

George Knell, Combined Sofa and Bed.

No. 120,283.

Patented Oct. 24, 1871.

FIG. 1.

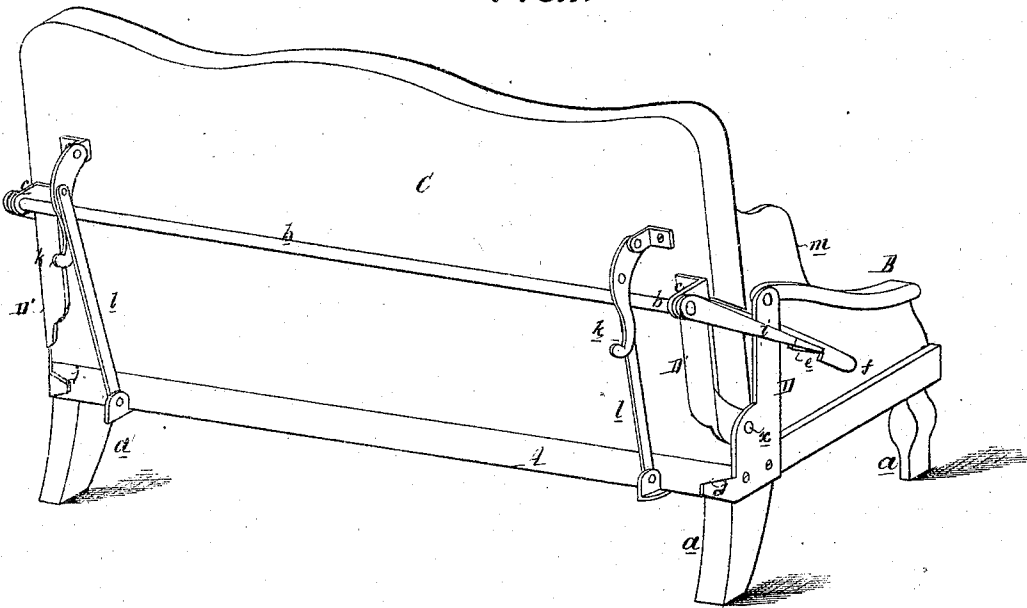


FIG. 2.

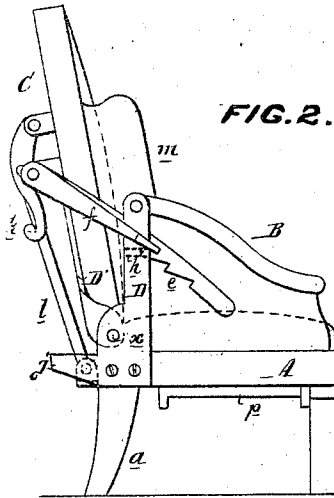


FIG. 3.

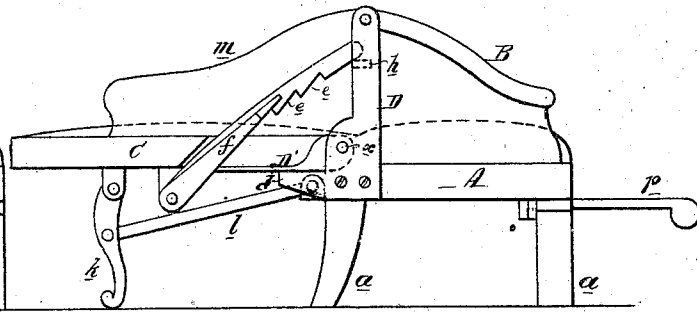
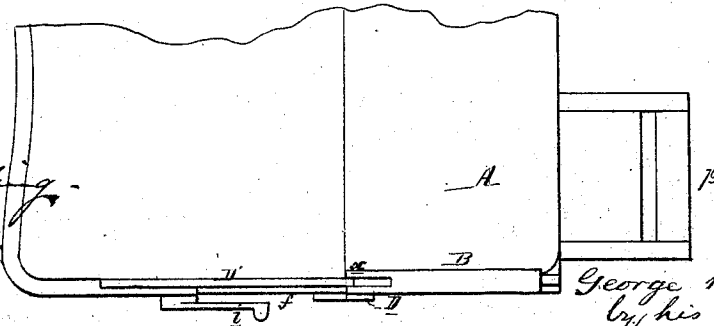


FIG. 4.



Witnesses,
Jno. B. Harding
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by his Attys
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UNITED STATES PATENT OFFICE.

GEORGE KNELL, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN SOFA-BEDS.

Specification forming part of Letters Patent No. 120,283, dated October 24, 1871.

To all whom it may concern:

Be it known that I, GEORGE KNELL, of Philadelphia, county of Philadelphia, State of Pennsylvania, have invented a Combined Sofa and Bed, of which the following is a specification:

My invention consists of certain improvements in combined sofas and beds, too fully described hereafter to need preliminary explanation, the said improvements having been designed mainly with the view of strengthening the hinged joints between the back and seat of the sofa, of enabling the said back to be retained in a vertical or inclined as well as a horizontal position, and of concealing the operating parts so that the arrangement may closely resemble an ordinary sofa or bed.

Figure 1 is a perspective view of my combined sofa and bed; Fig. 2, an end view of the same arranged as a sofa; Fig. 3, an end view of the same arranged as a bed; and Fig. 4, a plan view of one end of Fig. 3.

The body or seat A of the sofa rests upon four legs, *a*, and has at each end an arm, B, and the back C of the sofa is hinged at its lower edge at the points *x x*, so that it may be thrown down to the horizontal position shown in Figs. 3 and 4, to form part of a bed. Each of the hinges is composed of two plates, D and D', the former of which is secured to the seat and arm of the sofa and extends to the top of and serves to strengthen the latter, while the plate D' is secured to the back and is bent around the end of the same, so that it may overlap and be pivoted to the plate D. A rod, *b*, is arranged to turn in lugs *c c* formed at the upper end of each of the plates D' at the rear of the hinged back, and to the opposite ends of this rod are secured two arms or ratchets, *f f*, having teeth *e* formed on their under edges, adapted to projections *h*, which are formed on the inner sides of each of the plates D of the sofa. The rod *b* has also at one or both ends a handle, *i*, by means of which it may be turned so as to raise the ratchets *f* from or lower them down onto the projection *h* of the plate D. The ratchets *f* and projections *h* serve as locking devices to retain the hinged back in the upright position shown in Figs. 1 and 2, and against the arms of the sofa, or in an inclined position where a reclining sofa is desired; or by raising the said ratchets entirely free from the projections *h* the back may be lowered to its full extent, so as to form a portion of a bed, as shown in Figs. 3 and 4. The back

when thus lowered rests upon and is supported by two lugs, *j j*, which project from the lower edges of the plates D D at the opposite ends of the sofa; or, instead of the lugs, the said back may be supported by legs *k k* hinged to the same, and arranged to be thrown outward, when the back is lowered, by rods *l l*, which connect the said legs with the rear edge of the seat of the sofa.

This latter arrangement is similar to that described in my patent of March 31, 1868, and forms no part of the present invention.

A board, *m*, is secured to the hinged back close to each end of the same, and is arranged, when the back is raised, to fit into a recess formed for its reception in each of the arms B, the said boards, when the back is lowered, forming, with the arms B, a foot and head-board for the bed, and imparting a finish to the latter. (See Figs. 3 and 4.)

The sofa is provided, near one end or throughout its whole length with a sliding foot-board, *p*, intended to be drawn out and used as a rest for the feet when the hinged back is inclined so as to form a reclining sofa.

It is not absolutely necessary in carrying out my invention that the ratchets *f* should be connected together and operated simultaneously, as they might be simply pivoted to the plates D' or to the back of the sofa; and in some instances a single ratchet at one end of the sofa might be found sufficient to answer the purpose.

I claim—

1. The combination of the plates D and D' at each end of the sofa, when constructed and arranged substantially as herein described, so as to form hinges for the back, braces for the latter and for the arms of the sofa, and bearings for the ratchets and their operating rods.

2. The supporting lugs *j* on the plates D, in combination with the subject-matter of the first claim.

3. The ratchets *f f*, hung to the back of the sofa so as to be operated together, in combination with fixed pins upon which the ratchets are adjustable, as set forth.

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

GEO. KNELL.

Witnesses:

WM. A. STEEL,
F. B. RICHARDS.

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