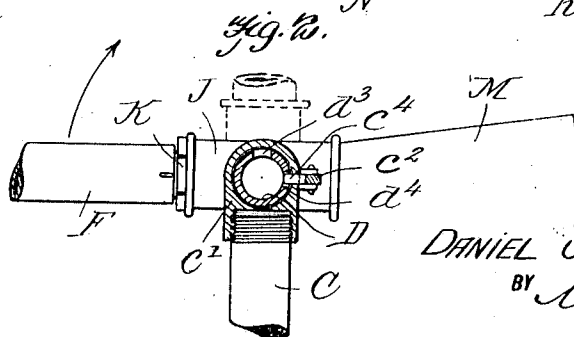
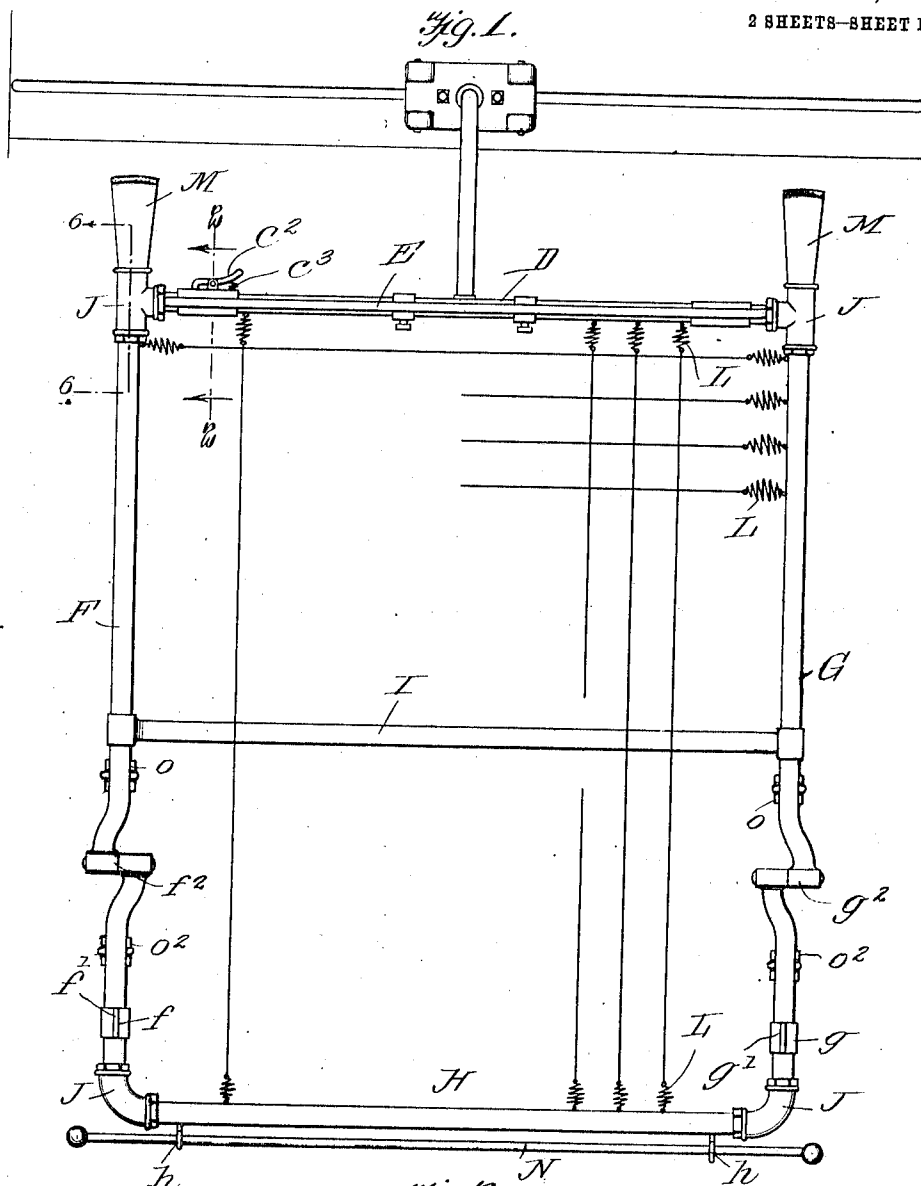


D. J. SPIRES.
FOLDING AND REVERSIBLE BED.
APPLICATION FILED SEPT. 16, 1912.

1,054,467.

Patented Feb. 25, 1913.

2 SHEETS—SHEET 1.



WITNESSES
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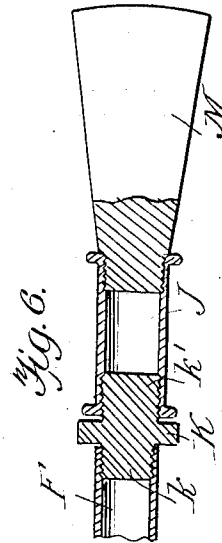
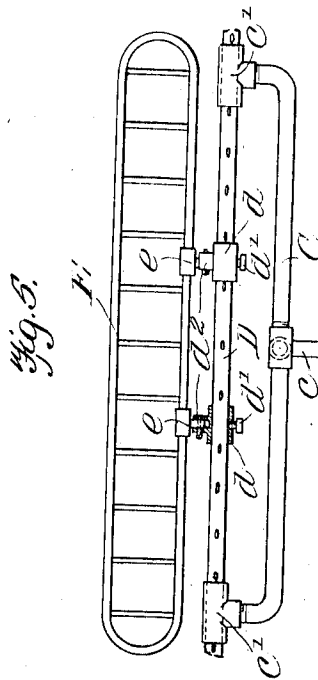
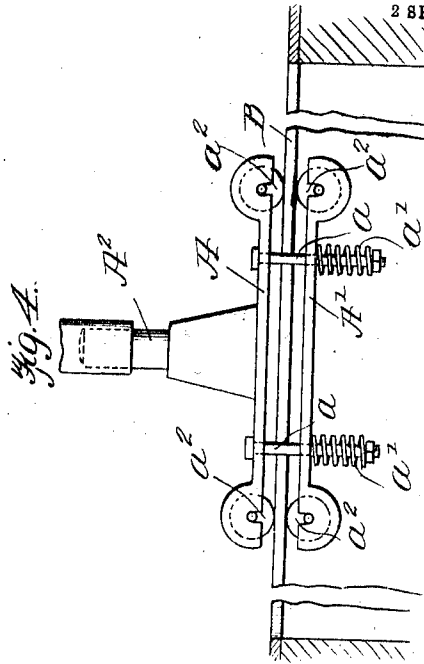
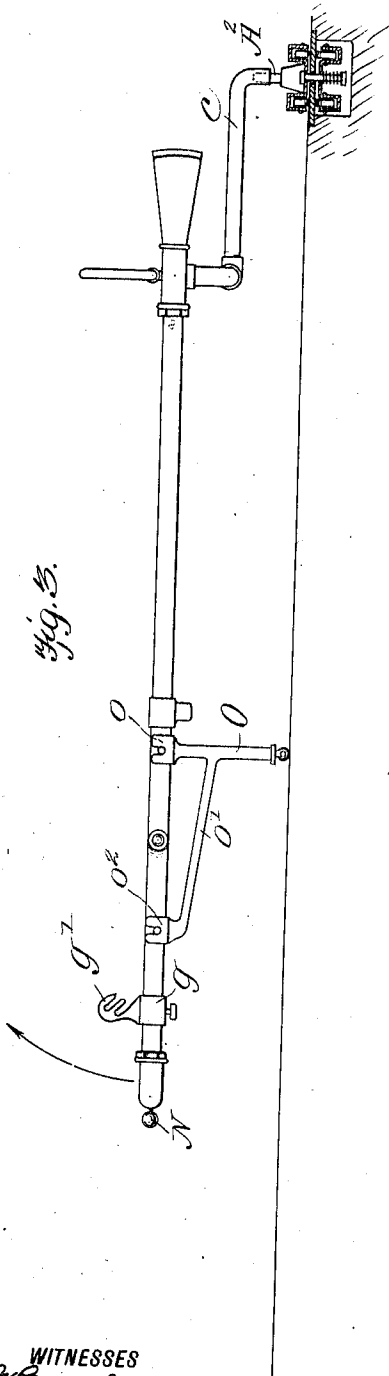
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2 SHEETS-SHEET 2.



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UNITED STATES PATENT OFFICE.

DANIEL J. SPIRES, OF TUCSON, ARIZONA.

FOLDING AND REVERSIBLE BED.

1,054,467.

Specification of Letters Patent.

Patented Feb. 25, 1913.

Application filed September 16, 1912. Serial No. 720,567.

To all whom it may concern:

Be it known that I, DANIEL J. SPIRES, a citizen of the United States, and a resident of Tucson, in the county of Pima and State of Arizona, have invented a new and Improved Folding and Reversible Bed, of which the following is a specification.

My invention relates generally to beds, my object being to provide a folding and reversible bed frame which is particularly adapted to be permanently mounted between two rooms, for instance, an inside sleeping room and an outside sleeping room, in such manner that it may be readily and quickly folded to assume an operative position within either room, and also movable to an upright or folded position within either room in which it may be in use.

With the foregoing in mind, my invention resides in the details of construction, arrangement and operation to be hereinafter described with respect to the accompanying drawing, forming a part of the specification, and in which,

Figure 1 is a plan view of my improvements; Fig. 2 is a detail-sectional view taken substantially on the line 2—2 of Fig. 1, and on an enlarged scale; Fig. 3 is a side elevation of the parts shown in Fig. 1, and partly in section; Fig. 4 is a sectional detail view illustrating the movable carriage support; Fig. 5 is a detail elevation illustrating the head frame and its connection with the bed frame; and Fig. 6 is a detail section, on an enlarged scale, taken substantially on the line 6—6 of Fig. 1.

In accordance with my invention, as illustrated, the support at the head-end of the bed frame is in the form of a carriage consisting of superposed plates A and A' which are disposed respectively above and below a slotted supporting plate B which is adapted to be arranged to extend longitudinally between a door frame or other open space connecting two rooms, for instance, an inside sleeping room and an outside sleeping room or porch. The plates A and A' are connected by central bolts a extending loosely therethrough and through the slot in the supporting plate B, these bolts carrying tension springs a' operating to press the plates A and A' toward one another. The plates A and A' also support side rollers a² which bear against the supporting plate B upon opposite sides of its slot, and thus permit the carriage as a whole to move freely over

the supporting plate and guided in such movement by the cooperating bolts a and the slot of the plate B. The carriage, as just described, further consists of a post A² extending centrally and vertically from the upper plate A and designed to receive the lower tubular end of the central arm c of a U-shaped member C, the upper ends of which, as clearly indicated in Fig. 5, are provided with bearings c' through which the head bar D of the bed frame is journaled, and is readily turnable. As also indicated clearly in Fig. 5, the head bar D is provided between the bearing c' with a pair of collars d arranged to be adjustably secured thereon by set-screws d', and provided with tubular extensions d² in which studs e of a head rest or frame E may be removably secured. The bed frame consists also of side bars F and G and a foot bar H, the side bars of which are connected by an intermediate transverse support I. The adjacent ends of the frame bars D, F, G and H, which bars are tubular, are connected by couplings J, which are also tubular and otherwise of suitable form, the connections between the said couplings and the said frame bars being in the form of adjusting nuts K which, as particularly indicated in Fig. 6, are provided with opposite extending portions k and k' provided with right and left-hand threads and engageable within the similarly threaded ends of the several bars and several couplings, whereby the frame bars may be adjusted with respect to one another for the purpose of regulating the tension of the bed springs L. The couplings J connecting the ends of the head bar D and the respective bars F and G are also provided with extending portions in which are secured, and from which project, counter-balancing weights M, these weights projecting from, and in line with, the side bars F and G, and serving to assist in maintaining the bed frame in its vertical or folded position when in disuse. Adjacent their forward ends, the frame side bars F and G are provided with collars f and g arranged to be adjustably secured thereto by set-screws and having upstanding lugs f' and g' provided with inclined slots for the reception of a rod N which is disposed in connection therewith for the purpose of pressing downwardly upon, and holding the bedding, adjacent the foot of the bed when the bed is moved to its upright or folded position, as before de-

scribed. Normally, when the bed is in use, the rod N is supported in hooks *h* secured to, and extending horizontally and forwardly from, the foot bar H.

- 5 The before-described movement of the bed frame to a vertical or folded position is made possible by the journals *c'* of the head bar D, and in order to effectively maintain the bed frame in both its horizontal and
10 vertical positions, I provide the said head bar with a pair of openings *d³* and *d⁴* located in one of the said journals *c'*, as clearly indicated in Fig. 2. I also provide said journal *c'* with a pivoted latch member *c²*
15 controlled by a spring *c³* having its nose *c⁴* extending inwardly through an opening in the said bearing and into one of the said bar openings *d³*, *d⁴* dependent upon the position of the bed frame. Thus with the frame extending in its horizontal operative position, the latch member *c²* engages the bar opening *d⁴*, while when the frame is moved to the upright position, as partly indicated in dotted lines in Fig. 2, the said latch member will
20 engage the bar opening *d³*, it being understood that the latch member is manually operated prior to every movement and serves to lock the bed frame in either of the positions stated.
- 30 If it is desired, the side bars F and G of the bed frame may each be in two parts, and the parts permanently connected by a knuckle joint, as indicated at *f²* and *g²* so that the parts may be folded upon one another when it is desired to raise the bed to a
35 vertical position preparatory to swinging the same from one room to another. The foot portion of the bed is normally supported in operative position by side legs O, having upper slotted yokes *o*, *o*, engageable with side trunnions projecting from the side bars F and G at one side of their knuckle joints *f²*, the said legs having angularly extending arms *o'* also provided at their upper angular ends with slotted yokes *o²* which are
40 likewise engageable with side trunnions projecting from the said side bars at the opposite sides of their said knuckle joints. Thus it will be noted that the bed frame may be
45 readily swung to a vertical position, as before described, and either retained in such

position when it is merely desired to fold the same out of the way, or it may be swung around on the carriage post A² and into the adjacent room upon the opposite side of the carriage and again lowered to a horizontal operative position when it is desired to remove the bed from one room to another. Furthermore, it may be swung on the journals *c'* beyond a vertical position and thus reversed with respect to the position shown in the drawings.

I claim:—

1. In a device of the character described, the combination of a frame, a laterally movable support at one end of the frame with which the latter has a movable connection whereby it may swing vertically and horizontally, and a reversible support for the other end of the frame.

2. The combination of a bed comprising a frame, a member with which one end of the frame has pivotal connection whereby the frame may be swung to a vertical position and reversed, and a movable support with which said member has a swiveled connection for the purpose described.

3. The combination of a bed comprising a frame, a U-shaped member having journals at its ends through which one end bar of the bed is disposed, said member being further provided with a central arm, and a movable carriage with which the said central arm has a swiveled connection.

4. The combination of a bed comprising a frame, a member in which one end of the frame is journaled, said member being provided with a dependent arm having a tubular lower end, and a movable carriage provided with an upstanding post upon which the said tubular lower end of the arm is movably engaged.

5. The combination of a bed comprising a frame, a support at one end of the bed in connection with which the said frame is mounted to swing horizontally and vertically, and detachable reversible supports for the opposite end of the bed.

DANIEL J. SPIRES.

Witnesses:

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GEORGE JONES.