

No. 775,876.

PATENTED NOV. 22, 1904.

R. J. WAGNER.

COUCH BED.

APPLICATION FILED JAN. 15, 1904.

NO MODEL.

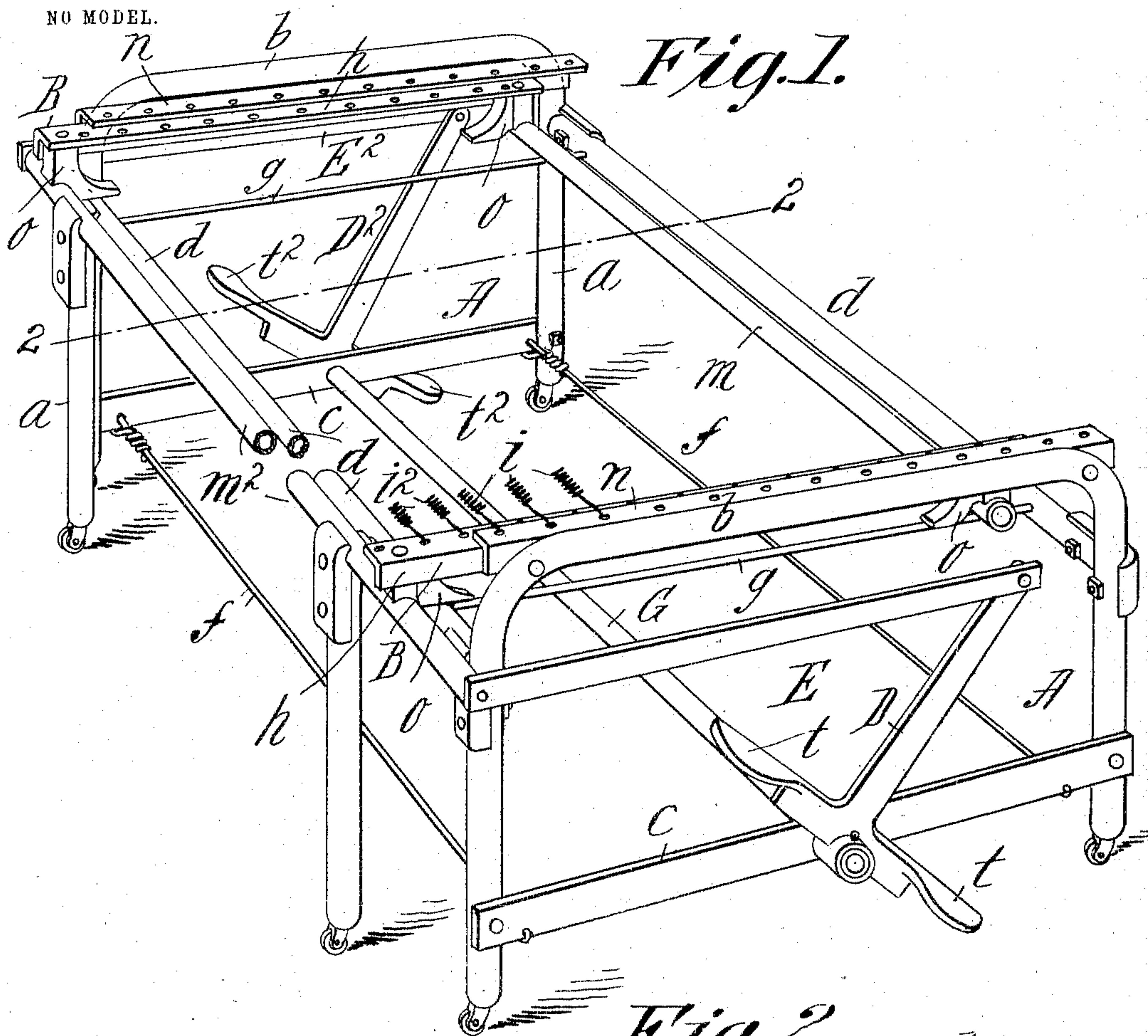
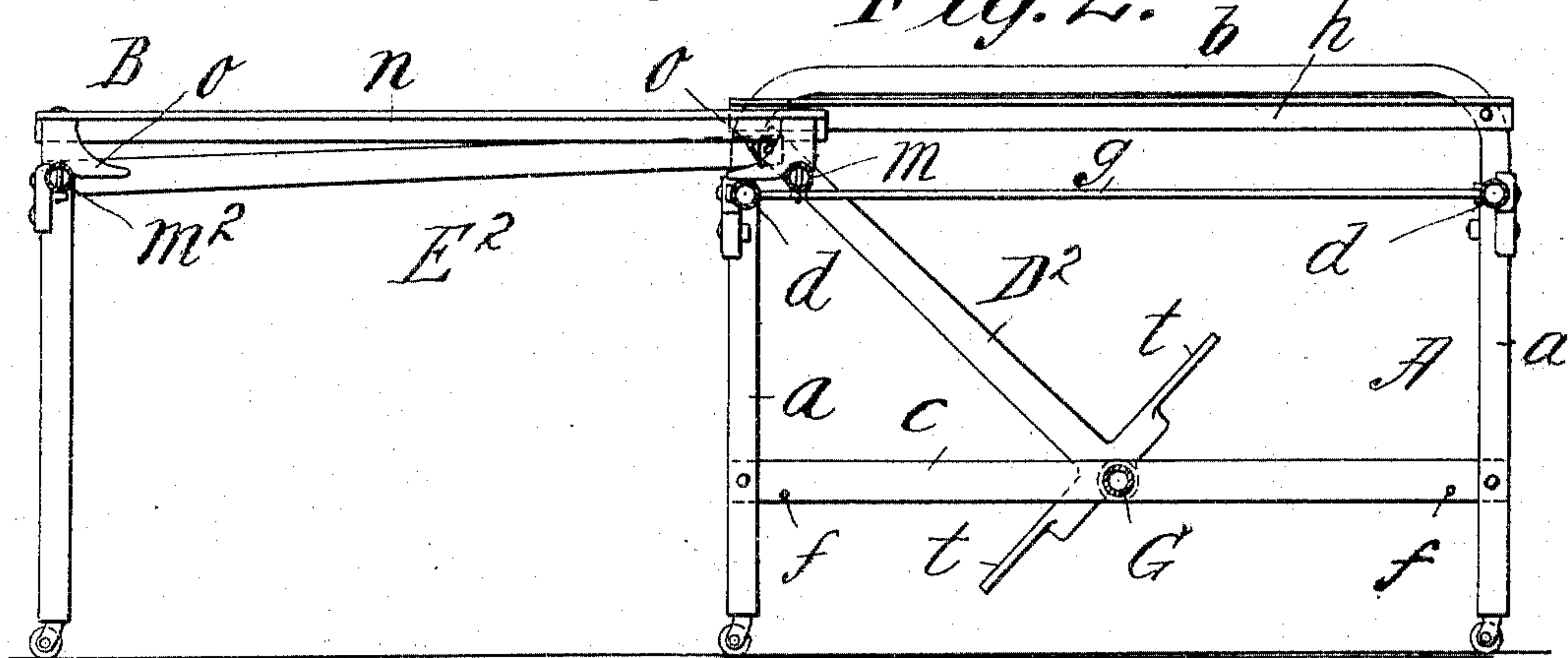


Fig. 2.



Witnesses:
J. R. Garfield
A. V. Leahy.

Inventor,
Richard J. Wagner,
by W. J. Bellone
Attorney.

UNITED STATES PATENT OFFICE.

RICHARD J. WAGNER, OF HOLYOKE, MASSACHUSETTS, ASSIGNOR TO
THE WAGNER SPRING BED MANUFACTURING COMPANY, OF HOL-
YOKE, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

COUCH-BED.

SPECIFICATION forming part of Letters Patent No. 775,876, dated November 22, 1904.

Application filed January 15, 1904. Serial No. 189,118. (No model.)

To all whom it may concern:

Be it known that I, RICHARD J. WAGNER, a citizen of the United States of America, and a resident of Holyoke, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Couch-Beds, of which the following is a full, clear, and exact description.

This invention relates to improvements in couch-beds of the type comprising a main and secondary bed-frame section, the latter being distensible relatively to the main section.

The invention particularly pertains to improvements in the means for extending and withdrawing the secondary-bed-frame section and to the means for guiding one frame in its movements relatively to the other and for holding the sections in either of their positions with rigidity in relation to each other.

The most prominent feature of the invention is comprised in the combination, with the main section and the secondary section, transversely movable relatively thereto, of a lever mounted for a swinging movement and having a link connection with the secondary section.

The invention furthermore and otherwise consists in combinations and arrangements of parts, all substantially as hereinafter described and claimed.

The improvements are illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the improved couch-bed-supporting structure or frame. Fig. 2 is a cross-section as taken on the line 2 2, Fig. 1.

Similar characters of reference indicate corresponding parts in the different views.

A designates the main or primary frame, and B the secondary and laterally-distensible frame. The main frame A may be made in any suitable design having fitness to the purpose and, as shown, consists of the opposite end pairs of legs *a*, the upper and lower cross-bars *b* and *c*, the upper longitudinal rails or bars *d*, and the lower longitudinal tie-rods *f f*. The legs and upper cross-bars and the

longitudinal upper rails or bars *d* may be advantageously constituted by metallic tubing.

Near the ends of the frame A are horizontal transverse tie rods or bars *g g*, the ends of which are united to the upper longitudinal rails *d d*.

Near the upper portions of the frame ends of the main section A are horizontal transverse and rigidly-connected metallic angle-strips *n n*, having a line of perforations through which are engaged the ends of spiral springs *i i*, which make the mattress-supporting portion of the structure which is comprised in the main frame, although, of course, woven fabric or other common kind of mattress-bottom may be incorporated in the structure.

The secondary frame B comprises parallel longitudinal bars or rails *m m*, shown as tubular, arranged parallel with, a little higher than, and of slightly less length than the longitudinal rails *d d* of the main frame, and the ends of these rails (one of which when the bed is closed has a position in parallelism and proximity to the right-hand main-frame rail *d* and inside thereof, while the other has a position in parallelism and proximity to the left-hand main-frame rail and outside thereof) are united by the transverse metallic angular bars *h h* through the medium of angular blocks or shoes *o o*, which serve as tie-pieces and hold the angular transverse horizontal bars *h h* suitably elevated and so that the horizontal leaf or flange of each of these angular bars *h* is overlapped by the corresponding leaf of the proximate angular bars *n n* of the main frame, and the vertical leaves or flanges of the two sets of bars are in facewise contact or proximity, so that the outer ones serve as guards or guides in a measure for the inner ones.

The lower portions of the angular shoes *o o* are horizontally and inwardly extended, and their bottom surfaces are in a common plane coincident with the top surface of both of the main-frame longitudinal bars *d d*.

The tie-rods *g g* of the main frame have

their upper surfaces next under and serve as supports and guides for the under surface of the inner longitudinal secondary-frame bar *m*.

D represents a lever which at its lower 5 portion is mounted for a rocking movement at a lower part of one end portion of the main-frame section, and to the upper end of this lever a link-bar E is pivotally connected, the same being pivotally connected to the sec- 10 ondary-frame section at the corresponding end thereof and at the portion thereof which adjoins its outer side.

As a means for operating the rocking lever it has at its lower portion integral or rigid 15 treadle or leather extensions *t t*.

As a matter of approved design and advantageous provision the secondary-frame-actuating means is represented in duplication, the second rocking lever *D*² at the opposite end 20 from the one, *D*, being mounted on a common rock-shaft *G*, which is supported by and journaled through the lower cross-bars *c c* of the main frame, the connection by means of the link *E*² with the opposite end of the secondary 25 frame being made the same as represented at the near end in the illustration Fig. 1, and the duplicated lever *D*² likewise has the treadle-lever extensions, so that the bed may be distended or contracted by foot or manual 30 force applied at either end of the bed.

It is hardly necessary to set forth that the end angle-bars *h h* sustain spiral-spring or other species of mattress-supporting structure, as partially represented in Fig. 1, and 35 in the same manner as provided in respect of the main-frame members, and the slight difference in the heights of the mattress-supporting equipments *i*² and *i* is unappreciable in the full-sized structure.

40 The functions of the angular shoes *o o* may be perceived in comparing Fig. 2 with Fig. 1. In Fig. 1 the outer side pair of shoes are seen in supporting and stiffening engagements upon the top of the left-hand or outer main-frame longitudinal upper side rail, while in 45 Fig. 2 the inner side pair of such shoes are seen in supporting and stiffening engagements upon the top of the same side rail of the main frame, so that whether the bed is open or

closed one or the other of the side pairs of the 50 shoes will have an engagement, as stated, for the manifest beneficial effect, and obviously the outer pair of the shoes might be omitted and with far less detrimental results than if the inner pair were dispensed with. 55

The shoes in addition to acting as supporting or reinforcing means may serve, by frictional binding or engagement on the left-hand main-frame longitudinal bar *D*, as a retainer to prevent the secondary frame from being 60 accidentally-displaced from either its fully-distended or its fully-contracted position.

Various changes and modifications may be made in the positions and arrangements of the parts without departing from the real inven- 65 tion here exemplified.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a distensible couch-bed, the combina- 70 tion of main and secondary frame sections arranged and relatively movable as described, a lever fulcrumed at its lower end on the main frame to swing in a vertical plane, said lever being provided at its base portion with treadle 75 members extending in opposite directions from both sides of said lever, and means to connect the lever to the secondary frame.

2. In a distensible couch-bed, in combination, the main and secondary frames movable 80 as described, the latter having inner and outer pairs of angular shoes arranged to alternately engage the outer longitudinal member of the main frame in the distension and contraction relatively of the frames. 85

3. In a distensible couch-bed, in combination, the main and secondary frame movable as described, the inner frame member of the latter carrying shoes adapted to engage the outer 90 member of the main frame when the secondary frame is distended, to support said secondary frame.

Signed by me at Springfield, Massachusetts, in presence of two subscribing witnesses.

RICHARD J. WAGNER.

Witnesses:

WM. S. BELLOWS,

A. V. LEAHY.