

(No Model.)

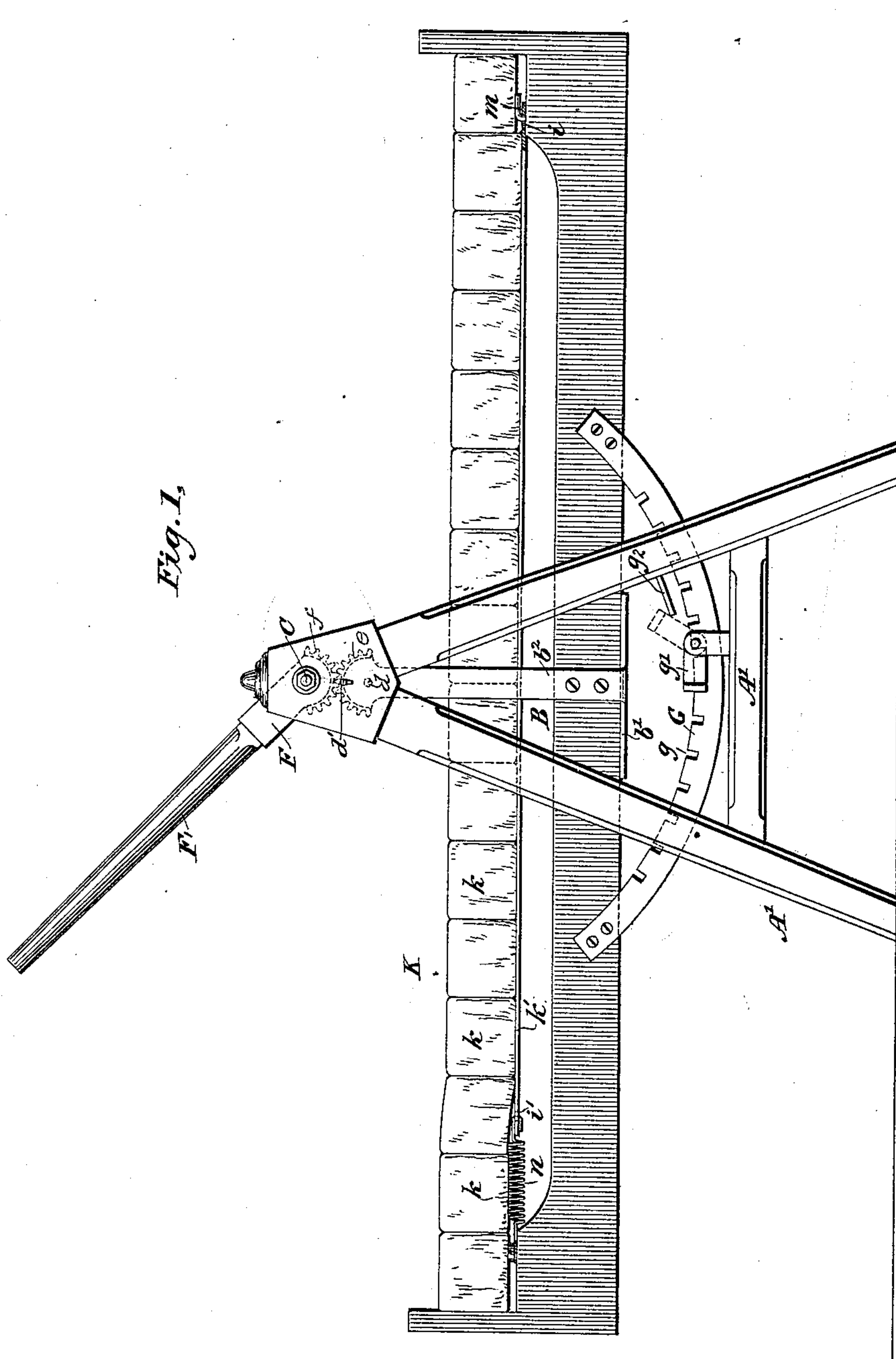
3 Sheets—Sheet 1.

M. G. FARMER.

ADJUSTABLE BED FOR INVALIDS.

No. 335,441.

Patented Feb. 2, 1886.



Witnesses

*Geo. W. Breck.*  
*Carrie O. Ashley*

Inventor

*Moses G. Farmer,*

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(No Model.)

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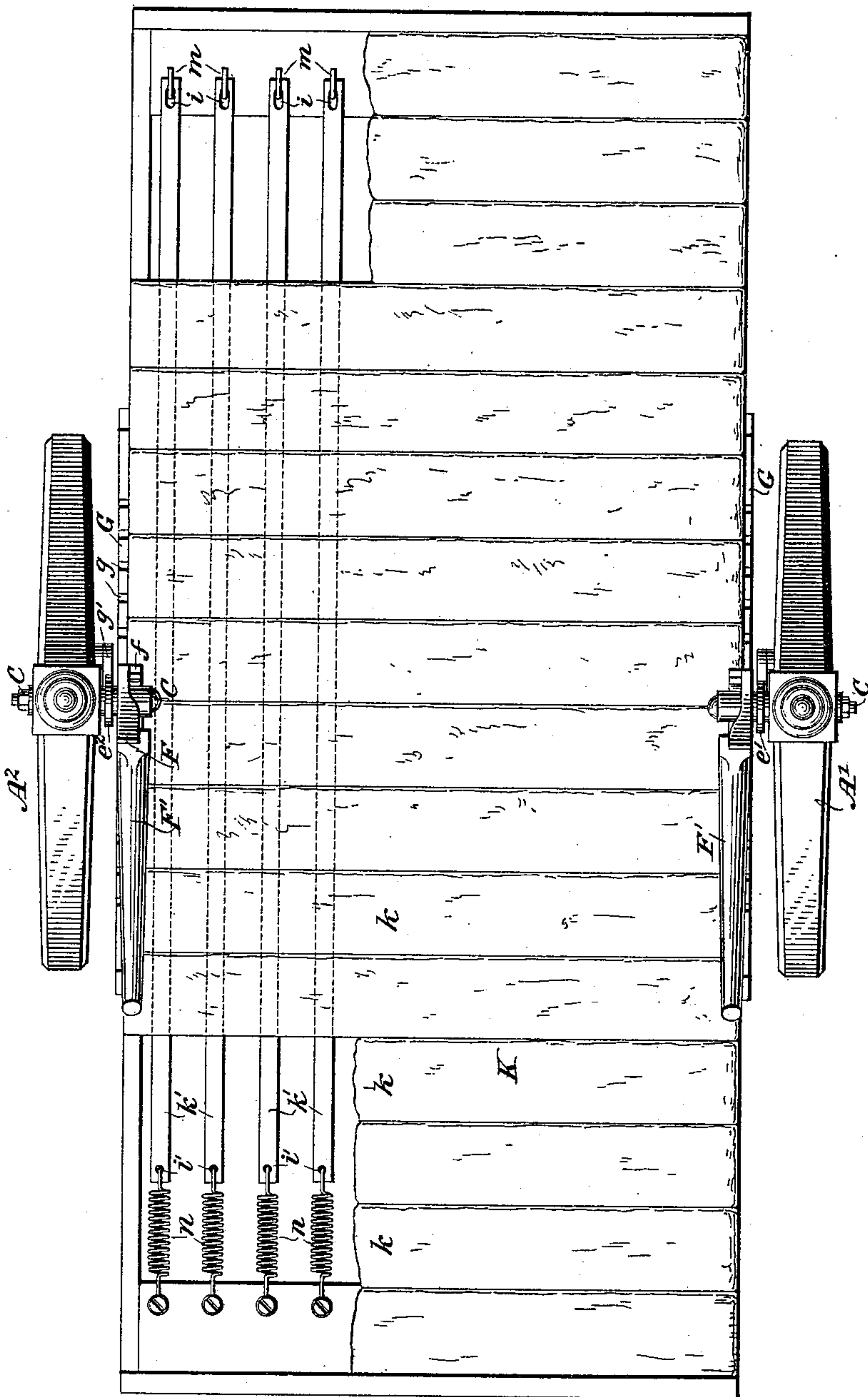
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Fig. 2.



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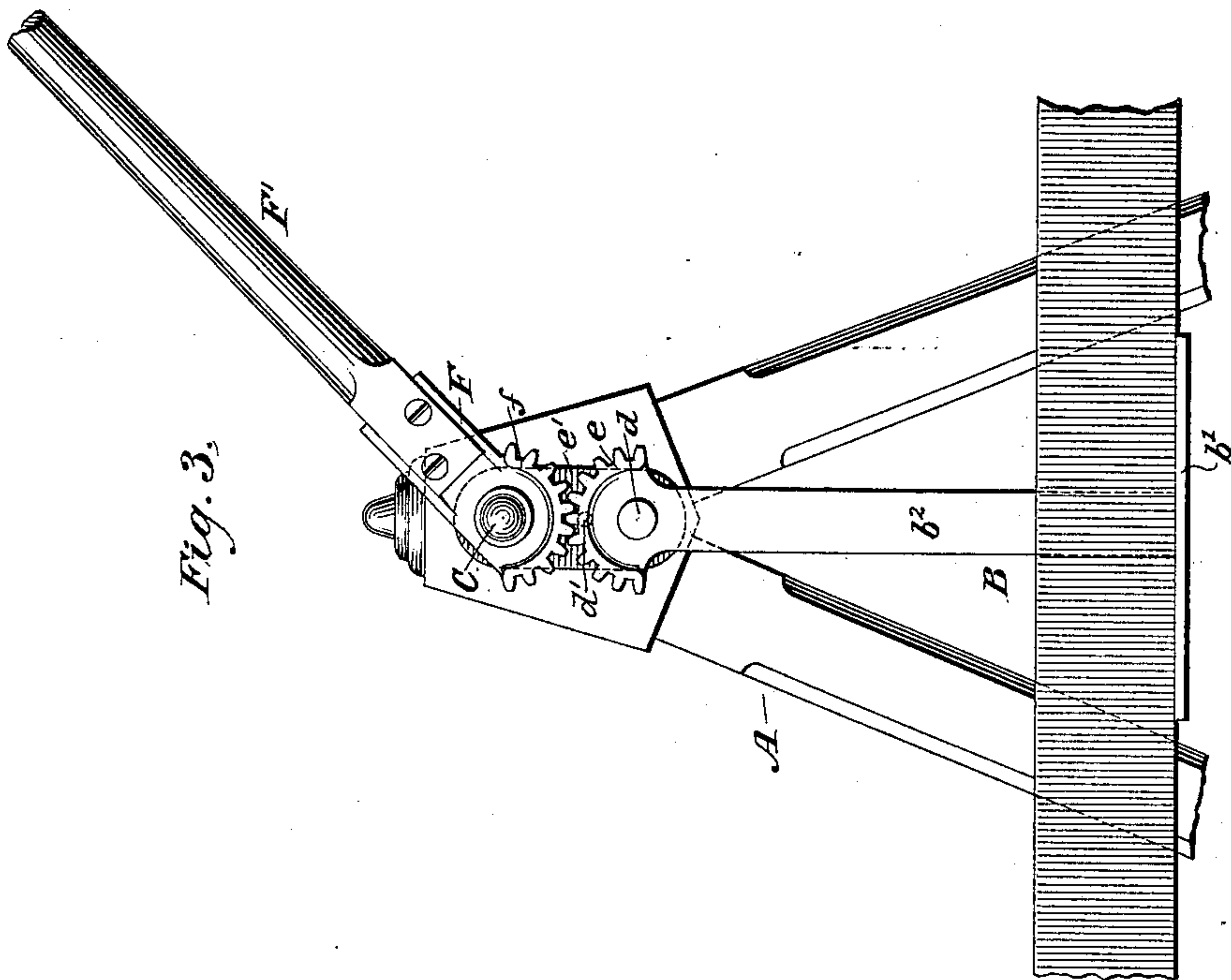
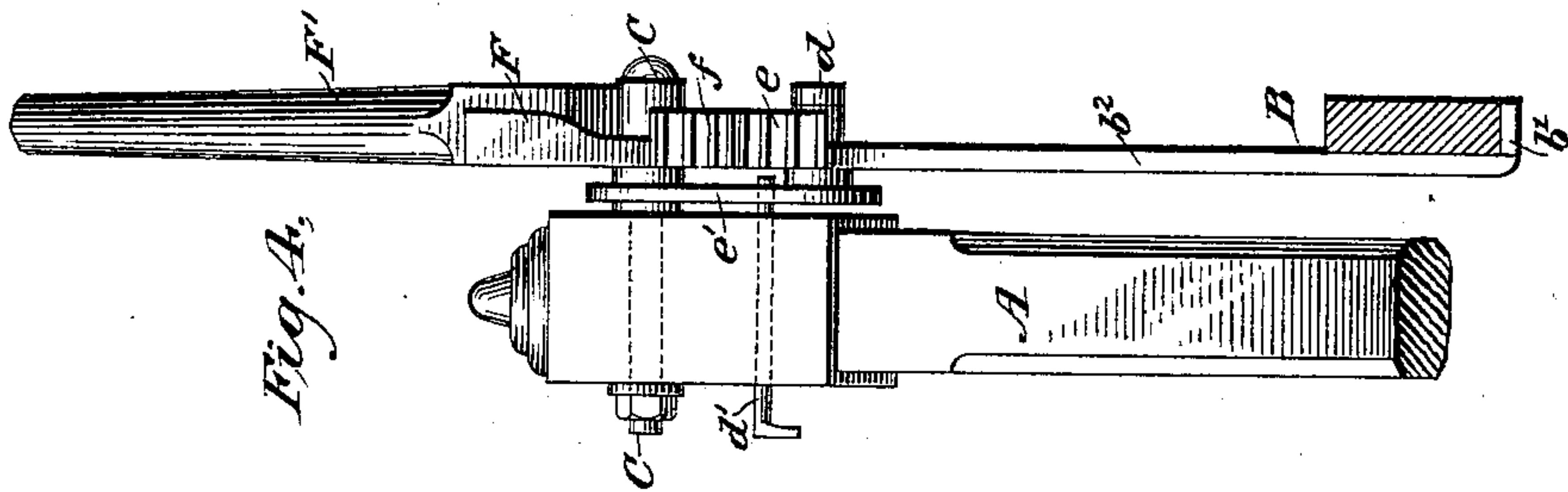
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# UNITED STATES PATENT OFFICE.

MOSES G. FARMER, OF NEW YORK, N. Y.

## ADJUSTABLE BED FOR INVALIDS.

SPECIFICATION forming part of Letters Patent No. 335,441, dated February 2, 1886.

Application filed June 15, 1885. Serial No. 168,711. (No model.)

*To all whom it may concern:*

Be it known that I, MOSES G. FARMER, a citizen of the United States, residing in New York, in the county and State of New York, have invented certain new and useful Improvements in Adjustable Beds for Invalids, of which the following is a specification.

My invention relates to the class of apparatus employed for supporting invalids in such a manner that they may be readily placed in different positions, permitted a certain amount of exercise which they may be unable to obtain walking or moving about, and treated by massage, surgically, or otherwise.

The object of the invention is to provide a convenient form of bed which may be placed in various positions or inclined at different angles, and also to provide means whereby patients may readily give to themselves a slight rocking movement, at the same time exercising the arms and the muscles of other portions of the body.

The invention consists, generally, in constructing a bed and its attachments in substantially the following manner: Between two stationary supports there extends a pivoted suspension brace or bracket, which carries the frame of the bed. The brace consists of a horizontal piece extending beneath the frame and two upwardly-projecting arms, which are pivoted to the support. A toothed segment is formed at the upper end of one, or, if desired, of both of the arms, and a corresponding segment gathers into it. This last-named segment is at the end of a pivoted lever or handle extending into convenient proximity to the bed, so that it may be reached by the patient. By means of the lever the patient or an attendant is enabled to tilt the bed in one direction or the other. Suitable devices are employed for locking the frame of the bed in any desired position, so that when it is inclined at any desired angle it may be firmly held in position.

The bottom of the bed consists of a series of flat metal strips or bands, which at one end hook over suitable pins or studs secured to the frame, and at the other end are held by yielding springs. The springs are secured firmly to the frame and hook into the ends of the strips or bands. These bands are at any convenient distance apart, and any one or

more may be temporarily removed for the purpose of affording access to the patient from beneath. Upon the strips there is laid a series of sections of mattress, about six or eight inches square, and in length corresponding to the width of the bed. These sections are interchangeable with each other, and either one of their four sides may be used as the top. Any one or more of the sections may be removed at pleasure.

No claim is herein made upon the special construction of the mattress of interchangeable parts, nor upon the special method of constructing the bed-bottom, but I contemplate making the same the subject-matter of other applications to be filed by me.

In the accompanying drawings, Figure 1 is a side elevation of a bed embodying the features of the invention, and Fig. 2 is a plan view of the same. Figs. 3 and 4 show certain details in the construction of the device employed for moving the frame of the bed.

Referring to the drawings,  $A'$  and  $A^2$  represent any suitable form of supports for the bed, to which there is pivoted a suspended brace or swinging girder, B. This consists of a horizontal portion,  $b'$ , having at either side an upwardly-projecting arm,  $b^2$ . The arms  $b^2$  are respectively pivoted to suitable links,  $e'$  and  $e^2$ , having projecting studs  $d$ . Each link is supported at its pivoted end from the corresponding support,  $A'$  or  $A^2$ , by means of a bolt or pivot, C, and it may be locked to its support and thus prevented from turning upon this bolt by means of a linchpin,  $d'$ . One or both of the arms  $b^2$  is provided at its upper end with a toothed segment,  $e$ , which gears with a corresponding segment,  $f$ , formed upon a pivoted arm, F. This arm is provided with a handle,  $F'$ , constituting a handle by means of which the gear  $f$  may be turned, thereby causing the frame of the bed to be swung or tipped in one direction or the other, as desired. It will be noticed that the arm F turns upon the bolt or pivot C, while the arms  $b^2$  swing upon their respective studs  $d$ , any movement of the links being prevented by the linchpin referred to. If, however, these pins be removed, then the frame of the bed may move by the turning of the links upon the arbors or bolts C independently of the movement of the lever or arm F. By this means the patient occupy-



ing the bed may give himself a slight rocking movement at will, or an attendant may move the bed to and fro upon the center C.

For the purpose of locking the bed in any required position, a segment, G, is secured to one side of the bed, or, if desired, two of them may be employed, one being secured to each side, as shown in the drawings. This segment is provided with a series of catches or notches, *g*, into which a locking-pawl, *g'*, secured to the support A', may be dropped. This pawl, when it is not desired to secure the bed firmly in any special position, may be thrown back against a suitable holding-pin, *g''*. When, however, it is desired to place the bed in any given position and lock it there, the pawl is thrown into the proper notch. The patient desiring to change his position can reach the pawl and throw it out and then by means of the handle move the bed to any desired angle and there again lock it.

The mattress is supported upon a series of longitudinal strips, *k k'*, which are preferably of strap-iron or other suitable strips of metal. At one end of each of these there is formed an opening, *i*, through which there passes a hook, *m*, secured to the frame of the bed at one end. The other ends of the strips are also provided with openings or eyelets *i'*, into which there are hooked the ends of coil-springs *n*, which are screwed or otherwise fastened to the other end of the frame of the bed. Any of these strips may be temporarily removed when it is desired.

The mattress K itself consists of a series of small mattresses or sections, *k k*, in the form of parallelopipeds. These are preferably about six to eight inches square and in length equal to the width of the bed, and being essentially of the same dimensions they are all interchangeable. Moreover, any one or more of

them may be removed independently of the others for the purpose of treating the patient by massage or otherwise.

By first tilting the bed so that it will incline at an angle, and then removing one or two of the straps *k'* and a section or two of the mattress, any portion of the body may be operated upon while in a recumbent position.

I claim as my invention—

1. The combination, substantially as hereinbefore set forth, of the stationary supports, the pivoted arms, the bed-frame secured to said arms, the lever and gear segments, means, substantially such as described, for rocking said bed-frame, and means for locking it in any of its positions.

2. The combination, substantially as hereinbefore set forth, with a pivoted bed-frame, of a stationary support, a lever pivoted to said support, a gear-connection between said lever and bed-frame, whereby the position of said frame may be modified by the movements of said lever, and a locking device for securing said frame in any desired position.

3. The combination, substantially as hereinbefore set forth, with stationary supports, of two links, pivots uniting these to said supports, a stud projecting from each link, a bed-frame supported by said studs, means for locking one of said links at will, whereby they are prevented from turning upon said pivots, a pivoted lever, and a connection between said lever and frame, whereby the latter may be turned upon said studs.

In testimony whereof I have hereunto subscribed my name this 3d day of June, A. D. 1885.

MOSES G. FARMER.

Witnesses:

DANL. W. EDGECOMB,  
CHARLES A. TERRY.