

(No Model.)

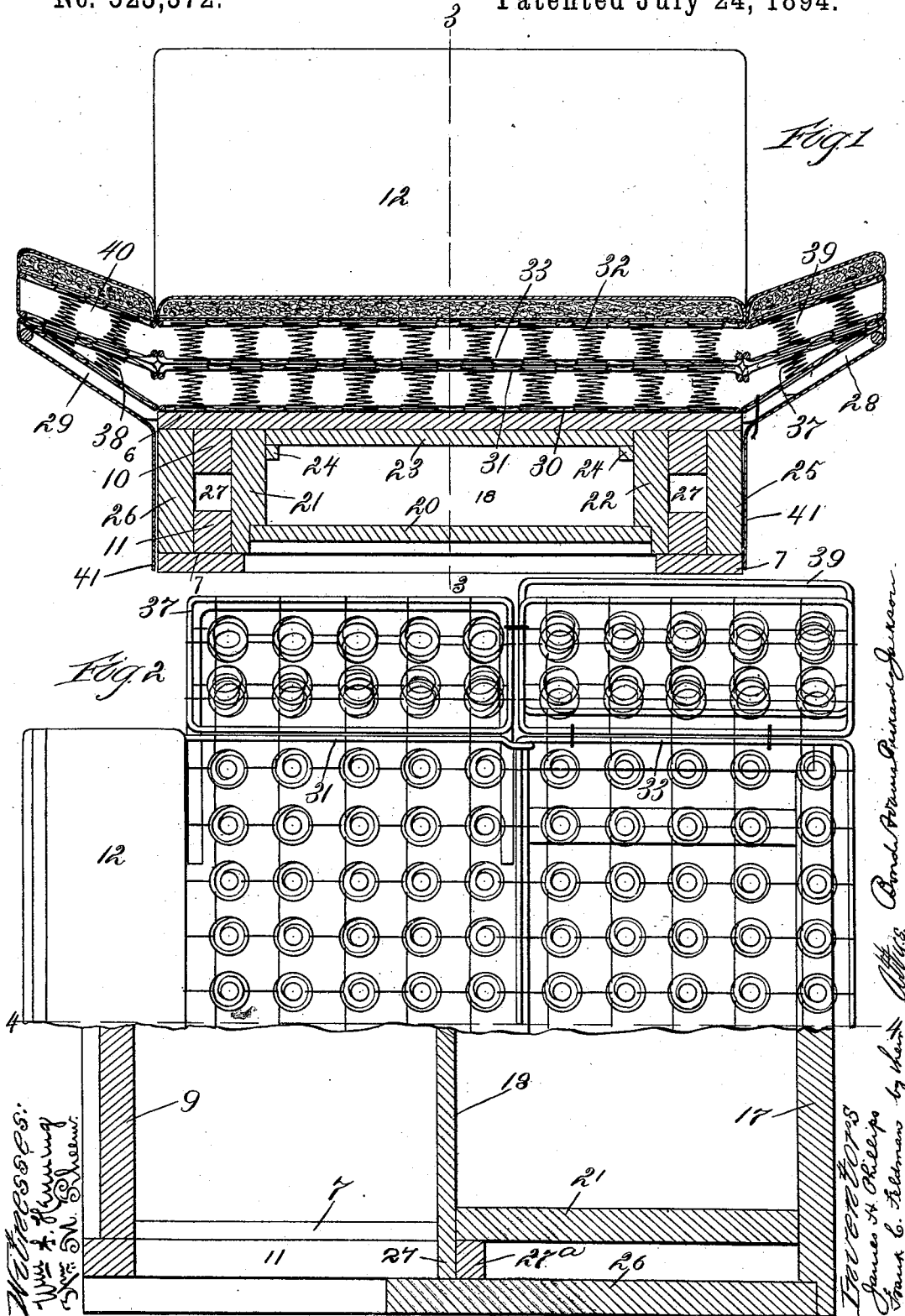
2 Sheets—Sheet 1.

J. H. PHILLIPS & F. C. FELDMAN.

SOFA BED.

No. 523,372.

Patented July 24, 1894.



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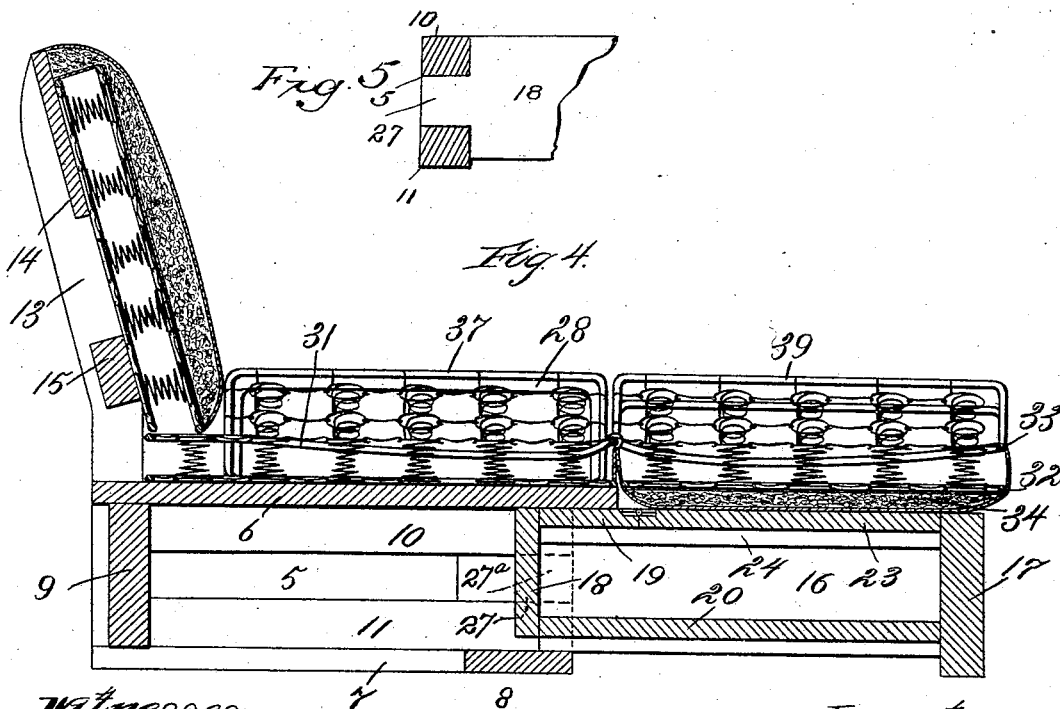
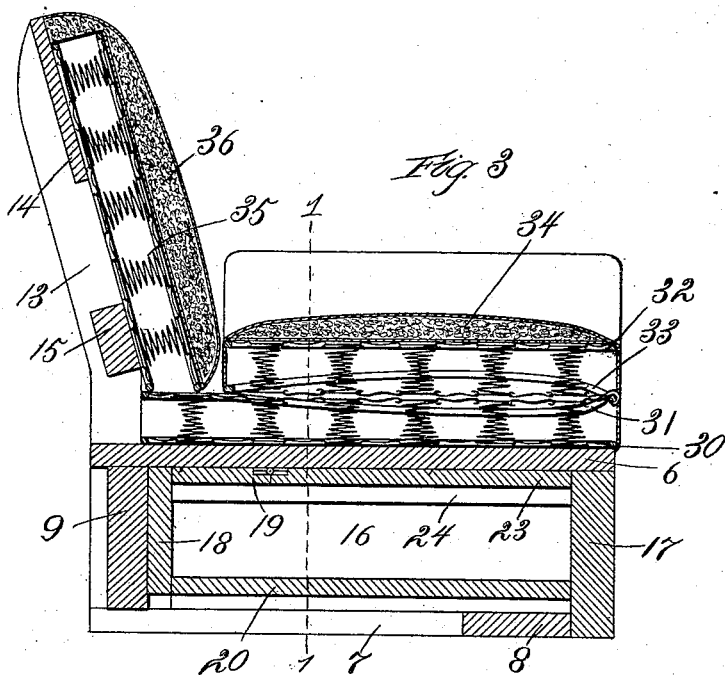
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Witnesses:

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UNITED STATES PATENT OFFICE.

JAMES H. PHILLIPS AND FRANK C. FELDMAN, OF CHICAGO, ILLINOIS.

SOFA-BED.

SPECIFICATION forming part of Letters Patent No. 523,372, dated July 24, 1894.

Application filed December 15, 1893. Serial No. 493,780. (No model.)

To all whom it may concern:

Be it known that we, JAMES H. PHILLIPS and FRANK C. FELDMAN, citizens of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Sofa-Beds, of which the following is a specification, reference being had to the accompanying drawings, in which—

10 Figure 1 is a longitudinal section on line 1—1 of Fig. 3. Fig. 2 is a partial top or plan view, part of the spring mattresses being removed, showing the stationary and extension frames in section. Fig. 3 is a vertical cross section on line 3—3 of Fig. 1. Fig. 4 is a longitudinal section on line 4—4 of Fig. 2, and Fig. 5 is a detail view, showing the tenon arranged between the upper and lower guide bars.

20 Our invention relates to sofas which are so constructed as to be adapted for use both as sofas and as beds, commonly known as sofa beds.

It has for its objects, to provide a sofa bed 25 which will be equipped with spring mattresses and head rests, which will be durable in construction, and will be so arranged as to present the appearance of an ordinary sofa. We accomplish these objects as hereinafter specified and as illustrated in the drawings.

That which we regard as new will be set forth in the claims.

In the drawings,—5 indicates a stationary frame, which forms the base of the sofa, and 35 consists of a top piece 6, bottom pieces 7—8, back piece 9, and guide bars 10—11. The guide bars 10—11 are arranged in pairs one above the other, and a pair of such guide bars is arranged near each end of the stationary frame, as shown in Fig. 1. The stationary frame is also provided with a back 12, which preferably consists of standards 13 and cross pieces 14—15, as shown in Figs. 3 and 4.

16 indicates an extension frame, which consists of a front piece 17, back piece 18, top piece 19, bottom piece 20, and end pieces 21—22, (see Figs. 1 and 4) the whole forming a drawer. As shown in Fig. 4, the top piece 19 extends forward a short distance from the 50 back piece 18, and to it is hinged a cover 23, as shown in Fig. 4. The cover 23 is sup-

ported by side strips 24, as best shown in Fig. 1.

The extension frame 16 is of such width that the side pieces 21—22 fit between the 55 pairs of guide bars 10—11 at the opposite sides of the stationary frame, between which guide bars said extension frame is adapted to move.

At each end of the extension frame 16 are 60 provided end pieces 25—26, the forward ends of which are secured to the front piece 17, as best shown in Fig. 2, the rear ends being secured to the back piece 18 by means of tenons 27 at the ends of said back piece, as shown 65 in Fig. 1. The outer ends of the guide bars 10 and 11 are connected by the upright pieces 27^a, Figs. 1 and 2. The tenons 27 project between the upper and lower guide bars 10—11, and they are adapted to move in the space 70 between said guide bars. The end pieces 25 and 26 move between the top and bottom pieces 6—7 of the stationary frame. This makes the extension frame very solid in construction, and it is so firmly fitted in the stationary frame that its action is very smooth. 75

As shown in Fig. 4, the front piece 17 of the extension frame extends below the lower edges of the pieces 25—26 a distance equal to the thickness of the pieces 7—8 of the stationary frame, so that when the extension 80 frame is extended the front piece 17 serves as a support to hold the extension frame in a horizontal position.

When the extension frame is retracted, as 85 is the case when the structure is used as a sofa, the front piece 17 forms the front of the sofa, the side pieces 25—26 forming its ends. When the extension frame 16 is extended, the cover 23 may be lifted, permitting access 90 to the interior compartment of the drawer, which may be used for the purpose of storing bed clothing or other articles.

28—29 indicate bails, which are secured to the top piece 6 of the stationary frame, and 95 extend from the opposite ends thereof at an angle of about forty-five degrees, as shown in Figs. 1 and 2. The bails 28—29 are rectangular, as shown in Fig. 2, and serve to support the head rests, as will be hereinafter set forth. 100

30 indicates a spring mattress, which is of the size and shape of the top piece 6 of the

stationary frame, upon which it rests, as shown in Figs. 1 and 3. The mattress 30 may be of any common construction, except that the upper end rods 31 are bent or concaved slightly, as shown in Fig. 3, the object of which arrangement will be hereinafter set forth.

32 indicates a second spring mattress, which is of such size and shape as to cover the upper surface of the extension frame 16 when extended, as shown in Fig. 4.

The mattress 32 is hinged at its upper rear edge to the forward upper edge of the mattress 30, and is adapted to be folded over upon said mattress, as shown in Figs. 1 and 3. The upper end rods 33 of the mattress 32 are also concaved, as shown in Figs. 3 and 4. By bending the rods 31 and 33 as shown, space is provided for bedding material which it may be inconvenient to remove.

The upper surface of the mattress 32 (when closed) is upholstered, as shown at 34 in Fig. 3, and such upholstery is of such thickness that when the mattress 32 is turned over on the extension frame 16, as shown in Fig. 4, such upholstery will hold the mattress 32 upon a level with the mattress 30.

The back also carries a mattress 35, the lower edge of which rests upon the mattress 30, as shown in Fig. 3. The back is upholstered, as shown at 36 in Fig. 3.

37—38 indicate stationary head rests, which are composed of spring mattresses triangular in cross section, as shown in Fig. 1. The head rests 37—38 rest upon the balls 28—29 at the ends of the mattress 30, to which they are secured.

39—40 indicate movable head rests, which are quadrilateral in cross section, and are adapted to rest upon the upper surfaces of the stationary head rests 37—38. The lower inner ends (when closed) of the movable head rests 39—40 are hinged to the lower end rods (when closed) of the movable mattress 32, as shown in Figs. 1 and 2, and the movable head rests 39—40 are also hinged to the forward upper end rods of the stationary head rests 37—38, as also shown in Fig. 2. By this construction, when the upper mattress 32 is turned over upon the extension frame 16 the movable head rests 39—40 will also be turned over, and will assume the position shown in Fig. 2, their upper surfaces being on a line with the upper surfaces of the stationary head rests 37—38.

The entire sofa may be covered with any

suitable finishing material, as shown at 41 in Fig. 1, which material may be secured to the ends of the top piece 6 of the stationary frame in such position as to hang down, covering the entire ends of the sofa, as shown. When arranged in this manner, the side pieces 25—26 of the extension frame are entirely covered, and the ends of the structure present the appearance of an ordinary sofa.

That which we claim as our invention, and desire to secure by Letters Patent, is—

1. In a sofa-bed, the combination with a stationary frame, an extension frame adapted to be inclosed in said stationary frame and to be withdrawn therefrom, and stationary and folding mattresses, of stationary and folding spring mattress head rests composed of upper and lower frames and interposed springs, the folding head rest being hinged to the stationary spring mattress head-rest and also hinged directly to the folding mattress, substantially as described.

2. In a sofa bed, the combination with a stationary frame, and an extension frame adapted to be inclosed in said stationary frame and to be withdrawn therefrom, of stationary and folding mattresses, said stationary mattress being supported by said stationary frame, and said folding mattress being adapted to be supported by said extension frame and to be turned over upon said stationary mattress, a lengthwise curved bar 31 at the end of the stationary mattress, and a lengthwise curved bar 33 at the end of the folding mattress, substantially as and for the purpose specified.

3. In a sofa-bed, the combination with a stationary frame, and a sliding extension frame movable therein, of a stationary mattress supported by the stationary frame, a folding mattress adapted to fold upon the mattress on the stationary frame and to be unfolded and supported by the sliding extension frame, a lengthwise curved bar 31 connected with one end of the stationary mattress, and a lengthwise curved bar 33 connected with the end of the folding mattress and pivoted to one end of the curved bar of the stationary mattress, substantially as described.

JAMES H. PHILLIPS,
FRANK C. FELDMAN.

In presence of—
LOUIS BOETTIGER,
H. MINZINGER.