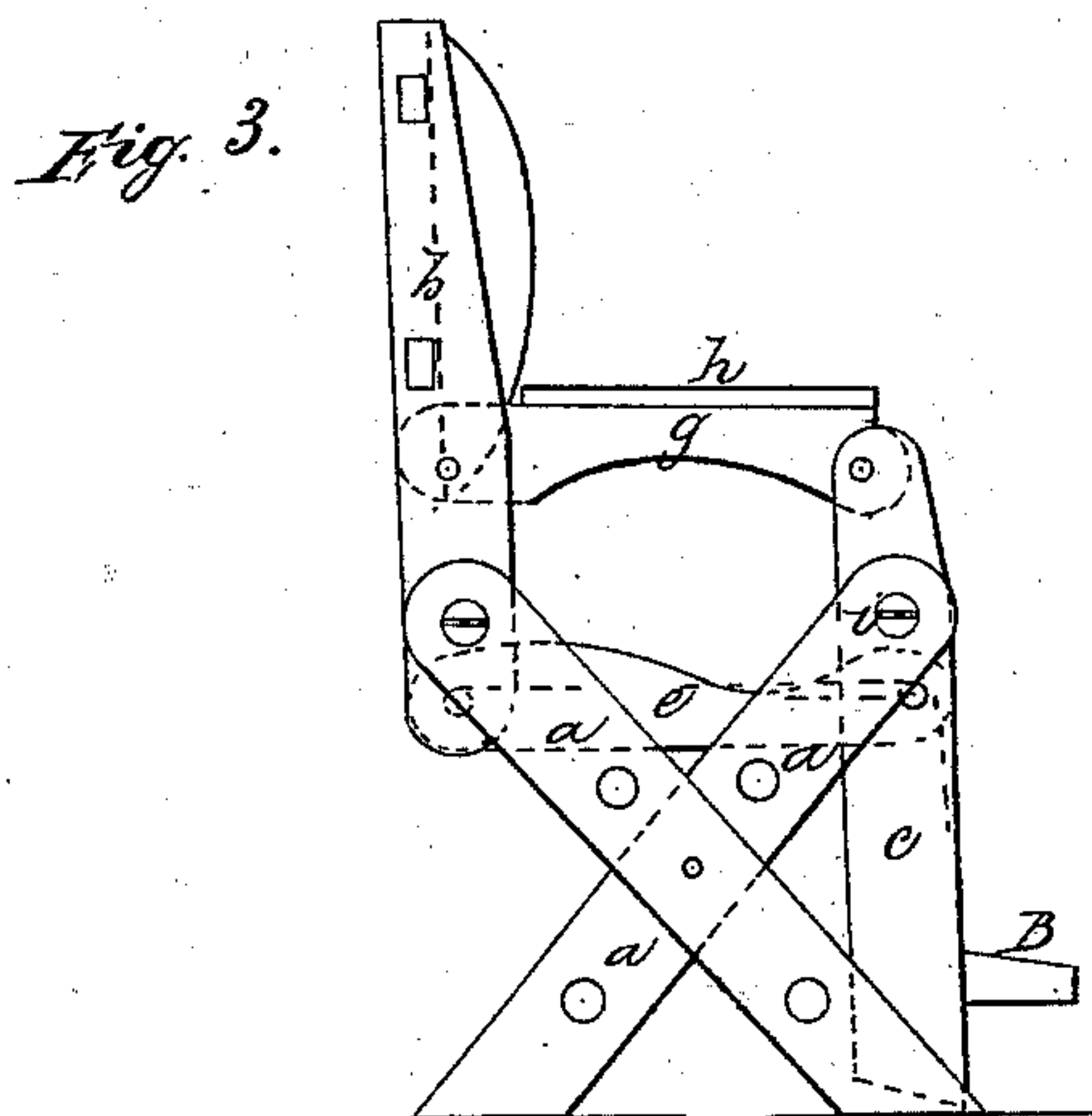
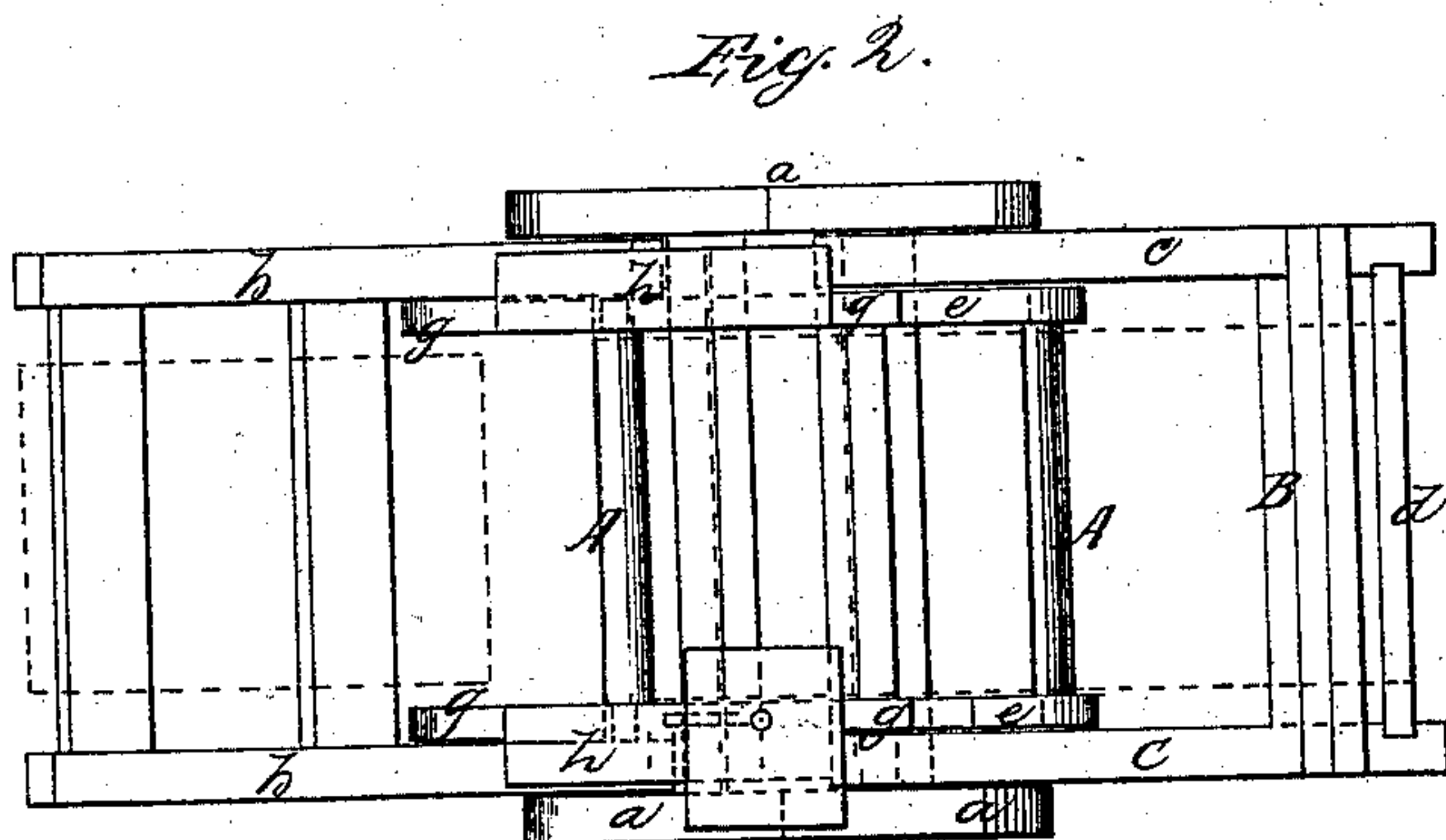
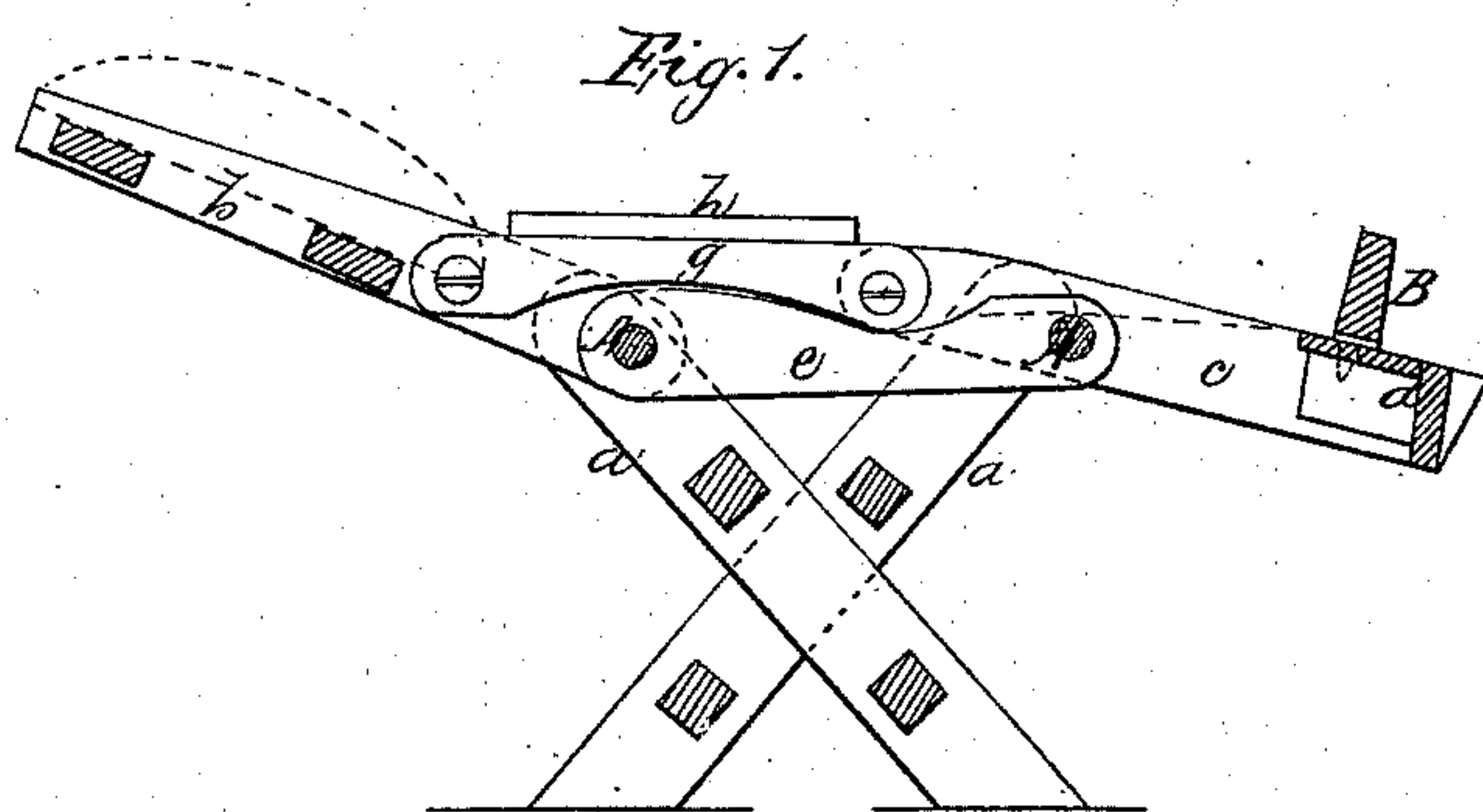


J. B. Duane,
Invalid Chair,

Nº 58,231.

Patented Sep. 25, 1866.



Witnesses:
Edw. Schaefer
Henry Sytner

Inventor.
J. B. Duane
by
Mann, Fenwick & Harwood

UNITED STATES PATENT OFFICE.

J. B. DUANE, OF SCHENECTADY, NEW YORK.

IMPROVED RECLINING-CHAIR.

Specification forming part of Letters Patent No. 58,231, dated September 25, 1866.

To all whom it may concern:

Be it known that I, J. B. DUANE, of Schenectady, in the county of Schenectady and State of New York, have invented a new and Improved Reclining-Chair; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a longitudinal section taken in a vertical plane through the chair. Fig. 2 is a top view of Fig. 1. Fig. 3 is a side elevation of the chair.

Similar letters of reference indicate corresponding parts in the three figures.

The object of this invention is to construct a self-adjustable reclining-chair in such manner that it can be made entirely of wood, so that a chair of this description may be made by any ordinary workman in localities where metal castings could not be conveniently obtained.

The nature of my invention consists in connecting the back and apron-bars of the chair directly to the seat-bars by means of transverse rods, which will serve as pivots for said parts, and also as supports for the cloth seat of the chair, and in so constructing and applying the chair-arms and seat-bars that when the chair is adjusted in a position for reclining upon it said parts will be brought together and made to sustain the chair in such position, all as will be hereinafter described.

To enable others skilled in the art to understand my invention, I will describe its construction and operation.

The legs or standards which support the adjustable portions of the chair consist of four crossed pieces, *a a*, which are secured together by means of transverse bars somewhat after the manner of a wood-horse. To the rear upper ends of this standard the side bars *b b* of the chair-back are pivoted. These bars, *b*, are secured together by cross-pieces, as shown in Fig. 2, and thus form the chair-back.

The side bars *c c* are connected together by a transverse piece, *d*, at their lower ends, and pivoted, near their upper ends, to the front ends of the standards *a a*. These side-bars of the apron or front portion of the chair should be arranged inside of the standard-arms *a a*,

and in a plane with the side bars of the chair-back, for a purpose which will be hereinafter shown.

The seat-bars *e e* are pivoted at their rear ends to the lower ends or short arms of the back-bars *b b*, and at their front ends these bars *e e* are pivoted a little below and in front of the pivots *i i* to the front bars *c c*.

The pivots which connect the longitudinal seat-bars *e e* to the back and front bars are formed on the ends of transverse rods *A A*, which rods serve as the supports for the cloth that is used to form the seat, which cloth is indicated in red lines in the drawings. The lower or front edge of the cloth is secured in a suitable manner to the transverse piece *d*, and the rear edge is secured to the rear rod *A*, so as to form the seat when the chair is in the position shown in Fig. 3, and a lounge-bottom when the chair is adjusted as shown in Figs. 1 and 2.

Directly above the seat-bars *e e*, and in the same vertical plane, are the chair-arms *g g*, which are pivoted at their front ends to the front bars *c c*, and at their rear ends to the back bars *b b*. These arms, *g g*, are pivoted so as to move in parallel lines with the seat-bars, and their lower edges are curved as shown in Figs. 1 and 3. The upper edges of the seat-bars *e e* are also curved as shown in said figures, for the purpose of allowing the back and front parts of the chair to be adjusted in as nearly a horizontal position as possible. When the chair back and front are adjusted in said position the seat and arm bars will be moved in opposite directions longitudinally, and at the same time be moved toward each other. These movements will bring the concave edges of the arms *g g* upon the corresponding convex edges of the bars *e e*, as shown in Fig. 1, and thus afford a firm stay for the chair-back.

The chair-arms *g g* being applied inside of the back and front bars, I apply arm-rests *h h* to said arms, *g*, which project out and cover the joints, as shown in Fig. 2.

The foot-board *B* is applied to the front bars by means of studs projecting from it, several holes being made to admit of the adjustment of this foot-rest to suit different persons.

The chair thus constructed may be cushioned

or upholstered in any suitable manner, so that it may not only be comfortable, but present a neat and handsome appearance.

It will be seen from an inspection of the drawings that the cross-pieces constituting the standards of the chair, the front bars, the back bars, the arms, and the seat-bars, are all made from straight strips of wood of an equal width and thickness, which can be readily worked out by machinery, cut of the required length, and then put together with very little labor and expense in comparison with chairs of this class which have hitherto been made.

It is obvious that the upper edges of the seat-bars *e e* and the lower edges of the arms *g g* might be made straight instead of curved, and still, to a very great extent, answer the

purpose desired, viz., having the chair capable of being adjusted to nearly a horizontal position.

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

Pivoting the seat-bars to the front and back bars of the chair by means of the transverse rods *A A*, for the purpose described, in combination with the arms *g g*, arranged directly over said bars *e e*, and pivoted to the inner sides of the front and back bars, substantially as described.

J. B. DUANE.

Witnesses:

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