

No. 771,779.

PATENTED OCT. 4, 1904.

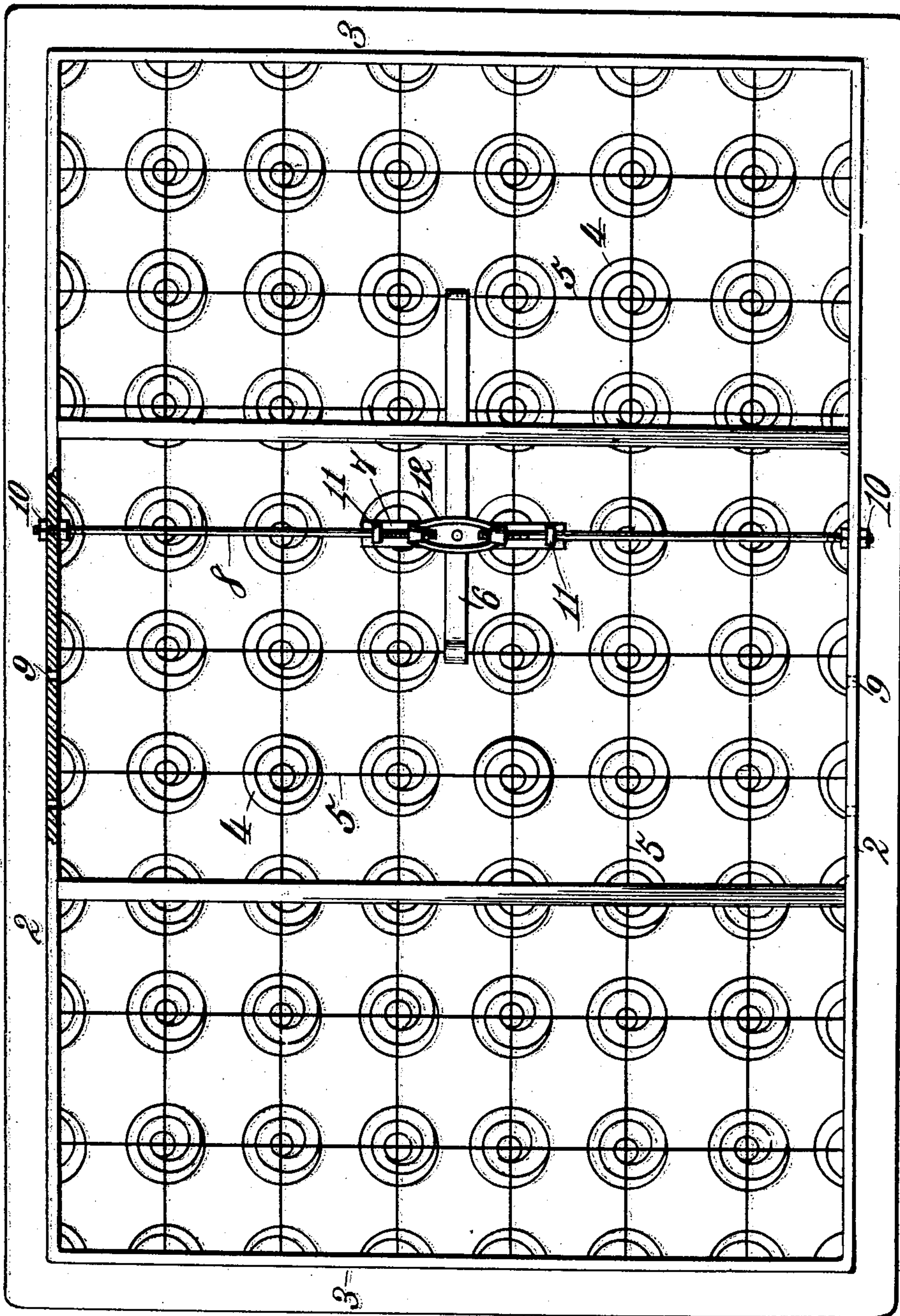
F. B. HEMINGWAY.
SPRING BED BOTTOM.

APPLICATION FILED DEC. 30, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses.
Robert Everett.
James L. Norris.

Inventor.
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By James L. Norris.
Att'y.

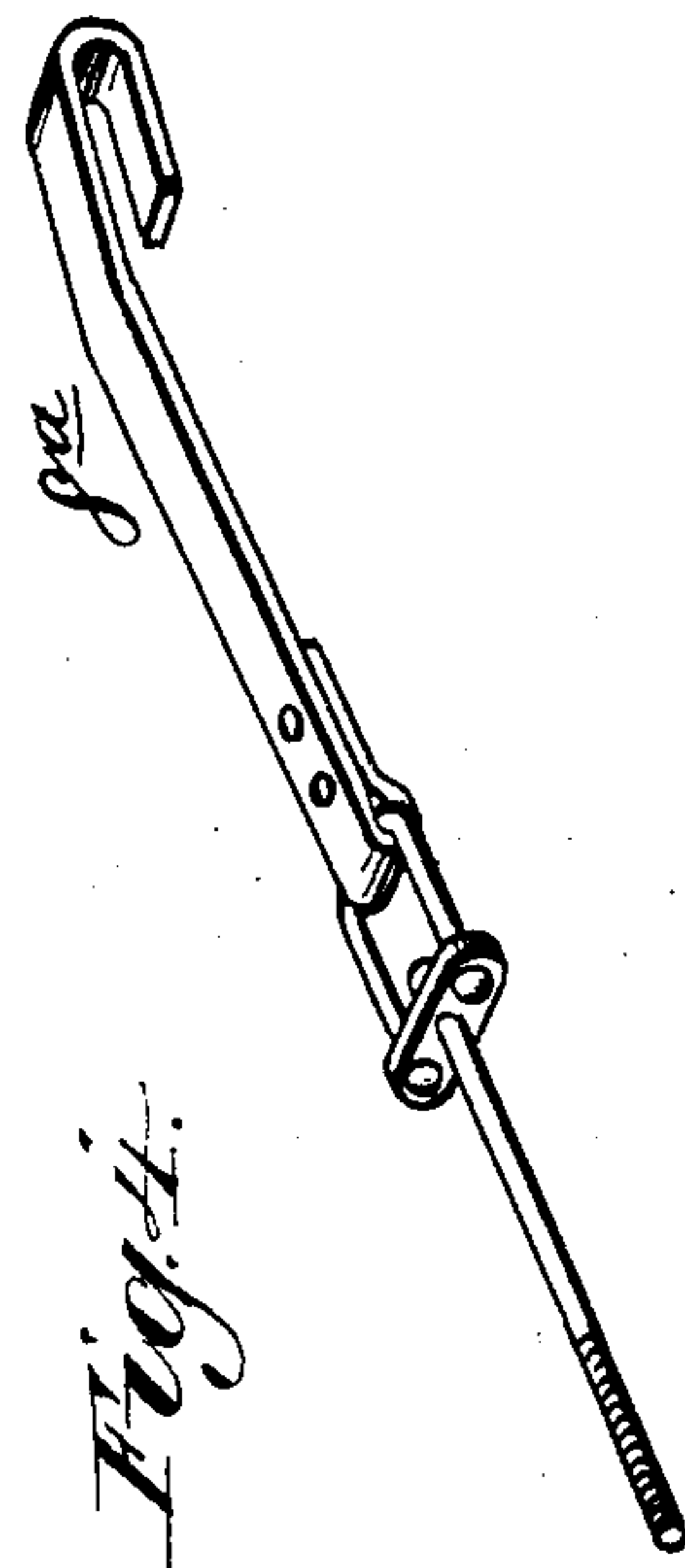
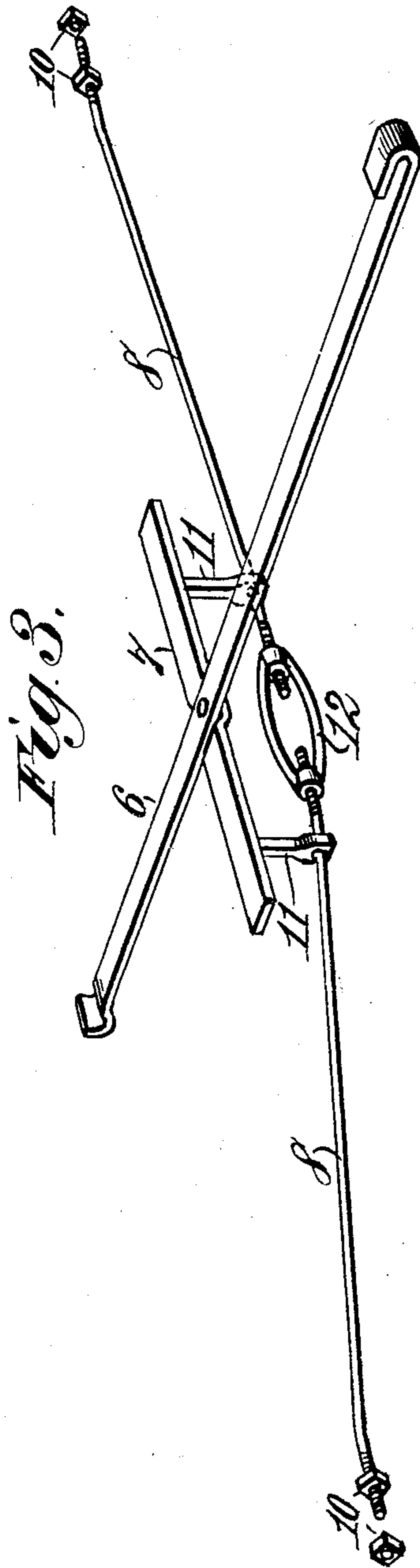
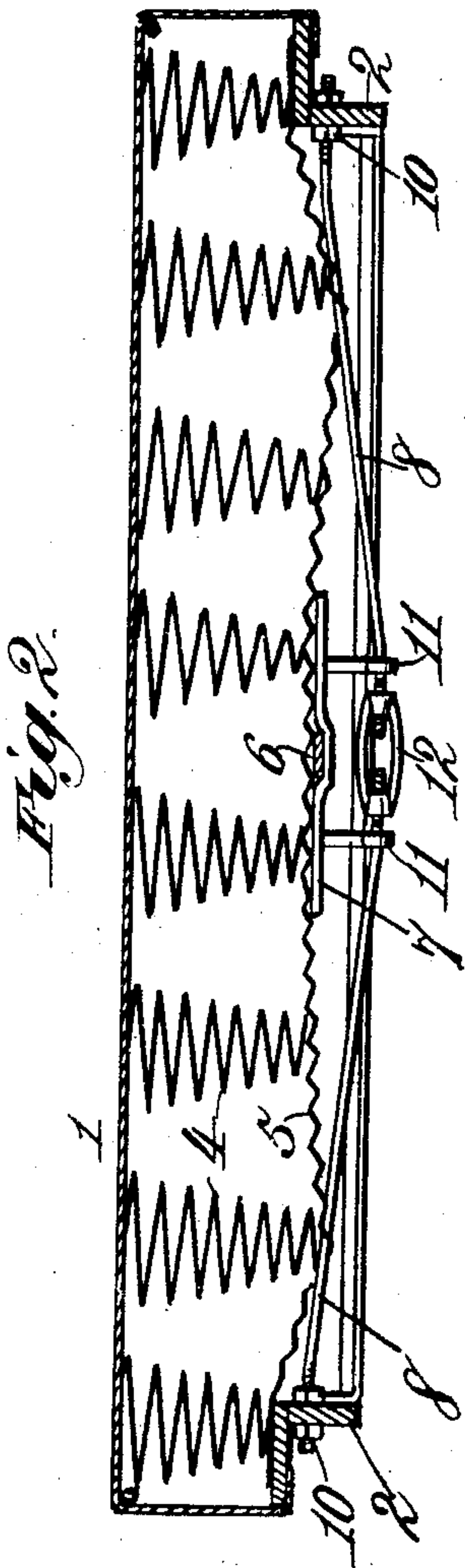
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SPRING BED BOTTOM.
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NO MODEL.

2 SHEETS—SHEET 2.



Witnesses.
Robert Cruik.
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UNITED STATES PATENT OFFICE.

FREDERICK B. HEMINGWAY, OF CLINTON, IOWA, ASSIGNOR TO
HEMINGWAY FURNITURE CO.

SPRING BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 771,779, dated October 4, 1904.

Application filed December 30, 1903. Serial No. 187,219. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK B. HEMINGWAY, a citizen of the United States, residing at Clinton, in the county of Clinton and State of Iowa, have invented new and useful Improvements in Spring Bed-Bottoms, of which the following is a specification.

My invention relates to improvements in spring bed-bottoms, and has for its object the provision of shiftable and adjustable means to compensate for irregularities in the surface of the bed caused by excess of weight imposed upon certain of the springs thereof, which excess of weight usually manifests itself in a sagging along the longitudinal middle line of the spring bed-bottom.

It has been found in the use of spring bed-bottoms that springs along the longitudinal middle of the structure are required to sustain more directly the weight of the body or bodies resting thereon, and the springs along this line in the course of time become depressed, causing the spring bed-bottom to sag in the middle, resulting in great discomfort to the users thereof. This fault has been recognized and is overcome in a novel, simple, and efficient manner by my invention.

The invention consists in the novel combination, arrangement, mode of operation, and adjustability of elements comprising my invention, and as hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1 is a bottom plan view of a spring bed-bottom provided with the shiftable adjustable device of my invention. Fig. 2 is a cross-sectional view, and Fig. 3 is a detail view of the spring-lifting or surface-equalizing mechanism. Fig. 4 is a view of a detail modification.

In the said drawings, in which my invention is illustrated as embodied in a spring bed-bottom, in which embodiment it will be hereinafter referred to, the reference-numeral 1 designates the spring bed-bottom, which may be of any known usual or suitable construction comprising side and end bars 2 3, and 4 designates the springs thereof, which are suitably braced and supported by brace-wires 5,

connected therewith in any suitable way. In the use of such bed-bottoms, as hereinbefore stated, it has been found that an objectionable sagging occurs in the middle or central portions of the structure, the supporting-springs of which portions become depressed. To lift these depressed springs to a common level with the others in order to maintain a level resting-surface, I provide a spring-lifter comprising an arm or member 6, adapted to bear against the lower convolutions of the springs, and an arm or member 7, angularly arranged with relation to the arm 6 and adapted to engage the spring tie or brace rods, as shown. This spring-lifter movably engages or rests against the spring-bottom—that is to say, in such manner that it may be moved or its position shifted to engage different parts of the spring-bottom, and the lifting device is supported by a pair of rigid rods 8, adjustably connected to the side bars of the spring bed-bottom and preferably in the manner illustrated in Figs. 1, 2, and 3, wherein the ends of said rods are disposed in holes 9, provided for in the side bars of the spring bed-bottom, being maintained therein by means of screw-nuts 10 engaging the screw-threaded ends of said rods. Instead of this preferable connection just described rods 8 may be adjusted or connected to the side bars through the medium of hook-shaped elements 8^a, as shown in Fig. 4 of the drawings and as will be obvious. The inner ends of these rods pass through downwardly-projecting legs 11, carried by the bar 6 of the spring-lifting device, whereby in operation said rods incline upwardly from their inner to their outer ends. The inner ends of said rods are screw-threaded and connected by means of a turnbuckle 12, whereby when the turnbuckle is manipulated to draw the ends of said rods together the inner ends of said rods and the spring-lifting device carried thereby are elevated and in turn lift or elevate those springs the depression of which have resulted in the objectionable sagging hereinbefore referred to, bringing them to a common level with the other springs of the structure and providing a level comfortable resting-surface. It will be ap-

parent that within the limited capacity of elevation of the device the depressed springs may be lifted in varying degree, according to necessity.

5 My improved spring-lifting device or arrangement is capable of being adjusted along the bed-bottom to different positions of use, as may be needed. To provide for this shiftability of position, the side bars of the structure
10 are preferably provided with a plurality of means for receiving the outer ends of the rods 8, which are capable of being detached from any of such means and operatively connected to any other of such means, so that the device
15 may be shifted to different positions of use. Instead of this particular manner of shiftable adjustment the rods 8 may be provided with hook-shaped elements 8^a, hereinbefore referred to, so that said rods 8 and elements 8^a may be
20 slipped along upon the side bars of the structure of the spring-bottom. The ends of the member 7 of the spring-lifting device are fashioned to engage the spring tie-rods or braces in the different positions to which the
25 device is applied for use, whereby proper engagement of the lifting device with the spring-bottom in any of its positions of adjustment is maintained.

30 By my invention I provide a novel and simple means for compensating for the objectionable sagging of spring bed-bottoms.

While I have shown my invention as embodied in connection with a spring bed-bottom, I desire it to be understood that I do
35 not limit the invention to spring bed-bottoms, but desire to avail myself of the invention in all the uses to which it is applicable—such, for instance, as in connection with spring couch-bottoms.

40 Having thus described my invention, what I claim is—

1. The combination with a spring-bottom for articles of furniture, of a shiftable spring-lifting device comprising an arm movably engaging against the spring-bottom, rigid rods
45 connected to and supporting said arm, means for shiftablely connecting the outer ends of

said rods to the spring-bottom structure, and means for manipulating the inner ends of said rods to cause the lifting device to lift the
50 springs with which it is engaged.

2. The combination with a spring-bottom for articles of furniture, of a shiftable lifting device comprising angularly-arranged arms movably engaging against the spring-bottom, rigid rods connected to and supporting said
55 angularly-arranged arms, means for shiftablely connecting the outer ends of said rods to the spring-bottom structure, and means for manipulating the inner ends of said rods to cause
60 the lifting device to lift the springs with which it is engaged.

3. The combination with a spring-bottom for articles of furniture, of a shiftable spring-lifting device comprising angularly-arranged
65 arms movably engaging against the spring-bottom, rigid rods connected to and supporting said angularly-arranged arms, means for shiftablely connecting the outer ends of said rods to the spring-bottom structure, and a
70 turnbuckle connecting the inner ends of said rods for manipulating said rods to cause the lifting device to lift the springs with which it is engaged.

4. The combination with a spring-bottom
75 for articles of furniture, of a shiftable spring-lifting device comprising angularly-arranged arms movably engaging against the spring-bottom, one of said arms fashioned to engage the tie or brace wires of the spring-bottom, legs projecting from the other of said arms,
80 rigid rods shiftablely connected to the spring-bottom structure at their outer ends and passing through said legs, and a turnbuckle connecting the inner ends of said arms for manipulating said rods to cause the lifting device to lift the springs with which it is engaged.
85

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses. 90

FREDERICK B. HEMINGWAY.

Witnesses:

RUBY C. HEMINGWAY,

WILLIS E. HEMINGWAY.