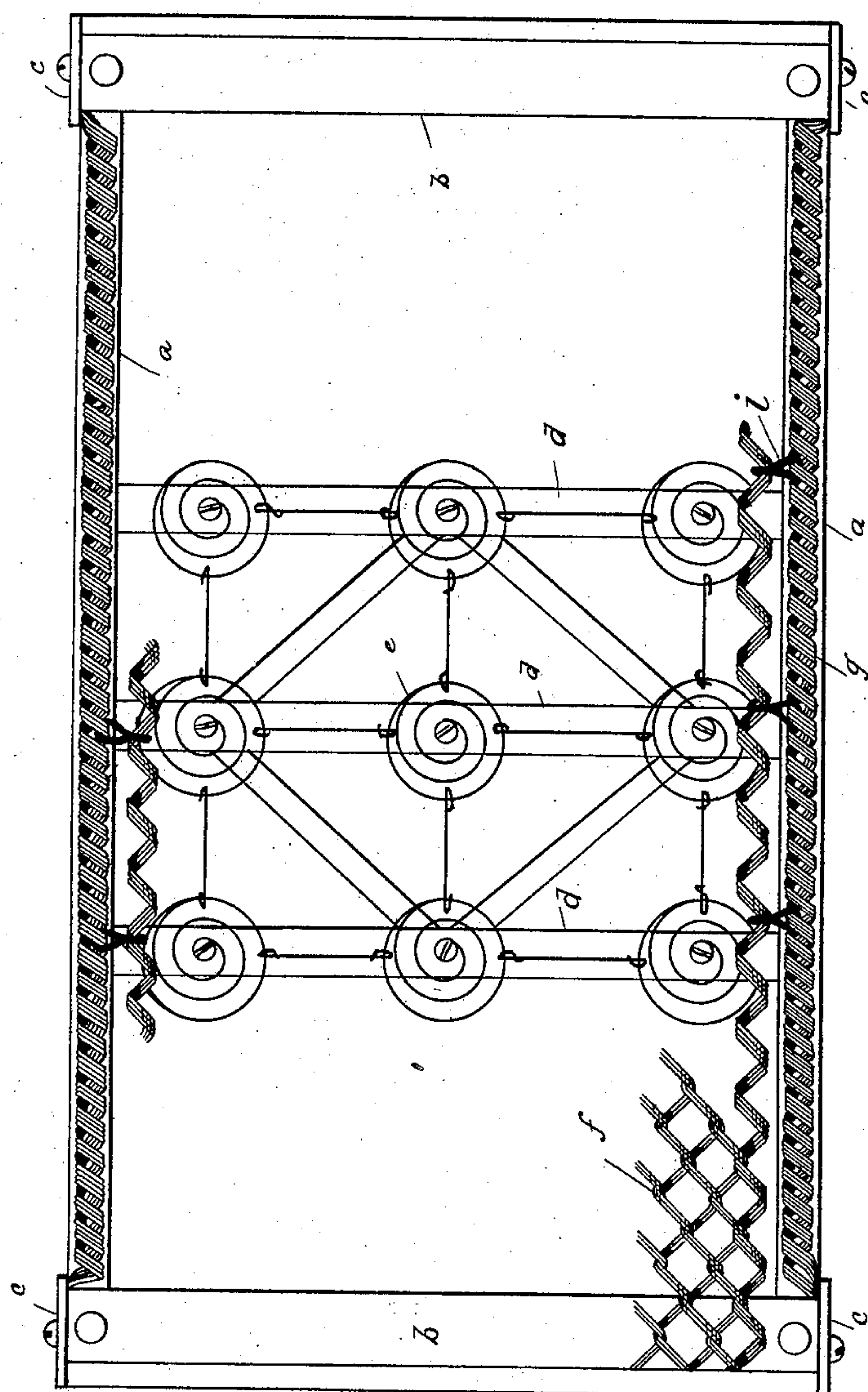
J. H. BATTCHER.

SPRING BED.

No. 368,905.

Patented Aug. 23, 1887.

Fig. 1.



Attest:

Geo. H. Bots
Edwin A. Finckel.

Inventor:

John H. Battcher
By Ernest Webb
Atty

(No Model.)

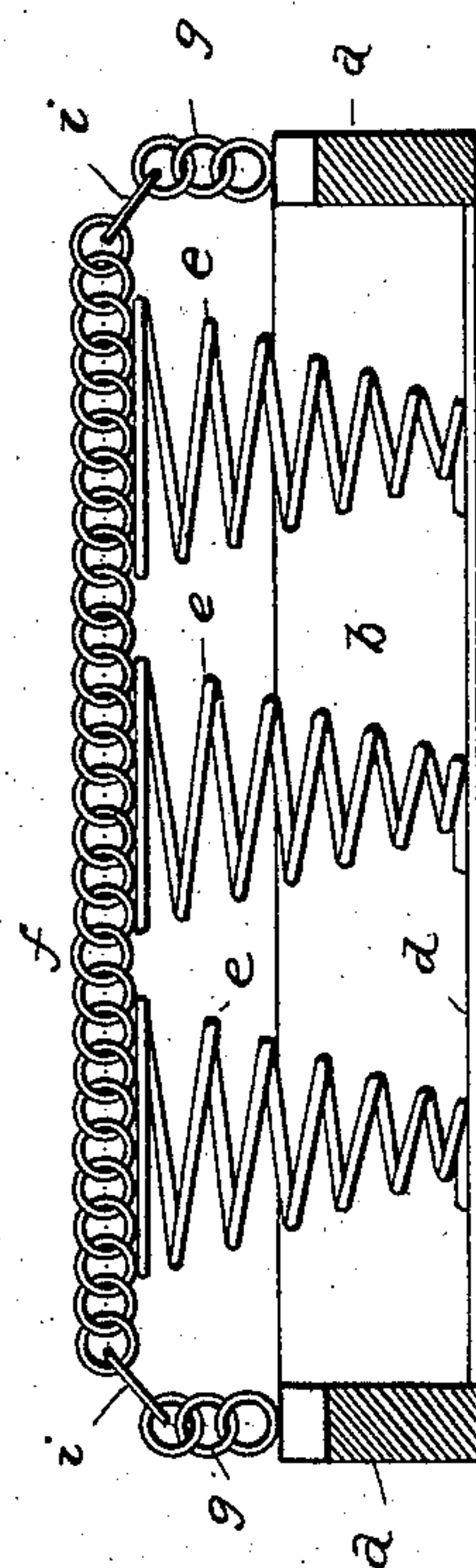
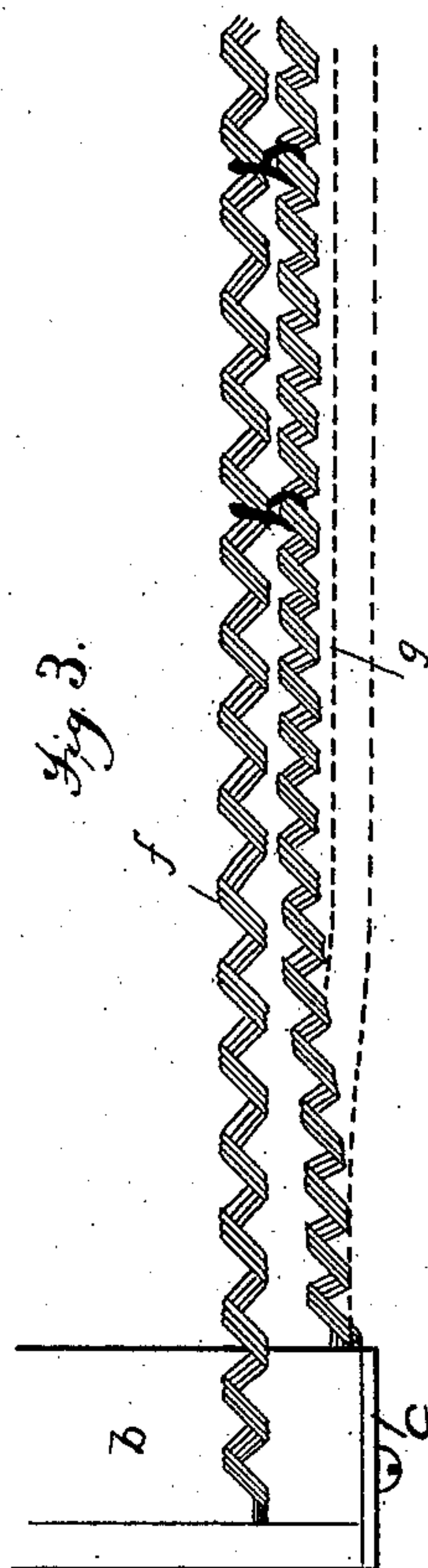
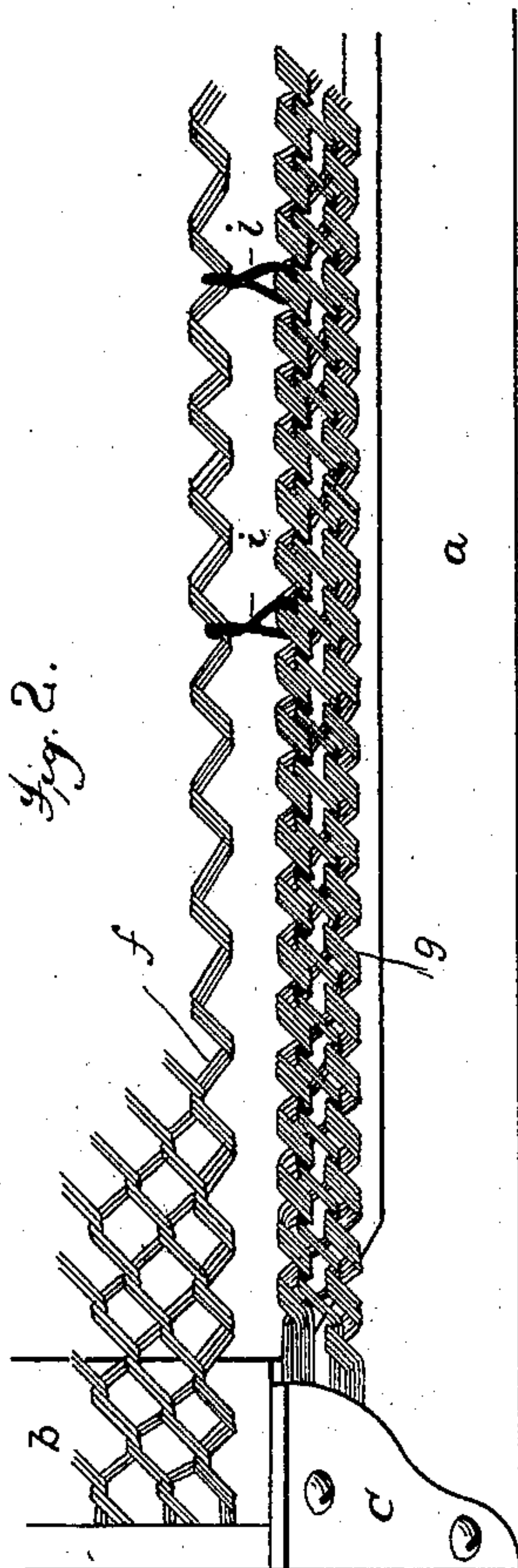
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J. H. BATTCHER.

SPRING BED.

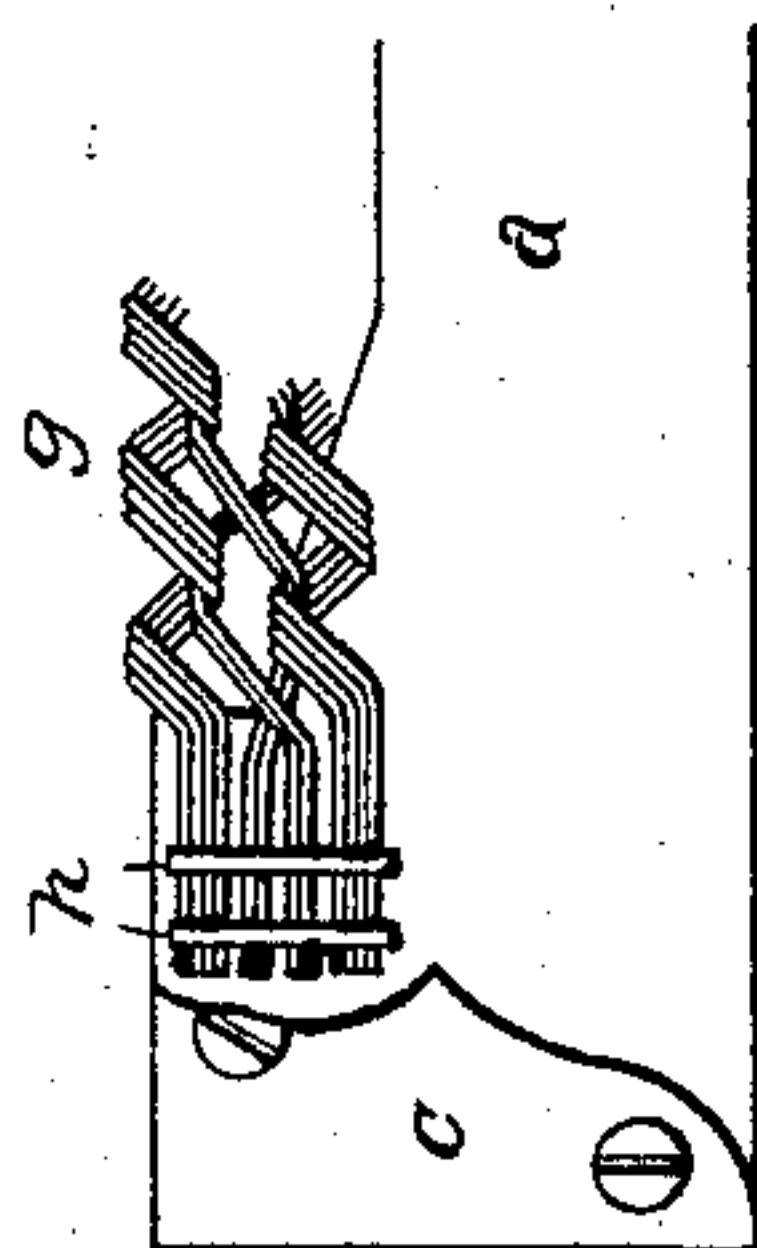
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Fig. 4.



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UNITED STATES PATENT OFFICE.

JOHN H. BATTCHER, OF NEW YORK, ASSIGNOR TO WALTER J. GAMBELL,
OF BROOKLYN, NEW YORK.

SPRING-BED.

SPECIFICATION forming part of Letters Patent No. 368,905, dated August 23, 1887.

Application filed August 13, 1886. Serial No. 210,799. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. BATTCHER, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Spring-Beds, of which the following is a full, clear, and exact description.

This invention relates to that class of bed-bottoms in which a woven-wire bottom or bottom of analogous fabric is employed. It is a known fact that one great difficulty in and objection to bed-bottoms of this fabric is the tendency of such fabric to become misshapen and to finally permanently retain such misshapen condition. Now, the object of this invention is to remedy this evil; and to this end the invention consists in a bed-bottom of woven wire or analogous fabric supported centrally by upholsterers' springs, and stayed laterally by a series of vertical springs arranged below its level between the end rails, and connected at top to the side of the fabric, and rigidly secured at their ends to the frame, so that as weight is applied to the bed-bottom the side springs will cant over and become practically part of the bed-bottom, and thus prevent it from becoming permanently misshapen, while at the same time they add strength and permanence to the bed-bottom without in the least detracting from its flexibility.

In the accompanying drawings, in the several figures of which like parts are similarly designated, Figure 1 is a plan view illustrating my invention, the woven-wire fabric being shown only in part. Fig. 2 is a perspective view of one corner. Fig. 3 is a plan view of one corner, showing the side springs deflected, as they will be when weight is applied to the bed-bottom. Fig. 4 is a detail side elevation of one corner, showing the manner of fastening the side springs, and Fig. 5 is a vertical cross-section.

The frame of the bed may consist, as usual, of side rails, *a a*, and end rails, *b b*, suitably connected, as by corner irons, *c*. Midway of this frame are arranged a series of slats, *d*, which support a series of upholsterers' springs, *e*, arranged thereupon. The bottom proper, *f*,

is composed of woven wire or other analogous bed-bottom fabric secured to the end rails in any suitable manner. This bottom *f* is of less width than the frame. Parallel with and just above the upper edges of the side rails are arranged a series of interlocking coiled springs or coils of wire, *g*. I have shown three such interlocking coils, arranged upon each side of the frame and secured, as by staples *h*, (see Fig. 4,) underneath the corner irons, *c*; but I do not limit my invention to any particular device or devices for retaining the said coils or springs in position above the side rails. I prefer that these side coils be of somewhat greater resistance or strength than the coils of the bed-bottom proper when said bottom is made of woven wire. These side coils are connected by their upper coils to the side coils of the bottom proper by means of any suitable fastening-links, *i*, at intervals along the sides of the bottom proper.

It will be noticed that the bottom proper is suspended by its ends from the end rails, and normally stands above and between the side coils, so that when weight is applied to the bottom the bottom tends to sink between the side coils, and if the weight is sufficient to depress it that far the pressure is transmitted through the links *i* to the side coils, which then receive a cant inward toward the bottom proper, as indicated by the full and dotted lines in Fig. 3, thus making the side coils a part of the bottom proper when under such pressure. In this way the tendency of the bottom to assume a set is overcome and the bed is preserved in its normal shape, for as soon as the weight is removed the bottom proper and the coils will resume their normal positions. Of course it will be understood that the upholsterers' springs *e* subserve their usual function in this arrangement of supporting the center of the bed-bottom, where the greatest weight usually falls, and these springs also assist in retaining the bed-bottom in its proper shape.

I am aware that it is old to insert a wire in the edge of the woven-wire fabric on each side of the bed, or instead of a wire to use a rod in the same places, for the purpose of holding the edges of the mattress outward, and for pre-

venting the mattress from being narrowed at the middle, and to counteract the strain of the spirals of the webbing upon the brackets.

I am also aware that it is quite common to provide the longitudinal edges of woven-wire mattresses with a double, triple, or multiple coil, so as to increase the stiffness or re-enforce the strength of the mattress at those points.

What I claim is—

10 1. A bed-bottom consisting of a frame, a bottom proper of woven wire or analogous fabric secured only by its ends to the frame, and only to the end rails of such frame, series of side coils or springs wholly separate in construction from the bottom proper and secured by
15 their ends to the frame and arranged above and in the same vertical plane as the side rails, and links *i*, for connecting the side coils and bottom proper and springs *e*, substantially as
20 shown and described.

2. In a bed-bottom of woven wire or analogous fabric, side coils, *g*, arranged parallel with and above and in the same vertical plane with the side rails and secured to the frame by their ends only, and a bottom proper arranged above said side coils and connected therewith by links, but otherwise wholly independent of said coils, whereby, as weight is applied to the bottom proper, said bottom will sink between the said side coils, and in sinking draw or cant said side coils over toward the said bottom, substantially as described.

In testimony whereof I have hereunto set my hand this 3d day of August, A.D. 1886.

JOHN H. BATTCHEE.

Witnesses:

ELIPHALET C. SMITH, Jr.,
THORNE S. WALLING.