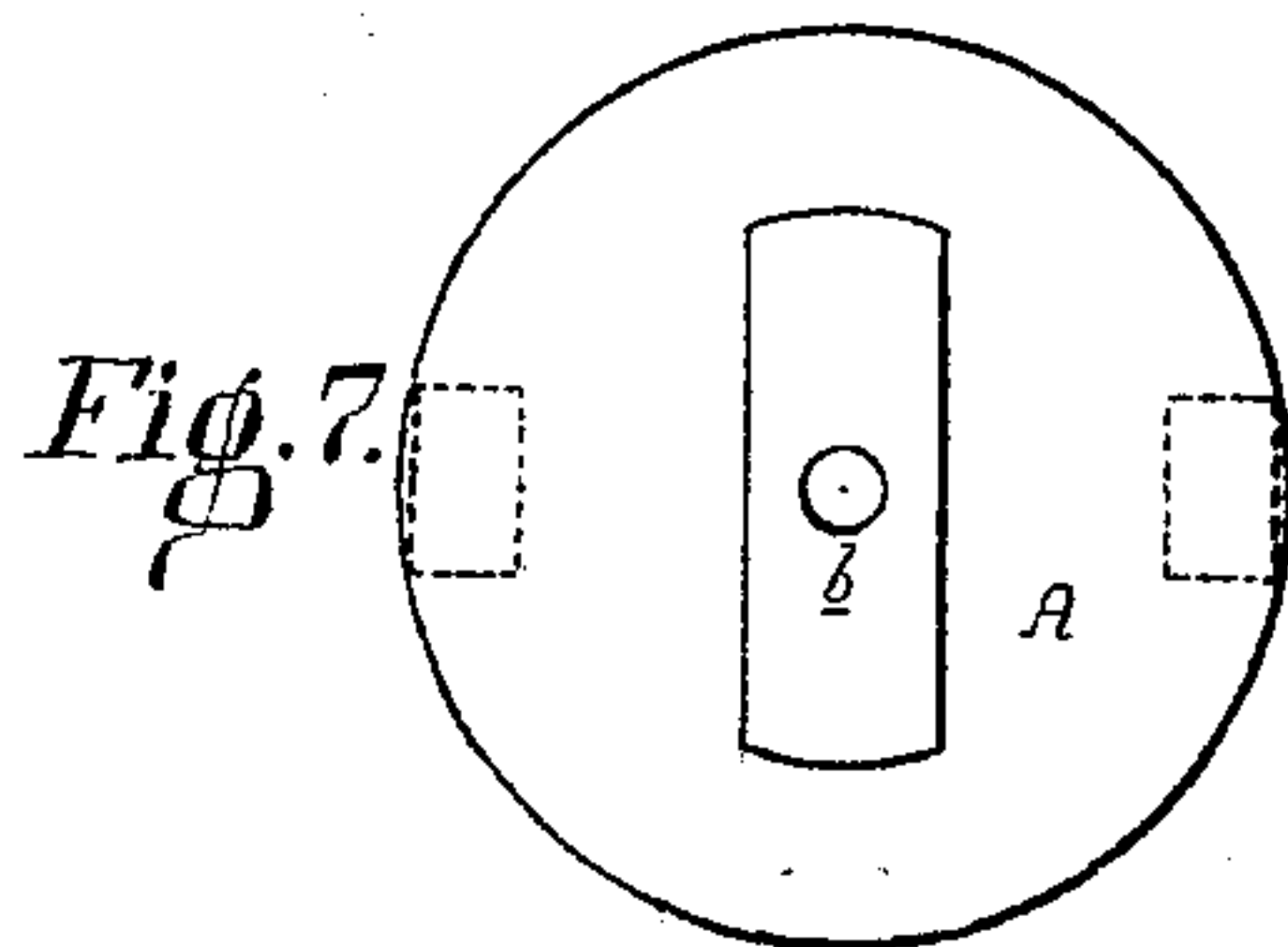
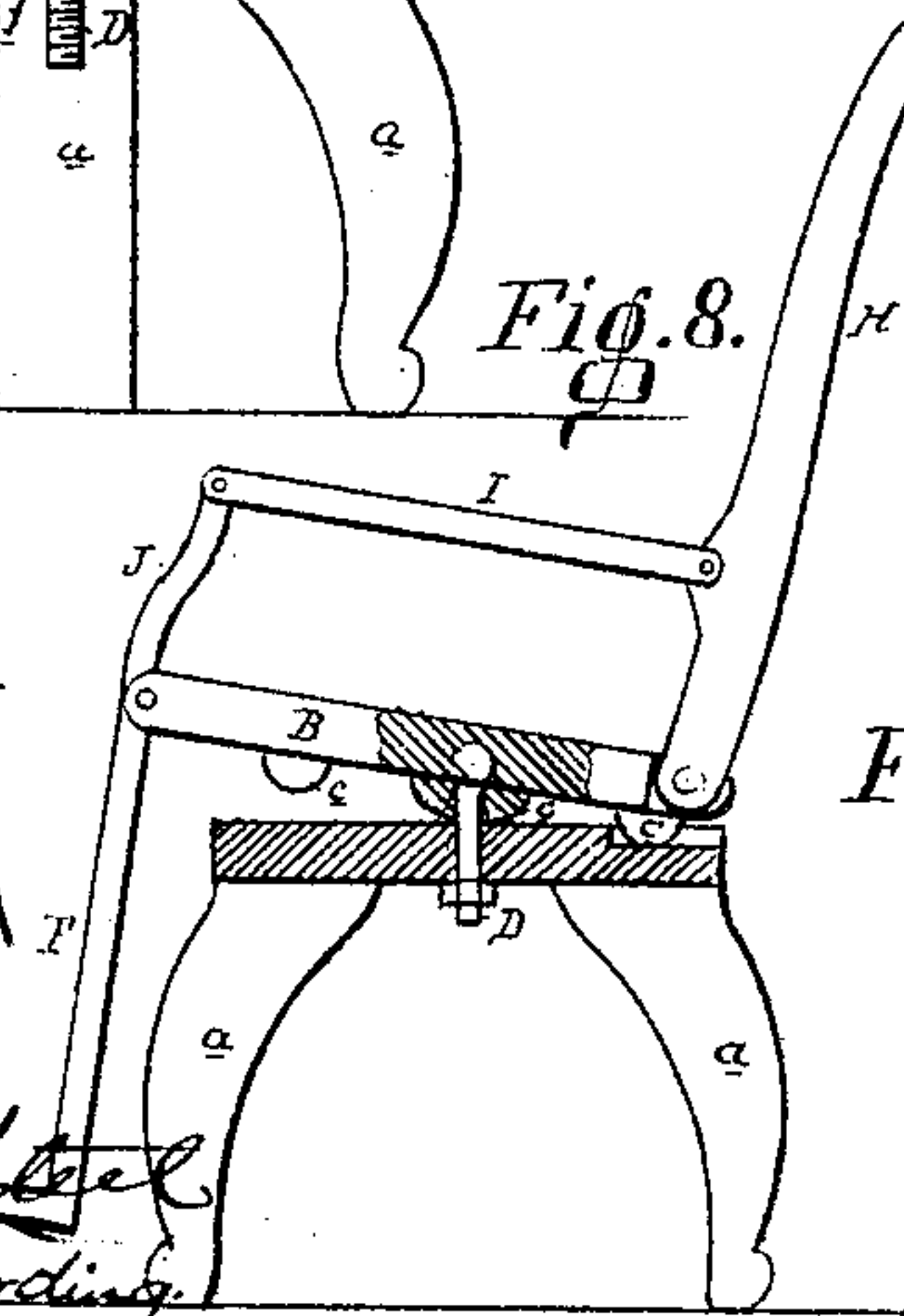
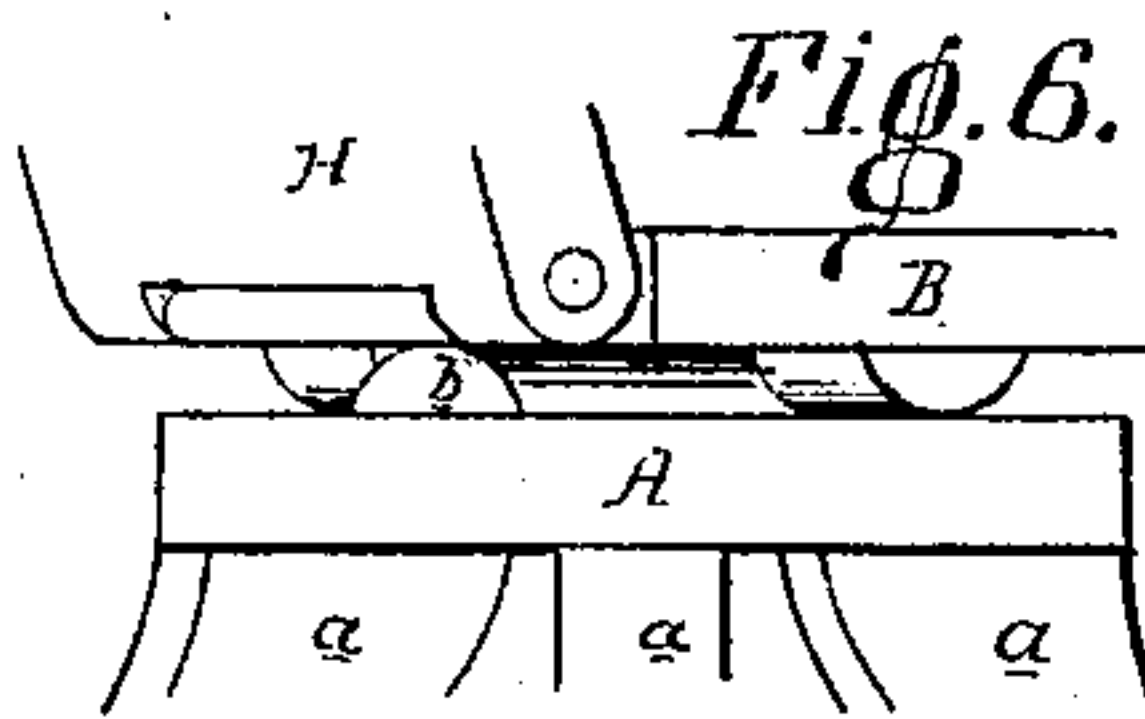
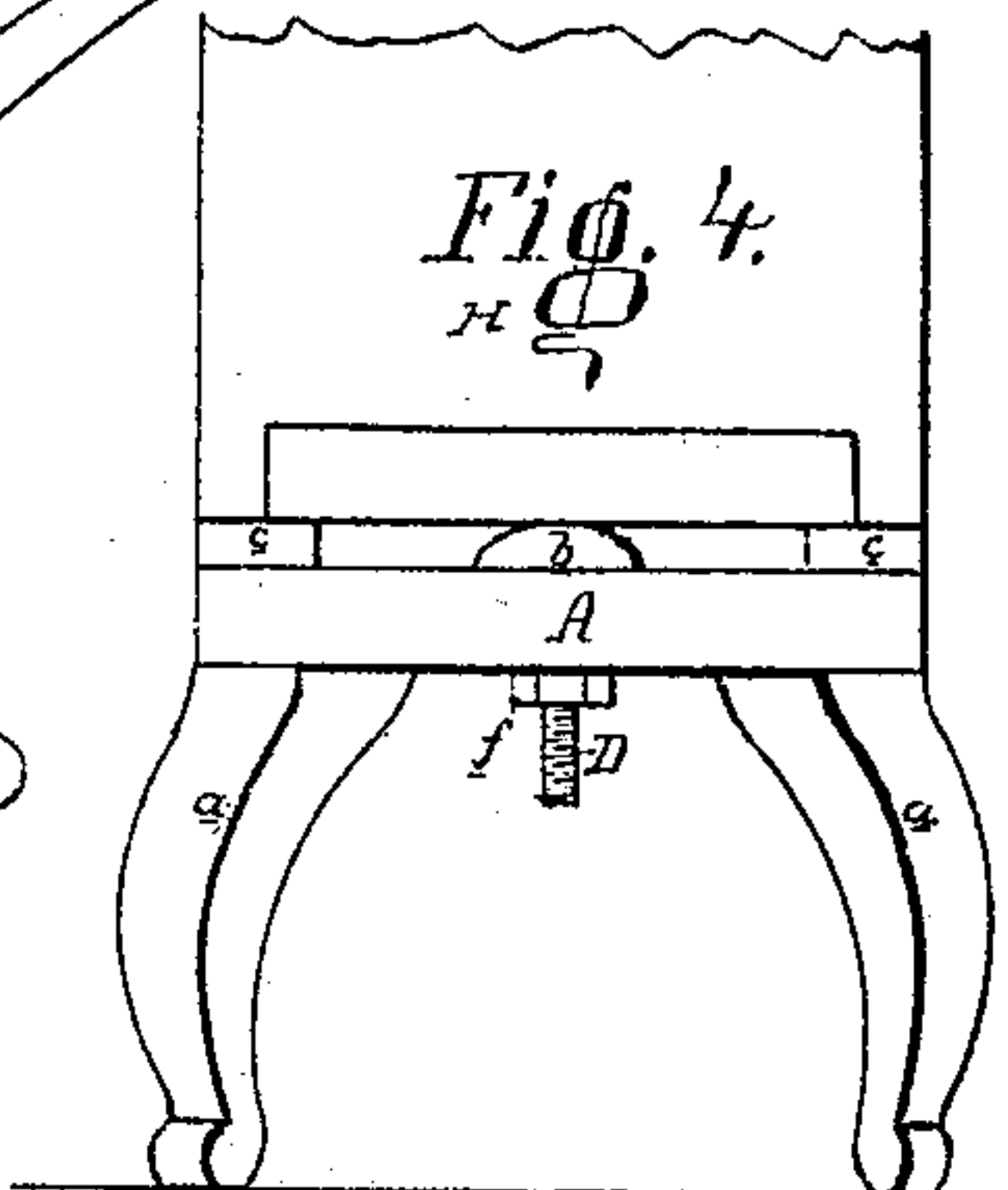
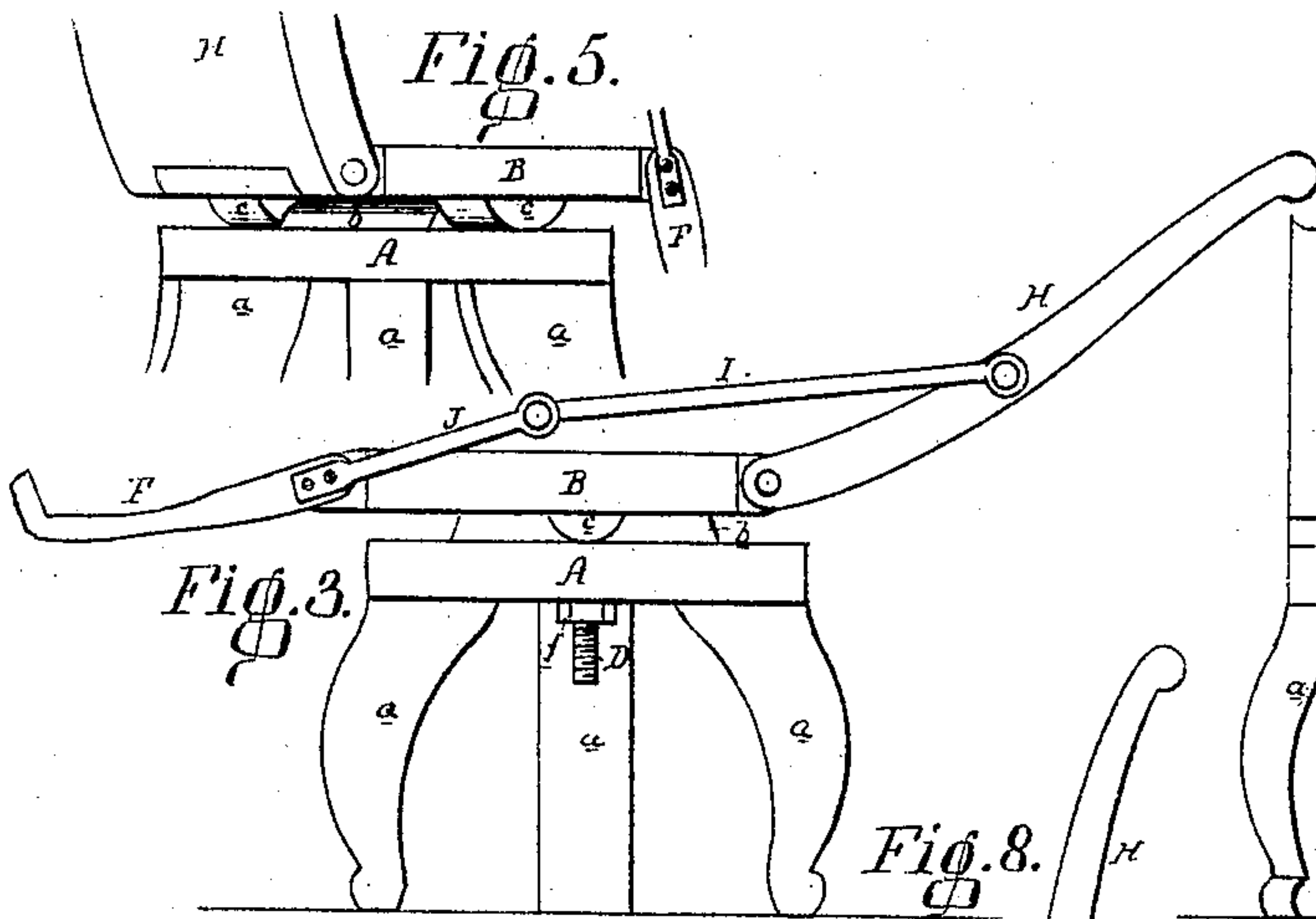
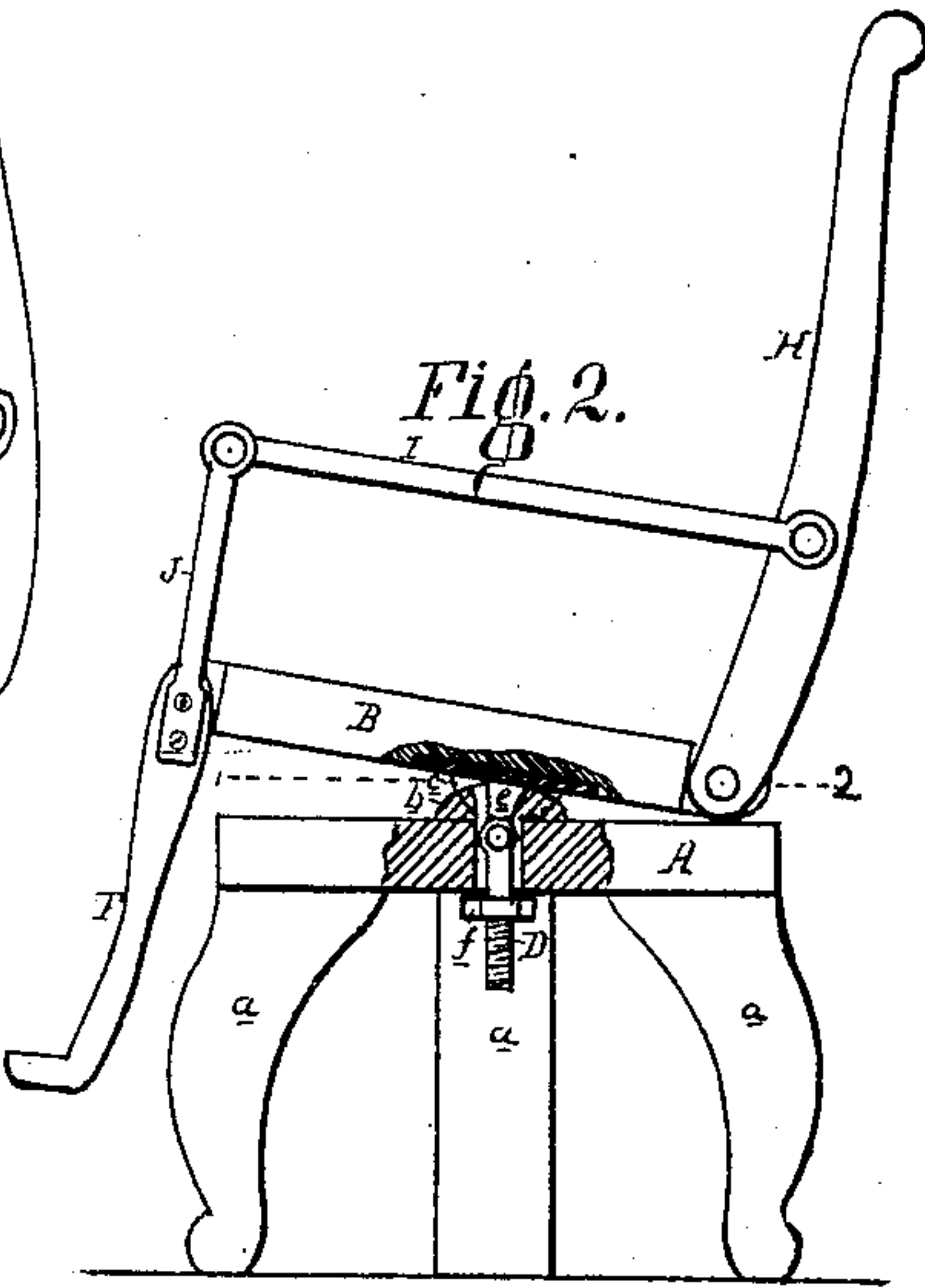
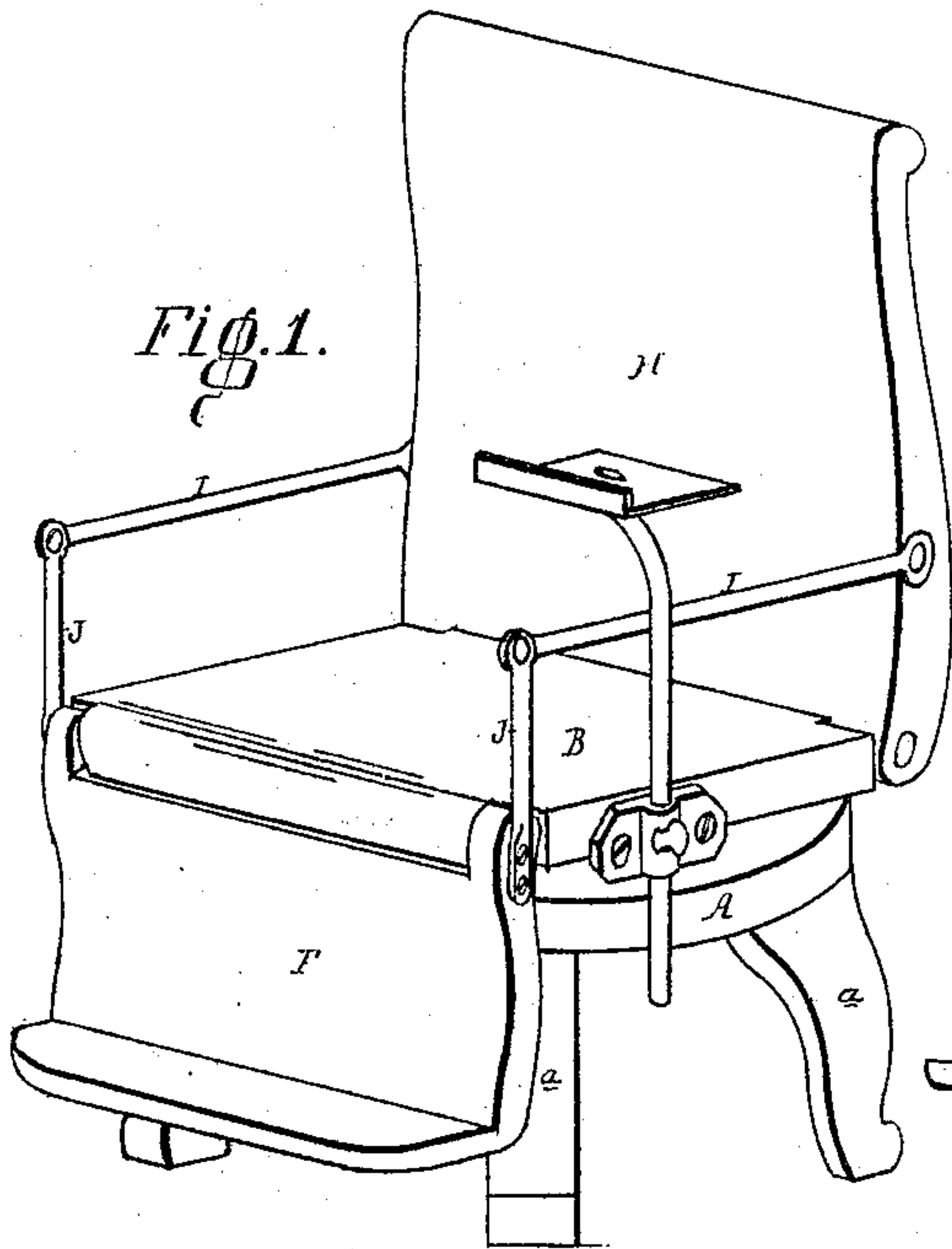


G. Knell,

Invalid Chair.

No. 100,905.

Patented Mar. 15. 1870.



Witnesses: *M. A. Steel*
Jno. B. Harding

G. Knell
by his atty
H. Howson

United States Patent Office.

GEORGE KNELL, OF MOORESTOWN, NEW JERSEY.

Letters Patent No. 100,905, dated March 15, 1870; antedated March 4, 1870.

IMPROVED REVOLVING, ROCKING, AND RECLINING-CHAIR.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, GEORGE KNELL, of Moorestown, Burlington county, New Jersey, have invented a Combined Revolving, Rocking, and Reclining-Chair; and I do hereby declare the following to be a full, clear, and exact description of the same.

My invention consists, firstly, of a chair, the seat of which is so connected to the base or platform to which the legs are secured that it can be caused to either revolve horizontally or to rock upon the said base; and it consists, secondly, in a foot-board and back, so hinged to the adjusted seat of the chair, and connected together by hinged and rigid rods, that, on depressing the back, the foot-board may be raised, and the chair thus converted into a reclining-couch, all of which will be fully described hereafter.

In order to enable others skilled in the art to make and apply my invention, I will now proceed to describe the mode of constructing and using the same, reference being had to the accompanying drawing which forms a part of this specification, and in which—

Figure 1 is a perspective view of my combined revolving, rocking, and reclining-chair;

Figure 2, a side view, partly in section, showing the chair arranged for rocking;

Figure 3, a view of the chair when in use as a reclining-couch;

Figure 4, a rear view;

Figures 5 and 6, perspective views of portions of the chair in different positions;

Figure 7, a sectional plan view on the line 1-2, fig. 2; and

Figure 8, a sectional view of a modification.

Similar letters refer to similar parts throughout the several views.

The base of the chair consists of a circular platform or table, A, supported by legs *a a*, and having upon its upper surface a rounded or semicircular projection, *b*, which extends across the center of the base, nearly to its opposite sides.

The seat B of the chair is supported by this rounded projection *b*, and by semicircular lugs *c c*, which are secured to its under side and rest upon the base A, the seat being secured to the base by means of a central bolt, D, of the latter, which is hinged to a projecting lug, *e*, of the seat, as best observed in fig. 2.

The bolt D is furnished with a nut, *f*, which is kept sufficiently loose to permit the seat to revolve freely upon the base, the lugs *c c*, when the seat is thus rotated, passing around the base, close to the outer edge of the same, and without striking the ends of the projection *b*.

It will be observed, on reference to figs. 4, 5, and 6,

that when the seat is turned to such a position that its lugs *c c* shall be at right angles, or thereabouts, to the projection *b*, the seat will be firmly supported by these lugs and projections, and will be prevented from tilting in any direction, but that, when the lugs are brought on line with the projection *b*, as illustrated in figs. 2 and 6, the support of the said projection will be removed, and the seat may be inclined backward or forward, or rocked upon the base A, the rounded lugs in this case serving as rockers, and the hinged joint at the upper end of the bolt or swivel D permitting such motion of the seat.

Instead of connecting the seat and base together by a hinged bolt, a ball-and-socket joint, such as is illustrated in fig. 8, might be advantageously employed; and instead of having a projection, *b*, on the base, the seat can be furnished with three supporting-lugs, *c*, instead of two, one of these lugs, *c*, being adapted to a recess formed in the base, so as to enable the seat to be inclined or rocked, (see fig. 8.)

The upper portion of the chair, which forms the second part of my invention, is constructed as follows:

To the front of the seat B is hinged the foot-board F, and to the rear of the said seat the back H of the chair, the latter being connected, by hinged rods I I, (which serve also as the arms of the chair,) to rods J J, which project upward from and are rigidly secured to the foot-board F.

In consequence of this method of connecting the above-mentioned parts, a pressure against the back of the chair will depress the same, and at the same time elevate the foot-board, so as to convert the chair immediately into a reclining-couch, such as is shown in fig. 3; and, in order to return the several parts to their original positions, it is only necessary to relieve the pressure upon the back, and to then depress the foot-board.

If desired, devices may be applied to the chair for the purpose of securing the several parts, after adjustment, to either an inclined or upright position.

An adjustable table or book-rest, such as shown in fig. 1, may also be attached to the chair, if desired.

Although I prefer that the chair should be constructed as above described, that is, for reclining, rocking, and revolving, yet it will be evident that, in some cases, the reclining devices may be dispensed with, and the seat of the chair furnished with a rigid back, while in other instances it may be desirable to have merely a reclining-chair, in which case the seat can be secured directly to the legs.

I claim as my invention and desire to secure by Letters Patent—

1. The base A with its elongated projection *b* in combination with the revolving adjustable seat B and its lugs *c c*, substantially as described.

2. The combination, with the said seat, base, rib, and lugs, of a swivel-bolt, D, as specified.

3. The adjustable back H and foot-board F, connected by rods I J, when arranged on an adjustable seat, B, as set forth.

4. The base A having a recess in its upper face, in

combination with the revolving adjustable seat B and its lugs *c c c'*, as described.

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

GEORGE KNELL.

Witnesses:

E. H. BAILEY,
HARRY SMITH.