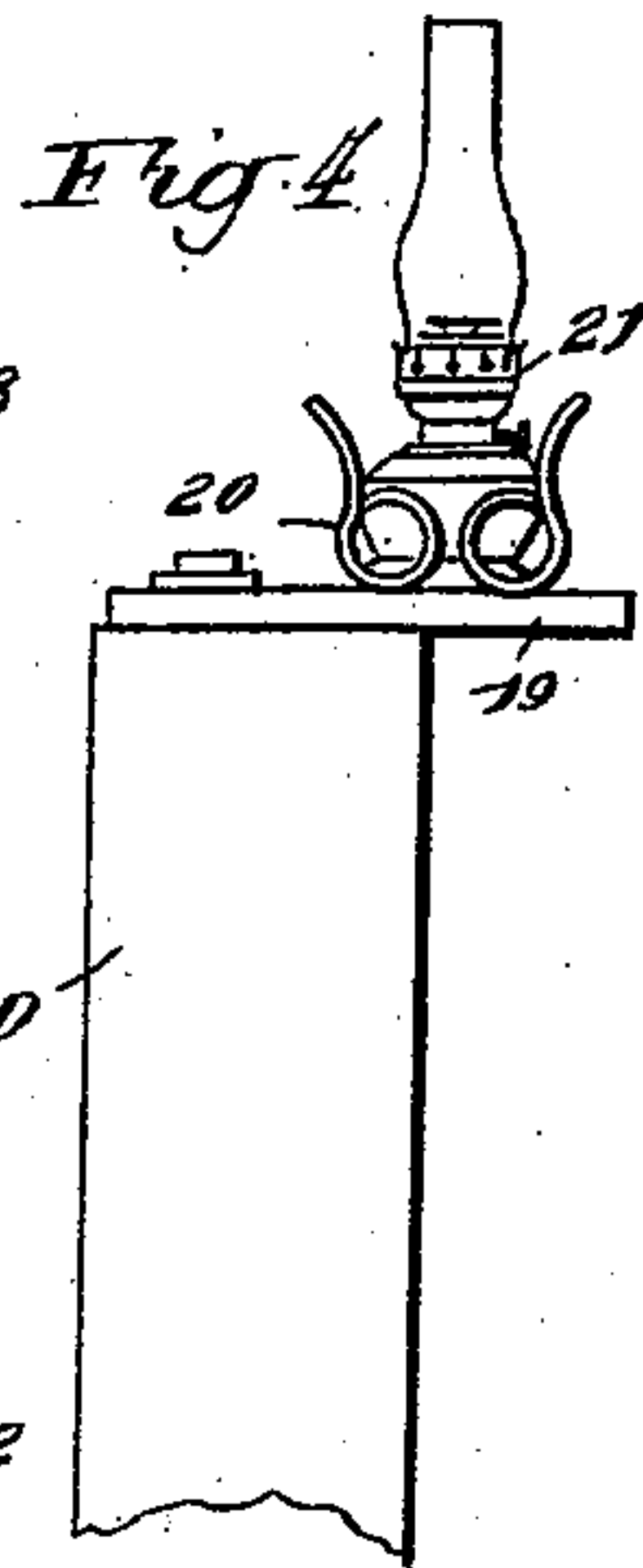
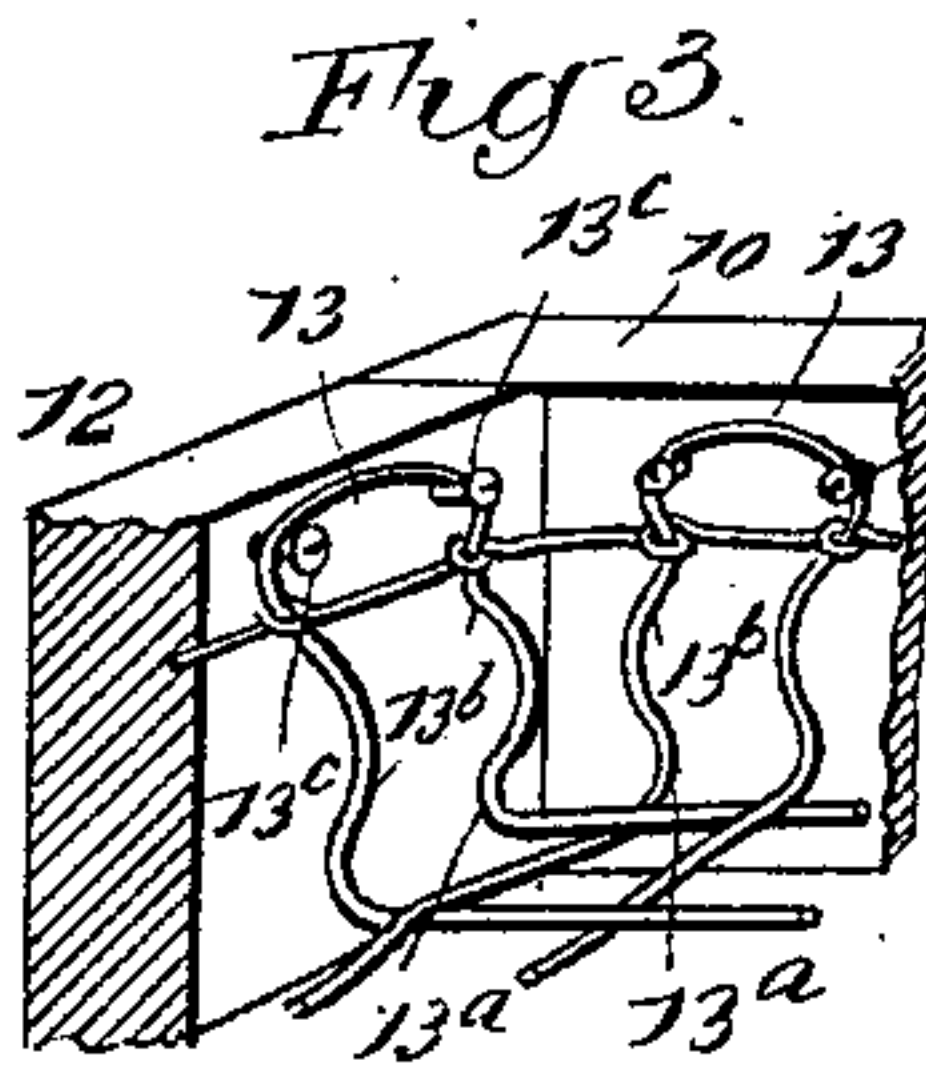
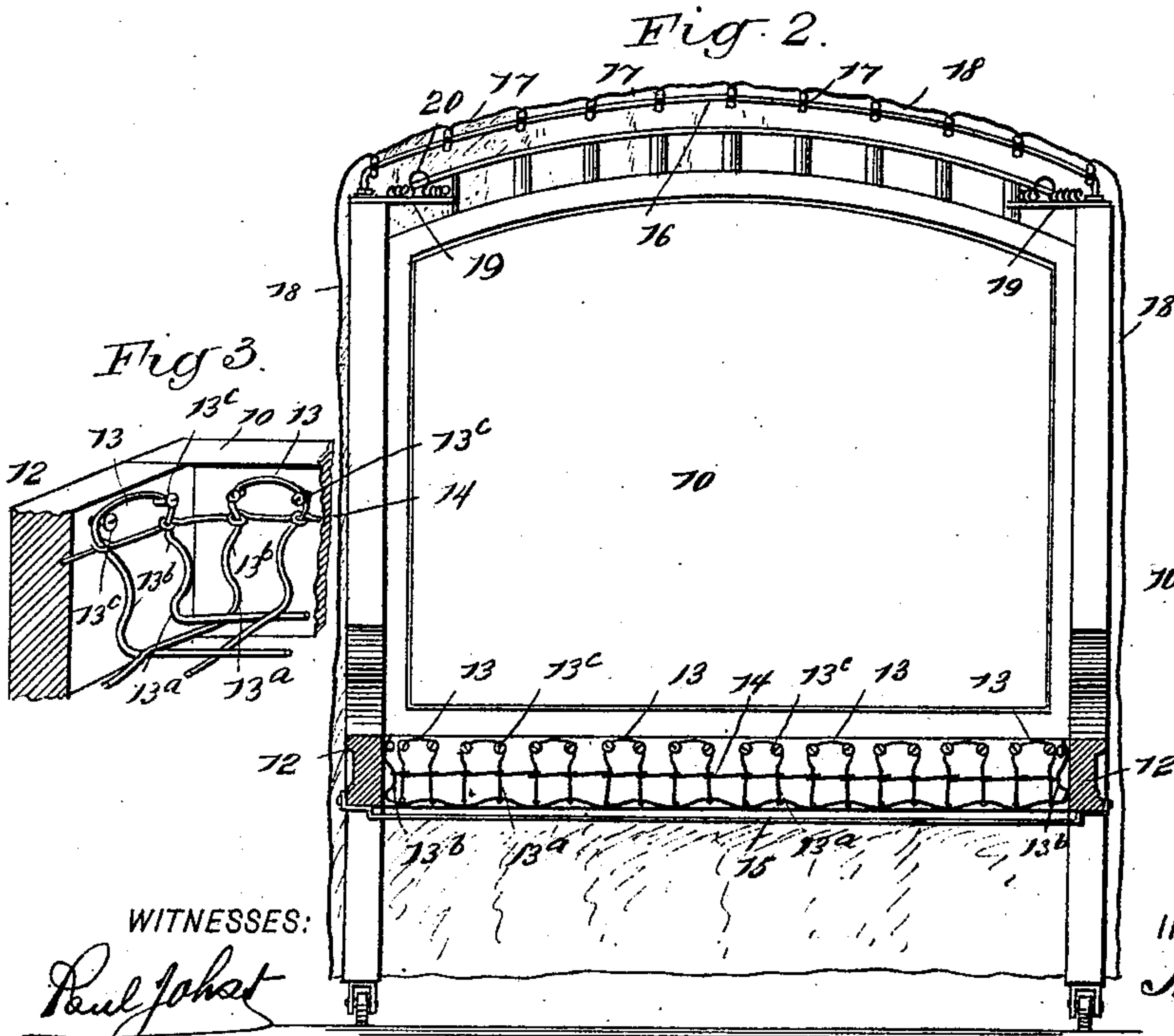
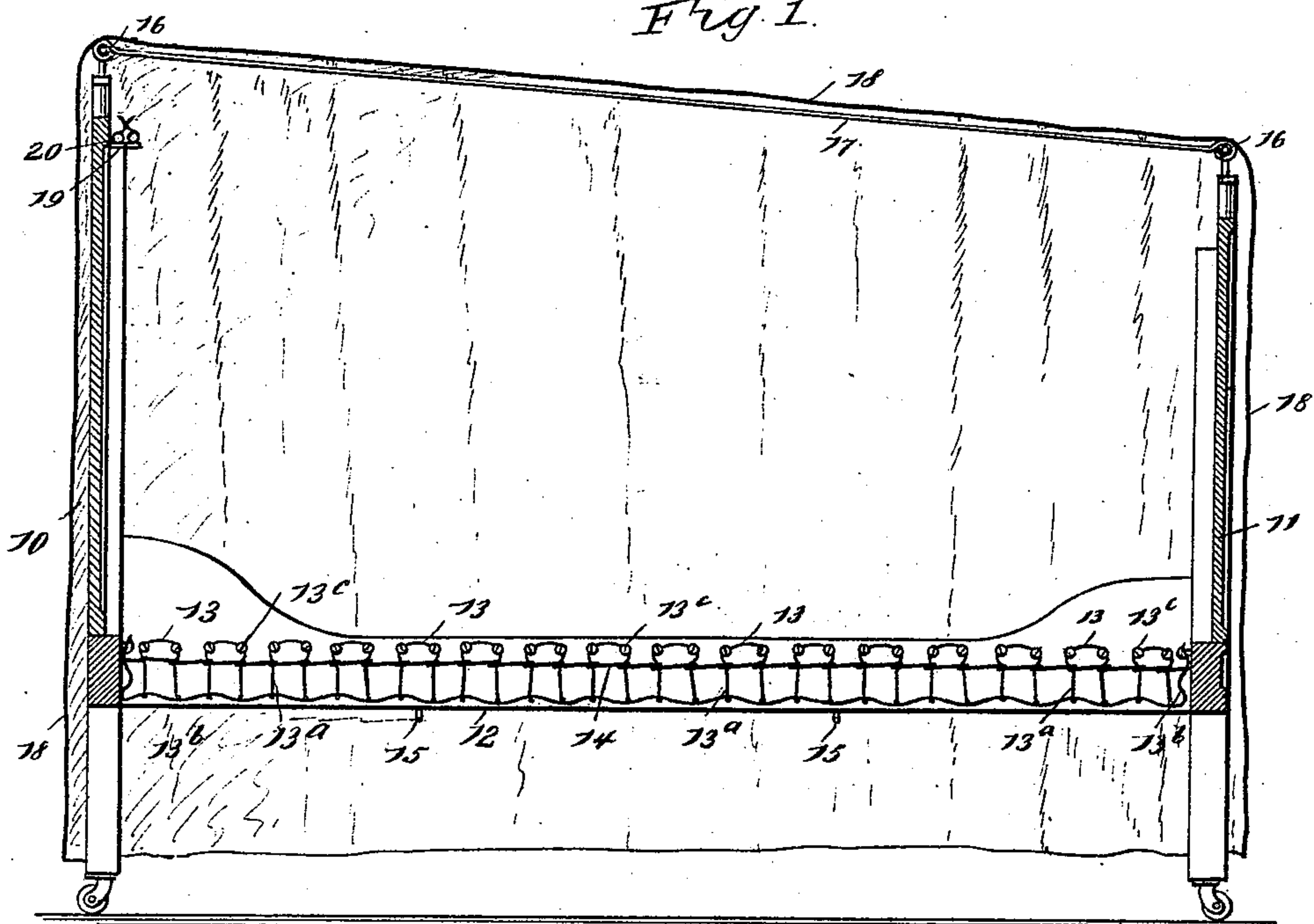


(No Model.)

A. R. TURNER.
BED.

No. 538,560.

Patented Apr. 30, 1895.



WITNESSES:

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BED.

SPECIFICATION forming part of Letters Patent No. 538,560, dated April 30, 1895.

Application filed September 5, 1894. Serial No. 522,187. (No model.)

To all whom it may concern:

Be it known that I, ALONZO R. TURNER, of Spragueville, in the county of St. Lawrence and State of New York, have invented a new and Improved Bed, of which the following is a full, clear, and exact description.

My invention relates to improvements in beds of a class having a non-foldable frame, and has for its object to provide a bed of the class mentioned with a novel and superior spring bottom, that is connectable to the bed frame after the latter is erected.

To these ends my invention consists in the construction and combination of parts, as is hereinafter described and indicated in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views shown.

Figure 1 is a sectional side view of a bed having the improvements, the mattress and bed-clothing being removed. Fig. 2 is a transverse sectional view in the direction of the head of the bed. Fig. 3 is an enlarged perspective view of a corner of the bedstead-frame, showing the novel construction of the spring bed-bottom; and Fig. 4 represents an upper portion of the head-board of the bedstead, a bracket-shelf thereon, and a lamp-holder of novel construction mounted on the bracket-plate.

The bedstead may be of any preferred design for a bed of the non-folding type, having a head board 10, a foot board 11 and side rails 12, detachably connected by suitable means to the head board and foot board so as to provide a substantial rectangular structure of proper dimensions for its use.

The improved bed bottom, which is part of the invention, comprises a novel construction and arrangement of wire springs, which are separately formed and so assembled that they co-act to produce an elastic bottom for supporting the mattress and bed clothing, and also provide a shallow receptacle for the mattress to retain it in place and afford spring support thereto at its edge, which will render the bed bottom resilient throughout its area, and adapt it to elastically support an occu-

pant equally as well at the edges of the bed as at other points on the same.

The bed bottom comprises two series of substantially similar spring sections, that are respectively extended and secured longitudinally and transversely on the frame of the bedstead. Each spring section 13 of the series that extends longitudinally and laterally on the bed frame, consists of an elastic wire strand of proper gage and length, which is folded at two points so as to return-bend it and dispose the bent parts that are connected at their ends, in a plane parallel with the other straight part of the wire strand, thereby producing an elongated endless wire link or bed bottom section. A sufficient length is provided for each section 13, to allow the end portions of the same to be equally bent in the same direction and substantially at right angles to the intervening straight portion, affording similar upright parts 13^a of a correct length for effective service as springs, which are produced on these parts by inwardly curve bending the members of the portions 13^a to produce elastic bows 13^b on them, as is clearly shown in Fig. 3. The spring sections of each series are evenly spaced apart, those in the transverse series crossing the longitudinal sections at a right angle and are therewith interwoven as is indicated, producing a coarse meshed fabric or bed bottom.

The dimensions of the bed bottom are proportioned so that the upright portion at each side and end will loosely fit within the bed frame, and these vertical portions are secured to the inner surface of the bedstead by screws 13^c that are arranged to engage with the flattened looped upper ends of the spring sections 13, as shown.

It will be seen that when the novel bed bottom is hung on the bedstead as stated, it will afford a spring support for a mattress, which will have resilience along the edges of the bed bottom, due to the peculiar formation of the bows 13^b on the upright parts of the spring sections 13, and as represented the latter are preferably retained in spaced condition by the brace wire 14, which is attached to the upright strands of said sections by wrapping it around said strands, the brace wire being

made to extend around and connect all the upright members of the bed bottom, as is indicated in the drawings.

Preferably two transverse truss wires 15 are employed to reinforce the bed bottom and prevent it from yielding too far under an extra heavy weight, said truss wires being properly separated and arranged parallel with each other and also with the head and foot boards of the bedstead from which they are suitably spaced, and have a secured connection at their ends with the side rails of the bedstead as shown in Fig. 2.

On the top rails of the head board 10 and foot board 11, a preferably arched carrier bar 16, is secured by its ends, the bars being attached to the stiles of the head and foot boards, and spaced from the intermediate top edge portions of the same to permit the free sliding movement thereon of the series of longitudinal stretcher rods 17, the latter having ring eyes formed on their ends which loosely encircle the carrier rods.

A canopy 18, made of gauze netting or any other suitable flexible fabric is provided, this being shaped to adapt it to completely envelop the upper portion of the bedstead, whereon it is placed by securing it on the stretcher rods 17, the latter being spaced apart to adapt them for the proper support of the canopy over the bed below it. A sufficient length is afforded the pendent portions of the canopy, to permit it to hang near the floor when arranged to serve as a tent-like screen for the bed, and prevent the entrance of mosquitoes, gnats or flies while the bed is occupied. If desired thicker material may be substituted for gauze netting, which will darken the inclosed space and cut off air drafts from the same, protecting the sleeper and excluding light that disturbs nervous persons when resting or sleeping.

The particular construction of the supports for the canopy 18, permits the fabric to be readily moved from one side toward the other, folding the stretcher rods together and affording an opening at the top and one side of the bed, for convenience in entering and for another purpose that will be presently explained.

Many persons induce sleep by reading after going to bed, using a lamp or other source of artificial light. To facilitate such a purpose a novel lamp holder is furnished as an additional feature of improvement for the bed that has been described, said holder consisting of the bracket shelves 19, that are secured so as to project forwardly from the side uprights of the head board 10, and also toward each other, as shown in Figs. 1 and 2. On each of the shelves 19, a spring clasp 20 is attached, which is composed of two pairs of spring coils that are arranged to receive the body of a hand lamp such as 21, between the same, and by the force of the springs retain the latter securely gripped in a vertical position.

As the height of the lamp when in position as explained at either side of the bed, permits it to be reached by the occupant, it will be evident that if the canopy is slid away from the lamp holder at one side of the bed, and a lighted lamp is placed in the holder, a person may recline at ease in the bed and read; extinguishing the light and inclosing the bed with the canopy when this is desired, without leaving the bed.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. In a bed, the combination with a frame, of a bed bottom, comprising two series of endless link-sections, each section having two upturned integral undulating bow springs at each end, substantially as described.

2. In a bed, the combination with a frame, of a bed bottom comprising two series of spring sections that cross each other at right angles, each section consisting of an elongated endless wire link having parallel side members, and end portions upturned at right angles thereto, and bent in undulations that form upright bow springs, substantially as described.

3. In a bed, the combination with a bedstead frame, of a bed bottom comprising two similar series of spring wire sections that cross at right angles, each section having parallel side members and two upright undulating bow springs formed on each end, and supports for each spring section projecting inwardly from the side rails of the bedstead frame, and engaging the upper ends of the bow springs for the support of the spring bed bottom, substantially as described.

4. In a bed, the combination with a bedstead frame, of a bed bottom comprising two series of similar spring sections, each section having two spaced undulating bow springs on its upturned ends, a spacing wire interlocked with all the upright spring ends that holds said bow springs spaced apart, and inward projections on the bedstead frame engaging loops at the tops of the bow springs of each section, holding the bed bottom pendent at its edges within the frame, substantially as described.

5. In a bed, the combination with a bedstead frame, of a bed bottom comprising two series of similar crossed and interwoven spring sections, each section being composed of an elongated endless wire link the side members of which are parallel, and upturned at each end, two integral undulating bow springs being formed on each upright end portion of a spring section, substantially as described.

6. A bed bottom comprising a series of wire strands arranged in pairs and the wires of each pair having their ends connected to form loops, said loops being bent upwardly at an angle and adapted to engage projections on a bed-frame, substantially as set forth.

7. A bed bottom comprising parallel wire strands arranged in series at angles to one another, the ends of adjacent wires in each series being connected to form loops which project beyond the edges of the bed bottom and are bent upwardly, substantially as set forth.
8. A bed bottom comprising a series of parallel strands of wire arranged in pairs, the ends of each pair being connected together by a spring loop adapted to form an elastic connection between the bed bottom and the bed frame, substantially as set forth.

ALONZO R. TURNER.

Witnesses:

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H. S. ARTHUR.