

No. 667,916.

Patented Feb. 12, 1901.

E. R. LEIGHTON.

COUCH BED.

(Application filed May 31, 1900.)

(No Model.)

Fig. 1.

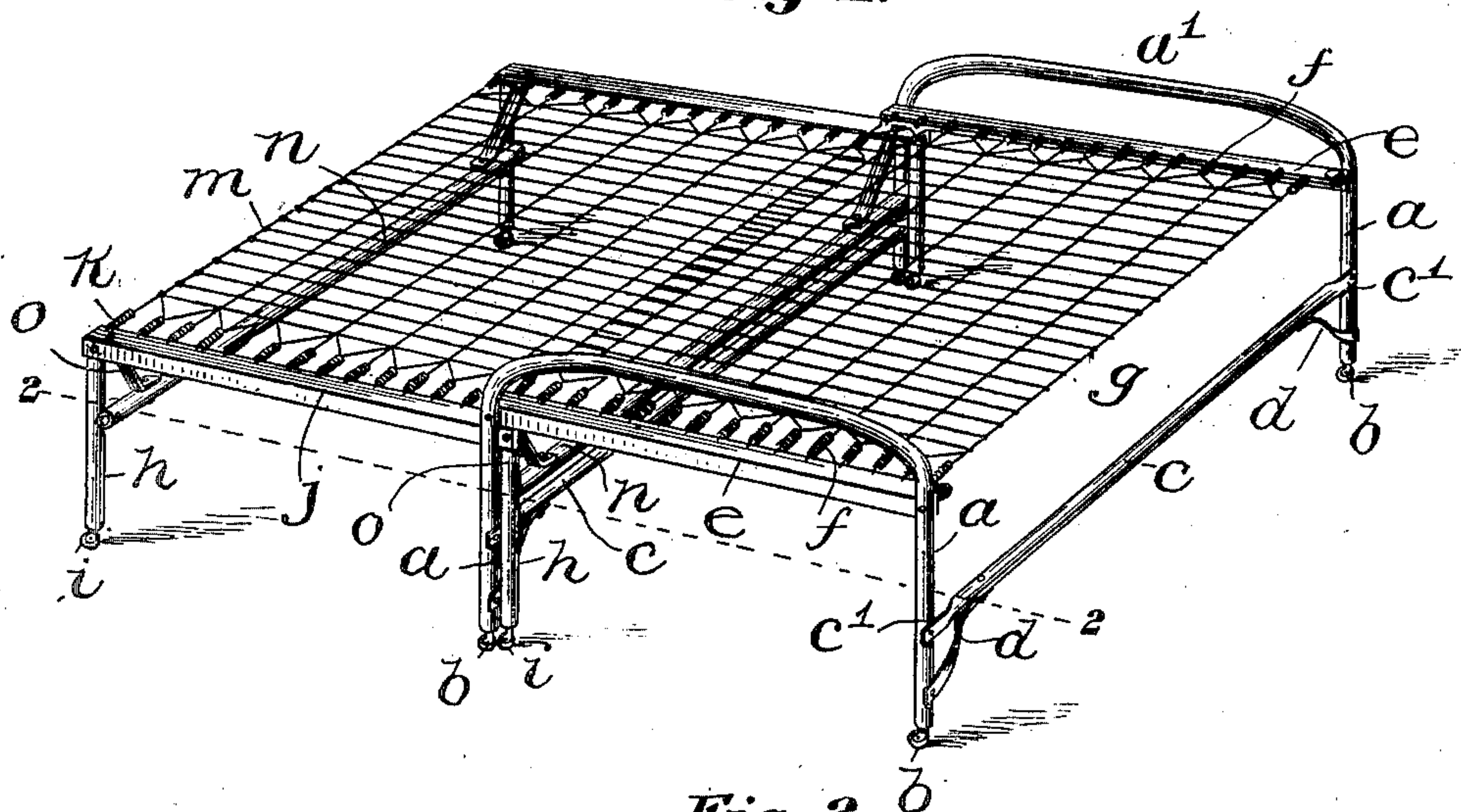


Fig. 2.

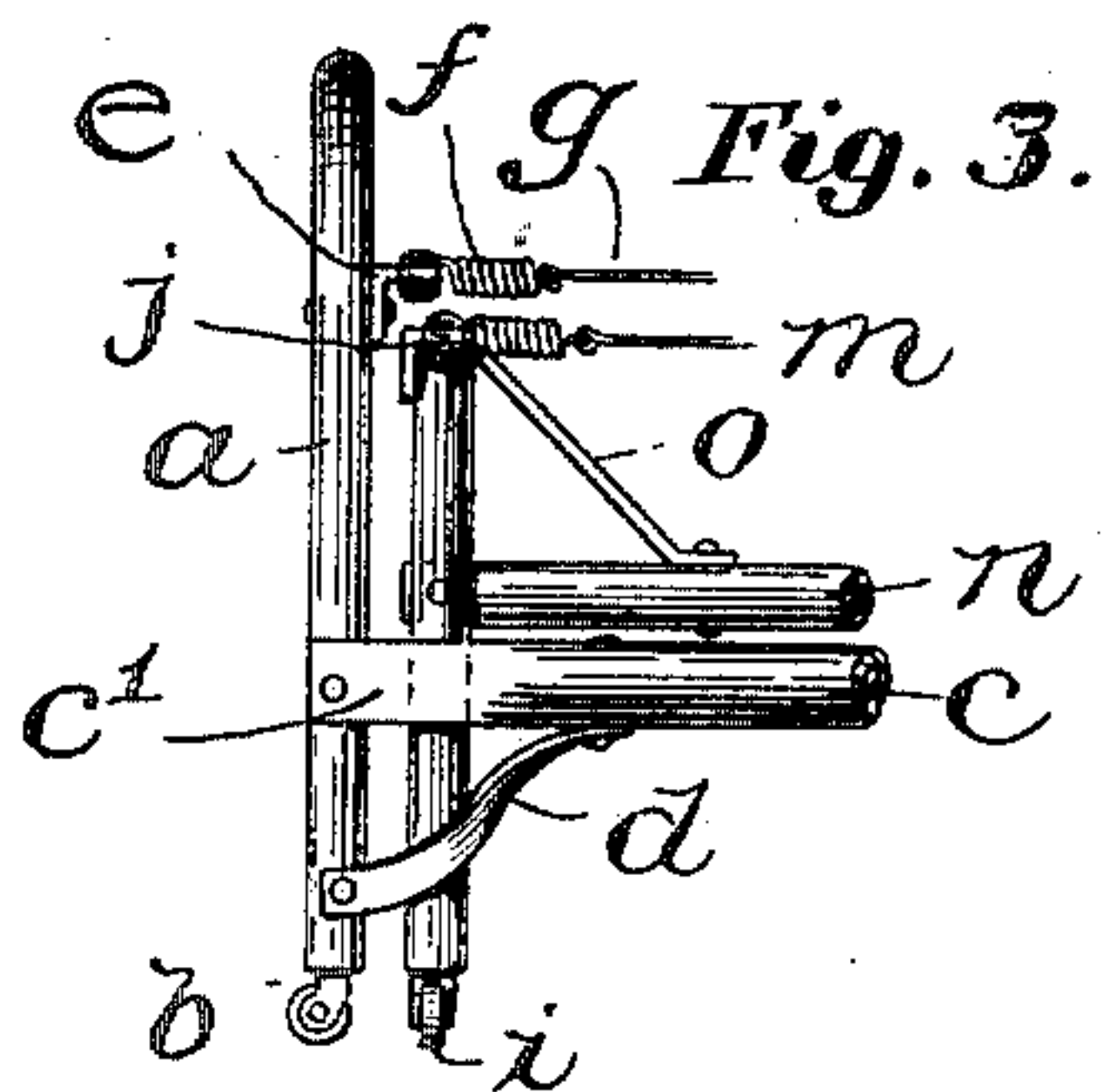
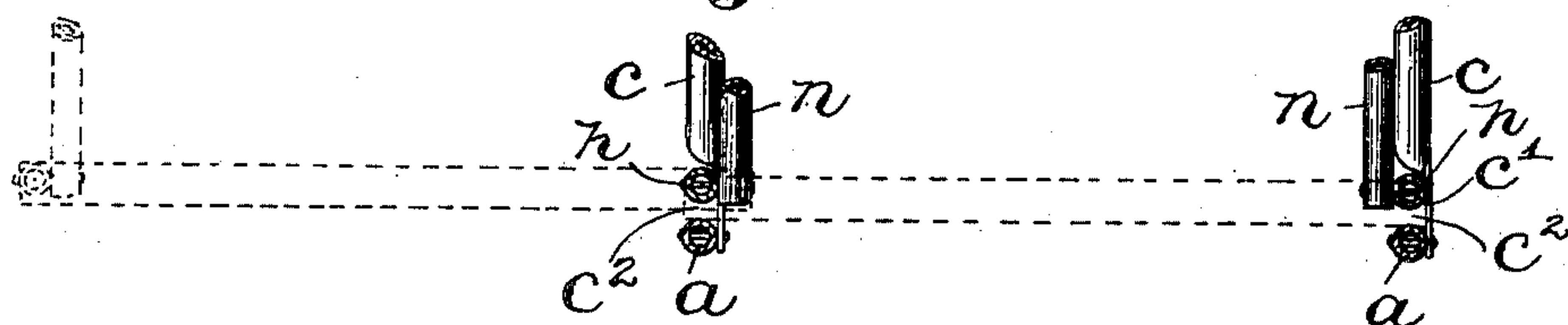


Fig. 5.

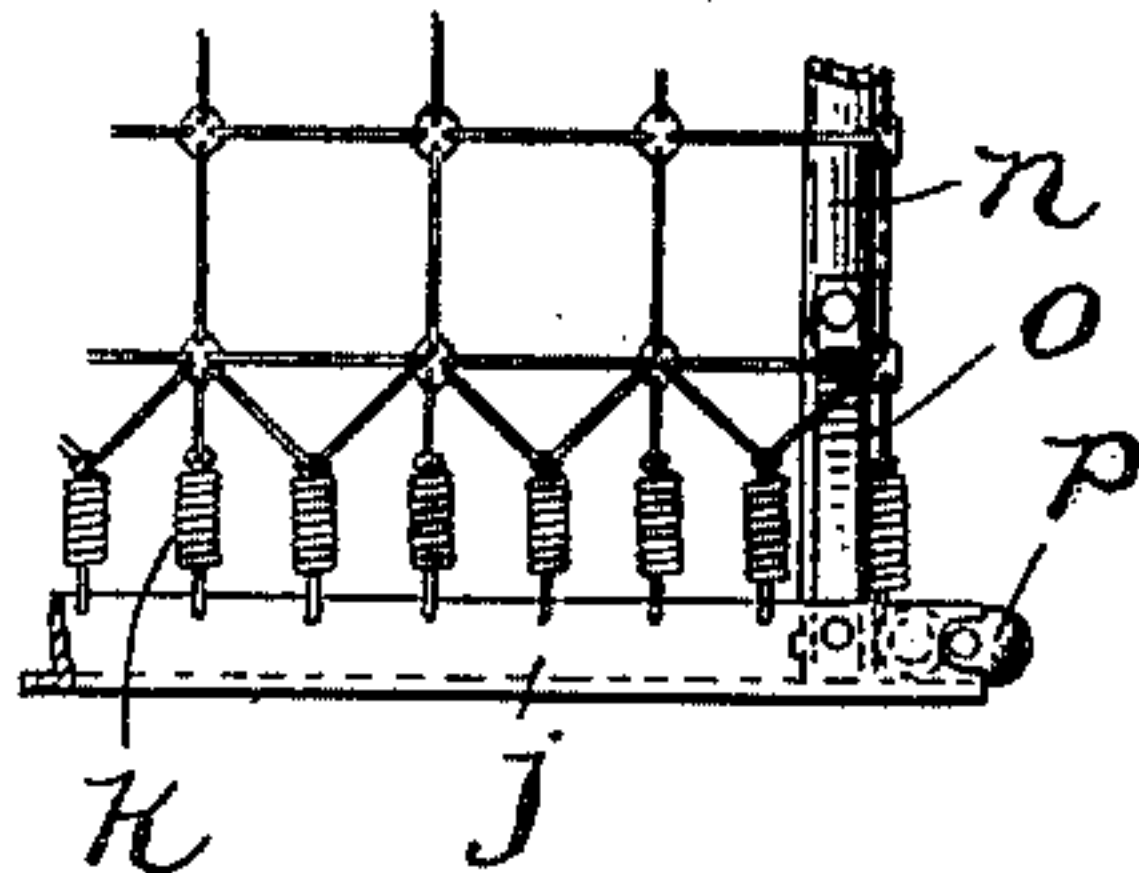
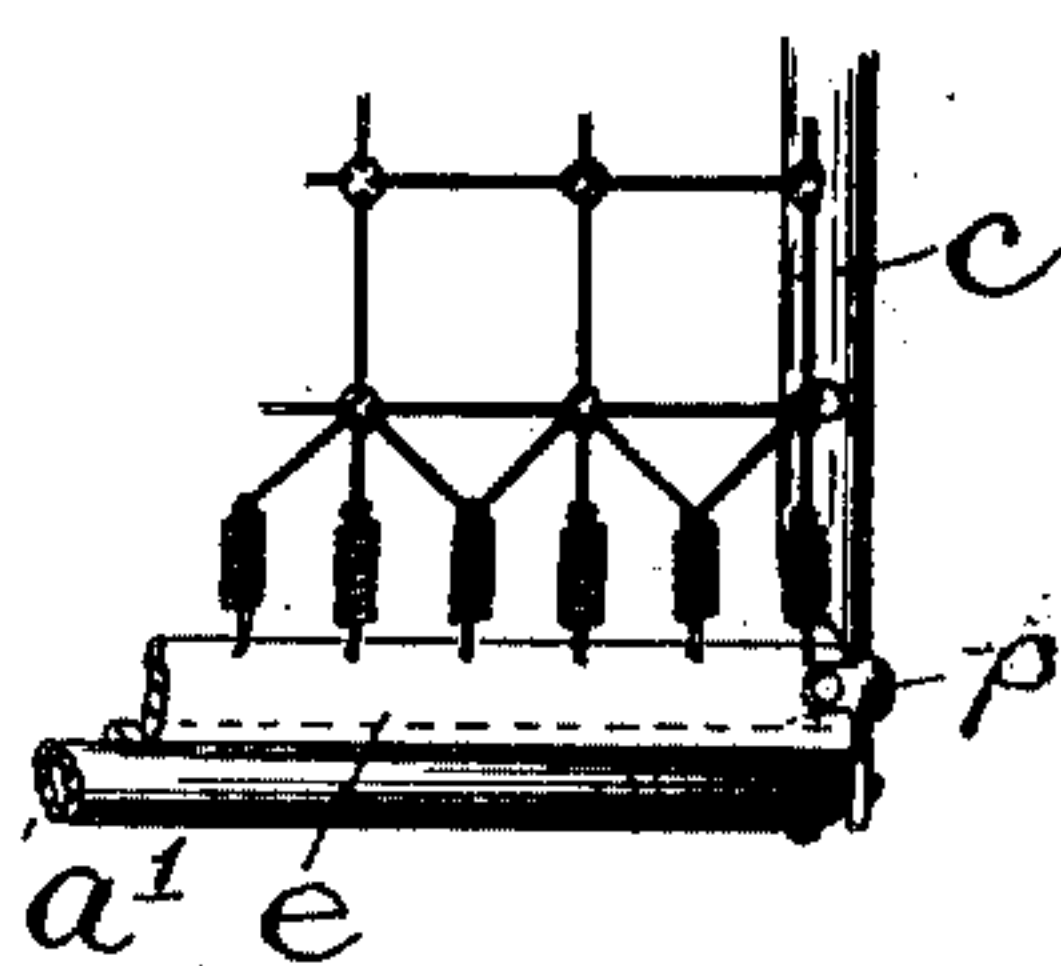


Fig. 4.



Witnesses:

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Inventor:

E. R. Leighton
by Wright Brown & Dumbley
his Attys.

UNITED STATES PATENT OFFICE.

EUGENE R. LEIGHTON, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE
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COUCH-BED.

SPECIFICATION forming part of Letters Patent No. 667,916, dated February 12, 1901.

Application filed May 31, 1900. Serial No. 18,488. (No model.)

To all whom it may concern:

Be it known that I, EUGENE R. LEIGHTON, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Couch-Beds, of which the following is a specification.

This invention has relation to interconvertible couch-beds.

The object of the invention is provide an article of the class named which can be converted from a bed to a couch, and vice versa, without the employment of operating mechanism or other power-transmitting devices, whereby said article may be greatly simplified in construction.

To this end the invention consists of a couch-bed comprising certain features of construction and relative arrangement of parts, all as illustrated upon the accompanying drawings, described in detail in the following specification, and pointed out with particularity in the claims hereto appended.

Of the drawings, Figure 1 represents in perspective view a couch-bed embodying my invention, the same being distended to form a double bed. Fig. 2 represents a section on the line 2 2 of Fig. 1 with one of the sections telescoped in the other. Figs. 3, 4, and 5 represent details of construction.

Referring to the drawings, it will be seen that the couch-beds are constructed in two sections, one of which telescopes within the other, and I shall refer to them as the "main" section and the "sliding" section, respectively. The main section comprises the ends *a a*, each end consisting of a tubular bar bent into inverted-U form and having the extremity provided for the reception of casters *b*. The ends therefore constitute four straight legs or standards, each pair being connected by a cross-bar. The ends are connected by side bars *c*, said bars being tubular and being flattened at their ends, as at *c'*, to provide sockets *c²*, for a purpose to be described. The said flattened ends are secured to the legs by bolts or rivets, which are passed there-through.

Braces *d* project downwardly from the side bars and are secured to the legs at points between the ends *c'* and the casters. It will be observed that the said braces are secured to

the under sides of the bars *c* and are given a quarter-turn and then riveted to the sides of the legs to preserve the sockets *c²*, to which I have referred. The side bars, as shown in Fig. 3, are dropped below a plane midway between the cross-bars *a'* and the casters *b*, for a purpose to be described.

Secured to the legs below the cross-bars *a'* are two angle-bars *e e*. The vertical webs of said bars are bolted directly to the legs below the junction of the cross-bars and the horizontal webs of said bars are perforated to receive the springs *f*, which attach the ends of the wire mattress *g* to said angle-bars.

It will be observed that while the side bar *c* and its brace *d* are secured to the outside of the legs on one side of the main frame they are secured to the inside of the other legs, this being clearly shown in Fig. 1, so that there is a socket immediately behind each leg.

As thus far described the main frame is capable of use by itself without the addition of the sliding frame. The sliding frame is also capable of use by itself, and it may be disconnected from the main frame. The sliding frame consists of four legs or standards *h h*, formed of vertical tubular bars provided at their lower extremities for the reception of casters *i*. At each end the legs are connected by an angle-bar *j*, the horizontal web of which is perforated for the reception of the springs *k* of the mattress *m*, the vertical web of each angle-bar being bolted or riveted directly to the standards or legs *h*.

The side bars for the sliding frame are indicated at *n*, and they are bolted or riveted at their ends to the legs *h*. It will be observed from Fig. 1 that the legs *h* are shorter than the legs *a* and that the plane of the horizontal webs of the angle-bars *j* is below that of the webs of the angle-bars *e* and also that the sliding section is a little shorter than the main section, so that said sliding section may be telescoped entirely within the main section, as shown in Fig. 2. To this same end the side bars *n* are in a plane a little above the plane of the side bars *c*, and the braces *o*, which connect the side bars *n* with the angle-bars *j*, project upward, while the braces *d* project downward, whereby there is no chance of

interference when the sections are telescoped. When the sliding section is directly below the main section, the legs *h* fit snugly in the sockets *c*², and consequently the said sliding section is entirely hidden from view by the coverings of the main frame.

The horizontal webs of the cross-bars *j j* rest upon the tops of the end legs *h*, and the vertical webs are on the outside of said legs, and the vertical webs of the cross-bars *e* are fastened to the inside of the legs *a a*, so that the horizontal webs project in the same direction as the horizontal webs of the adjacent cross-bars *j j*. From Fig. 3 it will be seen that the vertical webs of the cross-bars *e* overlap the corresponding webs of the cross-bars *j*. By reason of this construction the sliding section is guided in its lateral movement by the cross-bars to prevent the longitudinal displacement thereof, and, moreover, each cross-bar *j* being located almost directly below the adjacent cross-bar *e* the two spring wire mattresses may be made of substantially the same length.

The two sections are so arranged that the legs *h* at one side are between the side bars *c c* of the main frame, and consequently the lateral movement of the sliding frame is limited by said legs engaging said side bars at one side or the other of the main frame; but it is evident that, if desired, the sliding section may be detached from the main section and the two frames used separately, as said.

When the two sections are interlocked or nested together, the cross angle-bars *j j* of the sliding section are located between one of the side bars *c* and the wire mattress *g* of the other section, so that by tilting the inner sides of the two sections the sections may be separated without dismantling either of them, being each a complete bed without further addition. This is a new feature with me, for so far as I am aware I am the first to have provided an interconvertible couch-bed comprising two interlocking nesting-sections which may be separated without dismantling either of them and each of which when separated forms an independent bed.

To assist the assembling and detachment of the two sections, the side bars *c c* of the main section are dropped some distance below the mattress to make a long opening, through which the legs of the sliding section may be inserted.

To prevent the ends of the angle-bars from catching or tearing the bedclothes, they may be covered with buffers or pads, as at *p*. (See Figs. 4 and 5.)

From this description it will be seen that the article described may be converted from a bed or a couch, and vice versa, by simply moving the sliding section laterally, and as each section is supported independently of the other little or no effort is required to move the sliding section on its own casters. One of the wire mattresses is on a plane a little

below the other; but the hair or cotton mattress which is placed upon them may be thicker on one side than the other to compensate for the difference in height of the two spring-mattresses.

Having thus explained the nature of the invention and described a way of constructing and using the same, although without attempting to set forth all of the forms in which it may be made or all of the modes of its use, I declare that what I claim is—

1. A metallic couch-bed comprising two telescoping sections, each having legs, side bars connecting said legs, cross-bars directly secured to and connecting said legs at each end, and wire mattresses connected to and stretched between the cross-bars, the side bars for the one section having provisions for the reception of the legs of the other section.

2. A metallic bed comprising two telescoping sections, each having legs, side bars connecting said legs, cross-bars directly secured to and connecting said legs at each end, braces for maintaining the legs perpendicular to the side bars, and wire mattresses connected to and stretched between the cross-bars, the braces for one section projecting upwardly from the side bars thereof and the braces for the other section projecting downwardly from the side bars thereof whereby they do not interfere with the movement of one section relatively to the other.

3. A metallic couch-bed comprising two telescoping sections, each having legs, side bars connecting said legs, cross angle-bars directly secured to and connecting said legs at each end, and a wire mattress connected to and stretched between the said cross angle-bars, said angle-bars of the two bed-sections being nested or overlapping to serve as guides during the lateral movement of one section relatively to the other to prevent longitudinal displacement of said section.

4. A metallic couch-bed comprising two telescoping sections, each having legs, side bars connecting said legs, cross angle-bars directly secured to and connecting said legs at each end, and a wire mattress connected to and stretched between the said cross angle-bars, the angle-bars of both sections being nested and having their horizontal webs located one substantially directly above the other, whereby the wire mattresses are substantially equal in length.

5. An interconvertible couch-bed comprising two complete interlocking laterally-sliding sections each having all of its parts, including the mattress-support, permanently connected, the sections being relatively constructed and arranged to permit their separation into two independent beds without dismantling either of them.

6. An interconvertible couch-bed comprising two complete interlocking sections adapted to be nested one within the other, each section having side bars, end bars, and legs,

all permanently connected together, and each section being separable from the other into an independent bed.

7. An interconvertible couch-bed comprising two complete independent metallic beds, adapted to be arranged in interlocking relation with the legs of one bed between the side bars of the other bed, and the end bars of the first-mentioned bed above the side bars of the second-mentioned bed, all without disconnecting any of the parts of either of said beds.

8. An interconvertible couch-bed comprising two complete independent beds each having side bars, legs, end bars, and a mattress stretched between said end bars all of said parts being permanently connected together,

said beds being adapted to be arranged in telescoping interlocking relation with the legs and the end bars of one bed located respectively between the side bars, and a side bar and the mattress of the other bed, whereby one bed may be moved laterally a limited distance relatively to the other bed, or may be completely separated therefrom, without dismantling any of the parts of either.

In testimony whereof I have affixed my signature in presence of two witnesses.

EUGENE R. LEIGHTON.

Witnesses:

M. B. MAY,

P. W. PEZZETTI.