

No. 736,139.

PATENTED AUG. 11, 1903.

C. A. NEEDHAM.
BED.

APPLICATION FILED JUNE 3, 1902.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1.

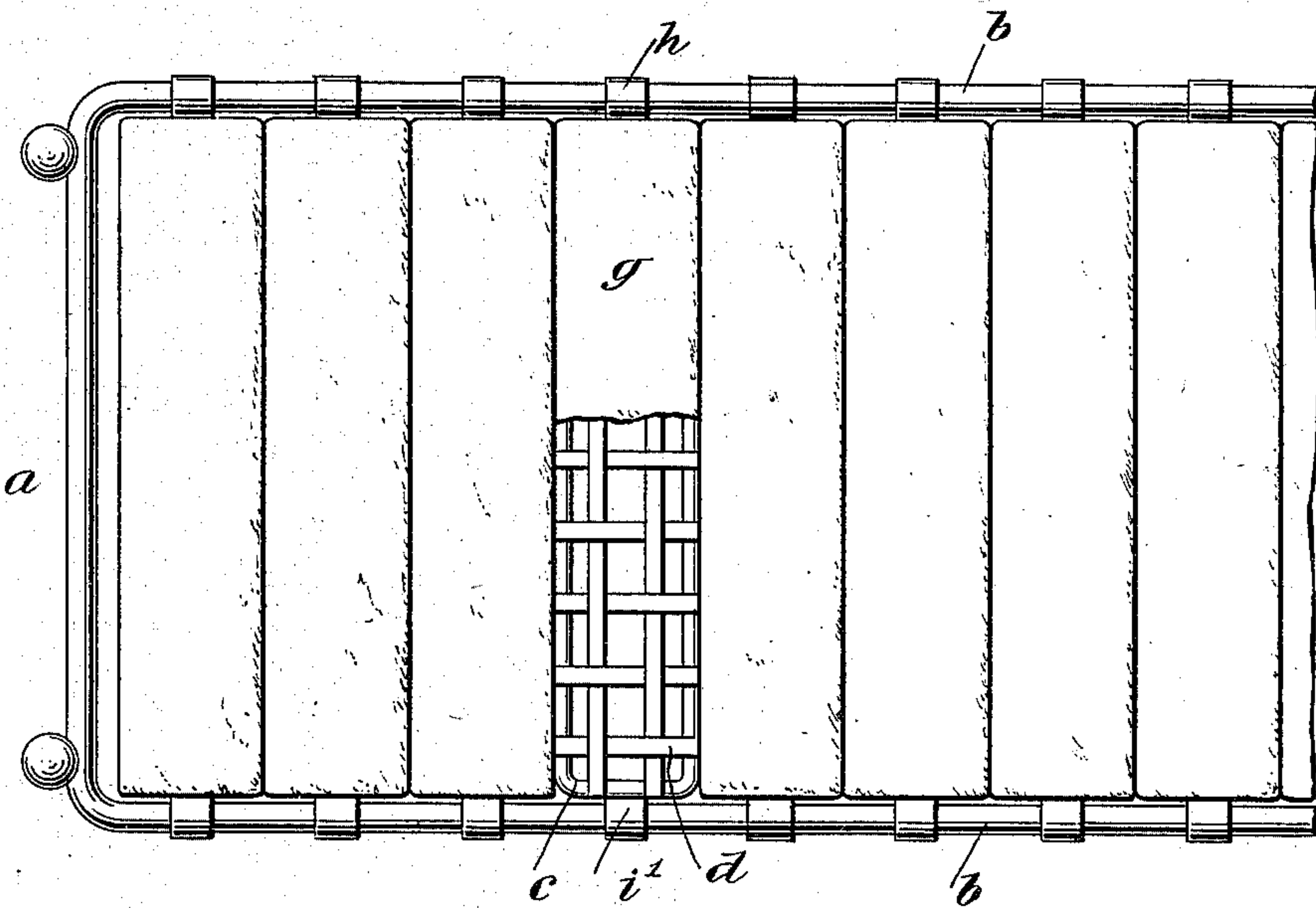
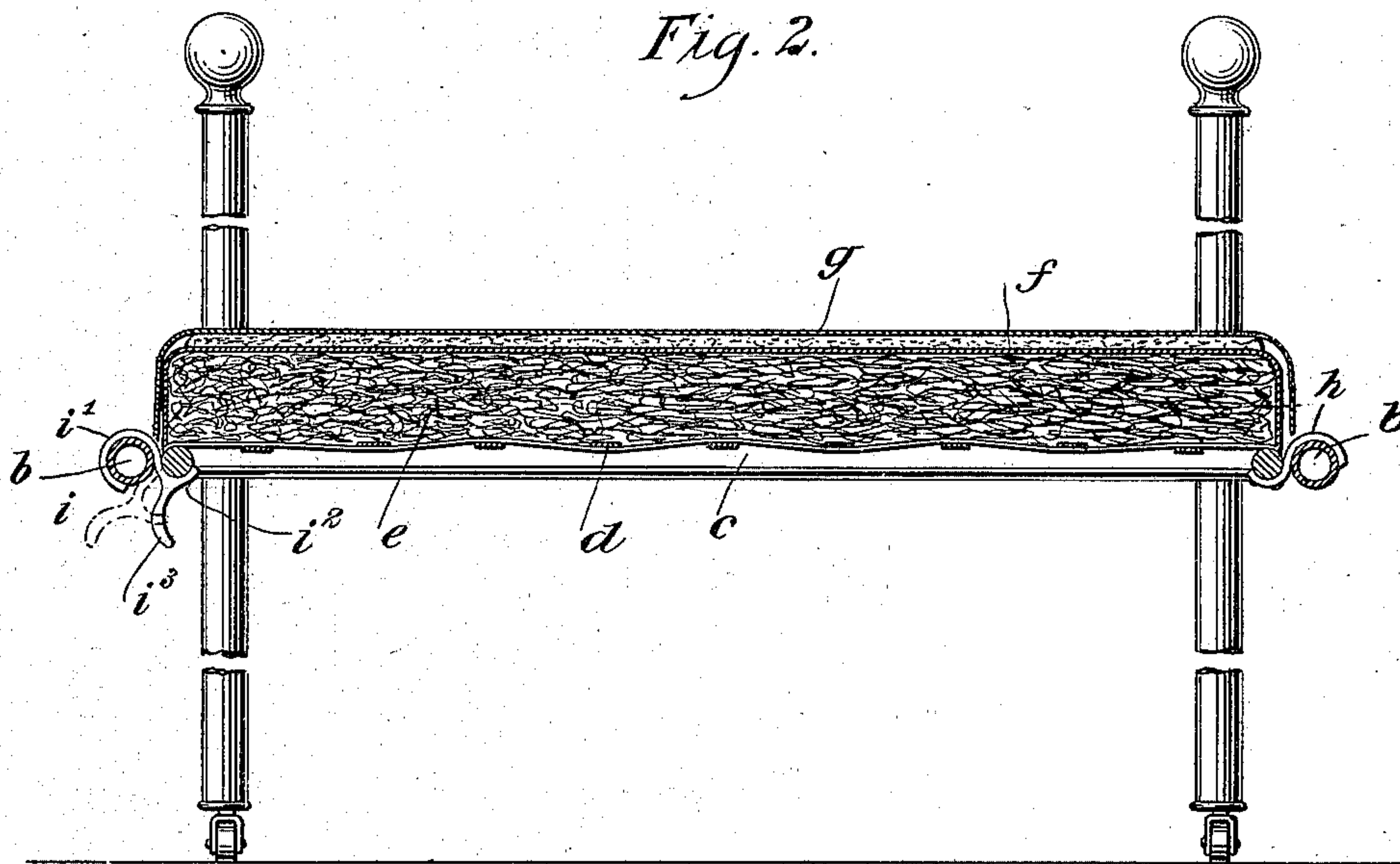


Fig. 2.



WITNESSES:

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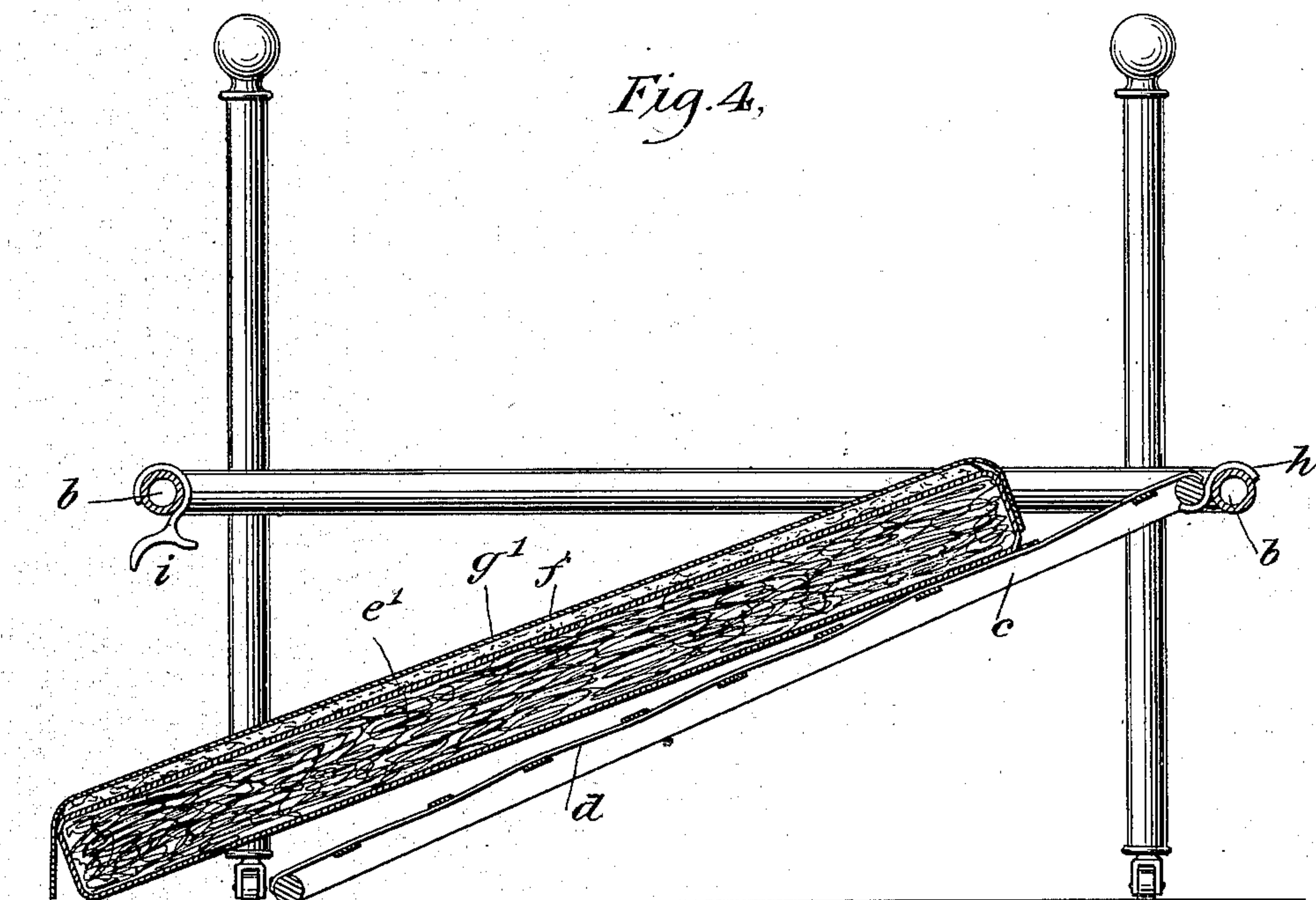
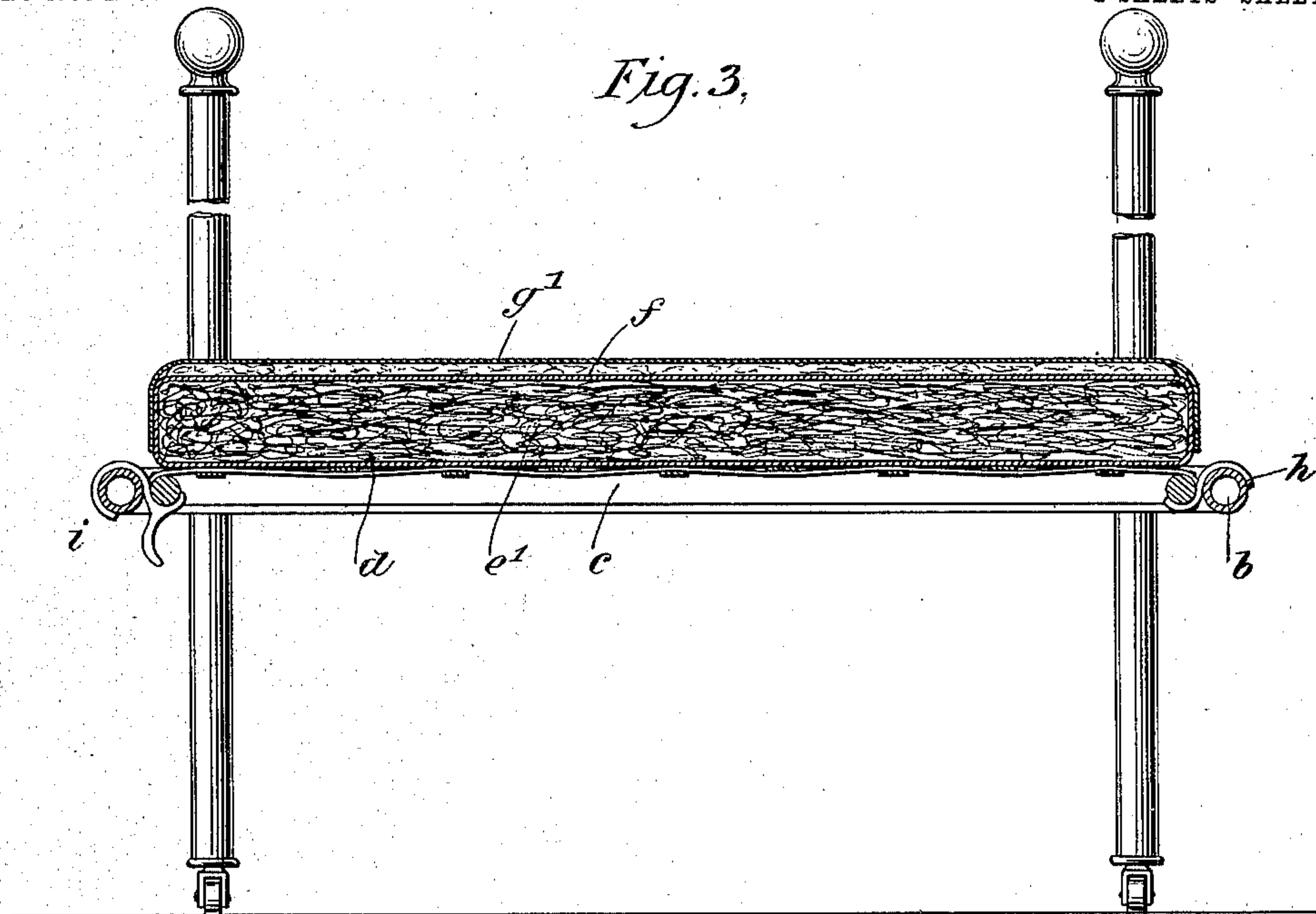
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2 SHEETS—SHEET 2.



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Edward Thorpe.
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INVENTOR

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UNITED STATES PATENT OFFICE.

CHARLES A. NEEDHAM, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND
GEORGE G. NEEDHAM, OF NEW YORK, N. Y.

BED.

SPECIFICATION forming part of Letters Patent No. 736,139, dated August 11, 1903.

Application filed June 3, 1902. Serial No. 110,026. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. NEEDHAM, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented new and useful Improvements in Beds, of which the following is a full, clear, and exact description.

This invention relates to a bedstead especially adapted for use by invalids, the object being to facilitate treating all portions of a patient's body without necessitating turning or otherwise moving the patient's body in the bed. To this end I construct the mattress in a number of independent sections, which are capable of being independently placed in and displaced from the bed, such adjustment being effected by moving the section vertically between the side rails of the bed, thus enabling any part of the mattress to be removed by dropping it down from under the patient or to be placed in the bed by a reversal of such movement.

This specification is an exact description of two examples of my invention, while the claims define the actual scope thereof.

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

Figure 1 is a plan view of the invention, showing parts broken away. Fig. 2 is a cross-section of the bed, showing one of the mattress-sections in detail. Fig. 3 is a cross-section showing a slight modification, and Fig. 4 is a similar view showing the act of removing a mattress-section.

In Fig. 1, *a* indicates one end of the bed, which may be taken to be the head, and *b* the two side rails. Each mattress-section is made up of a rectangular marginal frame *c*, preferably of metal, with a metallic lattice or other form of open-work *d* extending across it. On this frame is placed upholstery, (represented at *e*,) thus forming the main part of the mattress-section. I prefer in practice to place over the upholstery *e* a comfortable-section, of wadding or some other soft fibrous material, (indicated at *f*,) and then over the whole is placed a casing of sheeting, (indicated at

g,) this casing being very much in the nature of a pillow-case, except that it is open at its bottom, so as to permit of its being slipped readily on and off of the mattress-section. At one end of each mattress-section and fastened to the frame part *c* thereof is a hook *h*, and on the side rail of the bed opposite said hook *h* is a latch, (indicated at *i*.) This latch may be of any form desired and may be carried either by the mattress-section or by the side rail of the bed. According to the form here illustrated it is carried by the side rail of the bed and comprises a curved part *i'*, mounted loosely on the side rail, a hook *i''*, adapted to engage the frame part *c* of the mattress-section, and a thumb-piece *i'''* to permit the manipulation of the latch. The latch normally holds the mattress-section in position, as Fig. 2 illustrates, and to release the mattress-section the finger-piece *i'''* should be drawn out, as the dotted lines show. It will be observed that the mattress-sections extend transversely across the bed and may be placed snugly together side by side, thus forming an even and continuous bed. To remove any one of the mattress-sections, the latch *i* should be released, and the end of the section adjacent to said latch will then drop by gravity, the hook *h* finally disengaging itself from the adjacent side rail of the bed. This leaves an opening in the bed which enables the body of the patient to be reached, as mentioned above. To place the mattress-section back in position, the hook *h* should first be engaged with the proper side rail and then the mattress-section moved up and the latch *i* placed in operative position. It will be seen that this invention not only facilitates the treatment of a patient without disturbing him, but it enables the mattress itself to be removed and cleaned thoroughly or replaced by a fresh one and fresh bed-clothes supplied without moving the patient in any way. The form of the upholstery *e* is immaterial, and so, also, is the matter of arranging the wadding *f* and covering *g*, although it will be observed that the covering *g* furnishes a very valuable adjunct to the invention, and in practice it will probably be invariably used.

If desired, the mattress-section may not be fastened permanently to the frame *c d*, so as to be removed therewith, but may be made separate therefrom, as indicated at *e'* in Figs. 3 and 4. In this form of the invention to remove a mattress-section the frame *c d* need only be lowered, as in Fig. 4, and then the mattress-section *g'* may slide off laterally from the frame. It is also possible, as will be apparent from the drawings, particularly Fig. 4, for the mattress-sections to be first dropped, as in the view referred to, so as to clear the patient, and then instead of removing them from under the bed they may be drawn out over the side rail without disturbing the patient in any way.

Various changes in the form and details of my invention may be resorted to at will without departing from the spirit of my invention. Hence I consider myself entitled to all forms of the invention as may lie within the intent of my claims.

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

1. A bed having a bottom formed of a plurality of independently-movable sections, and means for removably securing each section in place, said sections being each shorter than the distance between the side rails and capable of dropping down between the side rails of the bed to permit their removal without disturbing the occupant of the bed.

2. A bed having a bottom formed of a plurality of independently-movable sections, and means for removably securing each section in place, said sections being each shorter than the distance between the side rails and capable of dropping down between the side rails of the bed to permit their removal without disturbing the occupant of the bed, and said sections of the bed-bottom being upholstered so as to form when assembled a continuous mattress.

3. A bed having its bottom formed of a plurality of independently-removable sections, each being shorter than the distance between the side rails and lying between said rails, a hook fastened to one end of each section to engage the adjacent side rail, and a latch located at the other end of each section to re-

movably fasten said end of the section to the adjacent side rail of the bed.

4. A bed having its bottom formed of independently-removable sections, a hook fastened to one end of each section to engage the adjacent side rail, and a latch located at the other end of each section to removably fasten said end of the section to the adjacent side rail of the bed, said latch comprising a part loosely mounted on the side rail, a hook connected with said loosely-mounted part, and a finger-piece projecting from the hook.

5. A bed, having a mattress formed of independent upholstered sections removably placed in the bed, and an independent casing of relatively light fabric dropped over each section of the mattress.

6. A bed comprising the combination with the side rails of a plurality of independent sections laid snugly together side by side to form a continuous bed-bottom, said sections being shorter than the distance between the said rails and lying in the vertical space between them, and independent means for releasably sustaining the said sections on the side rails whereby any one or more of the sections may be moved independently of the others downward between the side rails to form an opening in the bed-bottom without disturbing the patient thereon.

7. A bed comprising the combination with the head and foot boards and the parallel side rails of a plurality of independent sections lying snugly together side by side and extending transversely of the bed to form a bottom running continuously from head to foot of the bed and independent means for removably securing the said sections in place, each section being capable of independent displacement by movement downward between the side rails of the bed, whereby to form an opening in the bed-bottom without disturbing the patient thereon.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES A. NEEDHAM.

Witnesses:

ISAAC B. OWENS,

EVERARD BOLTON MARSHALL.