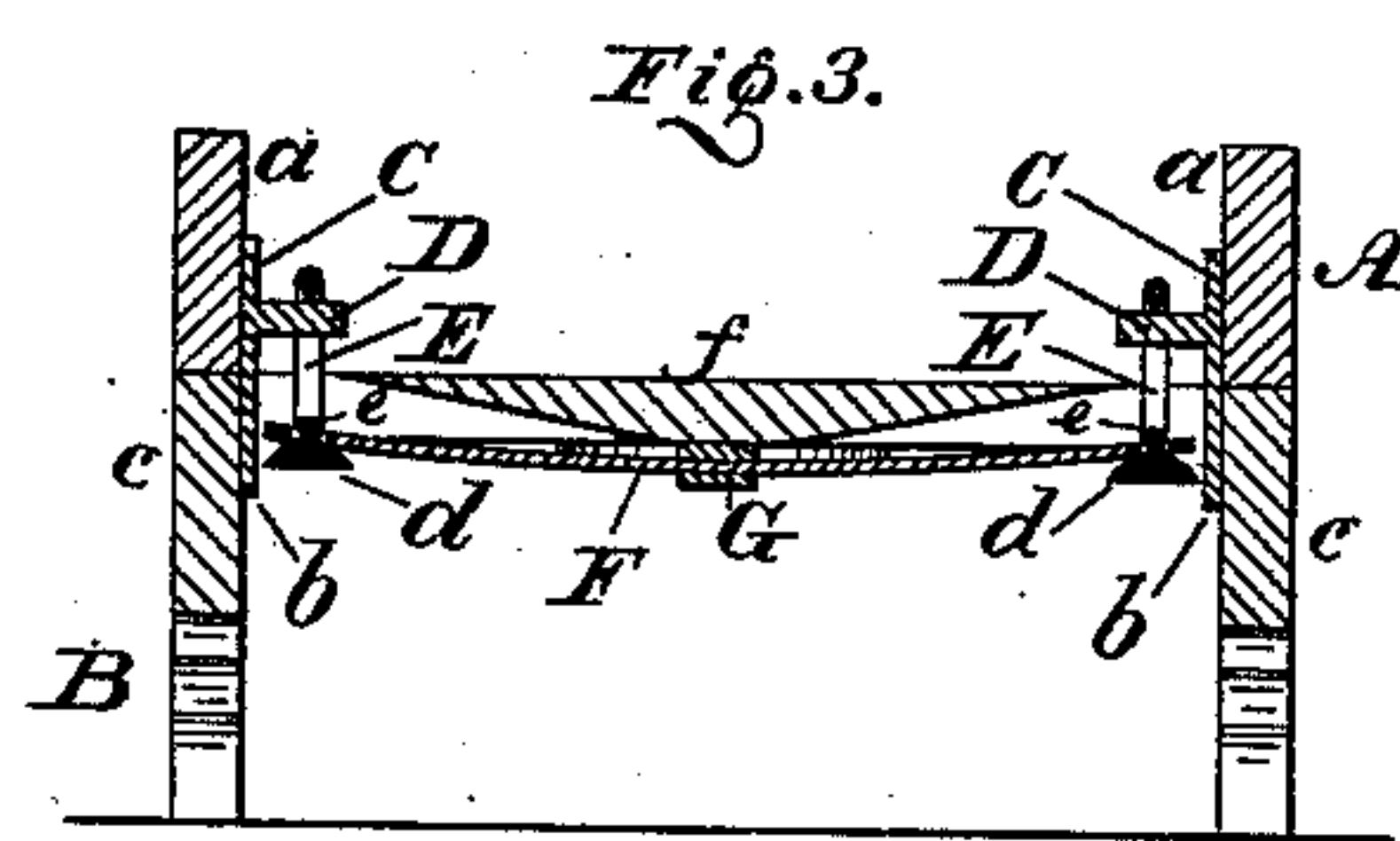
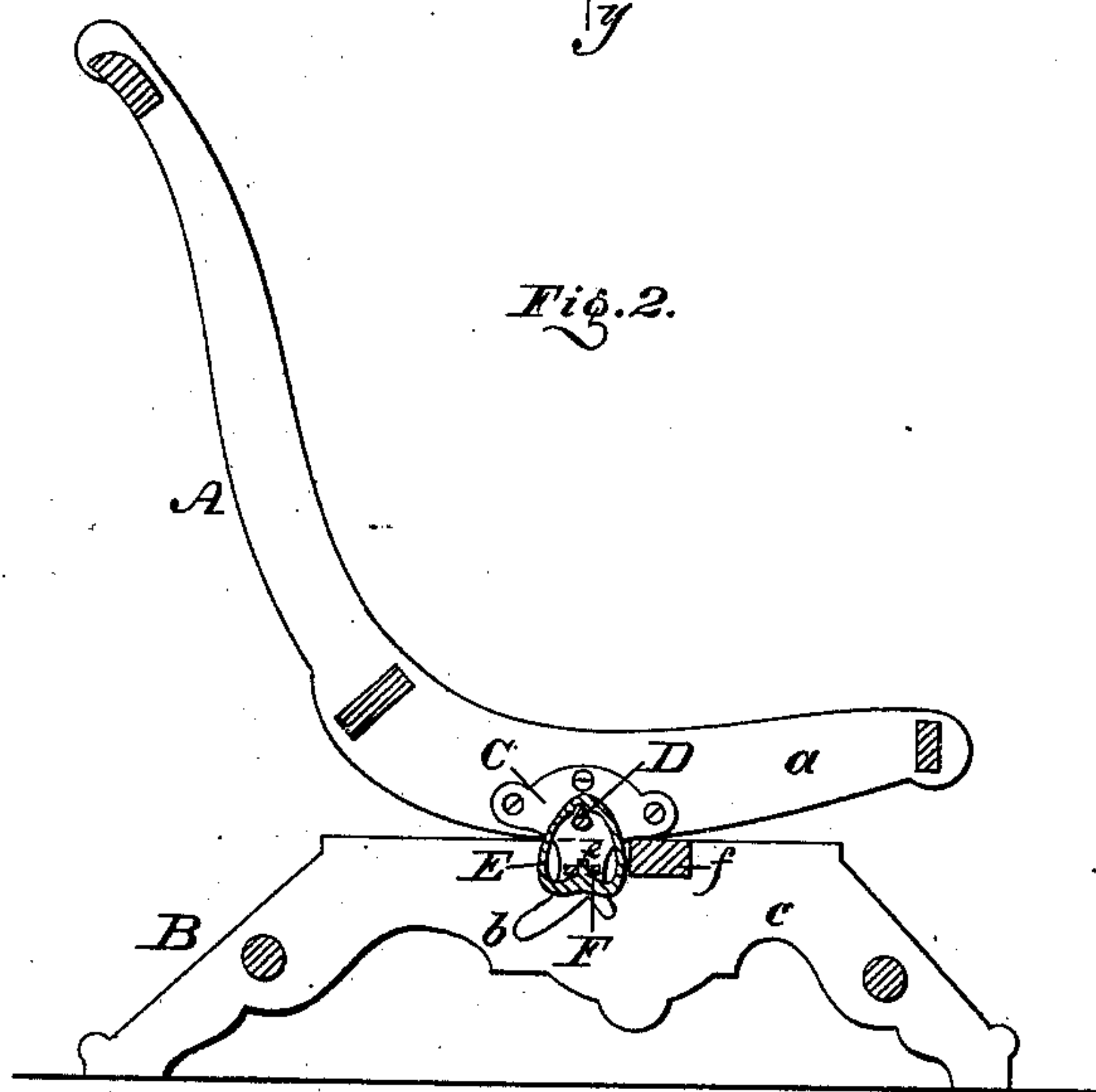
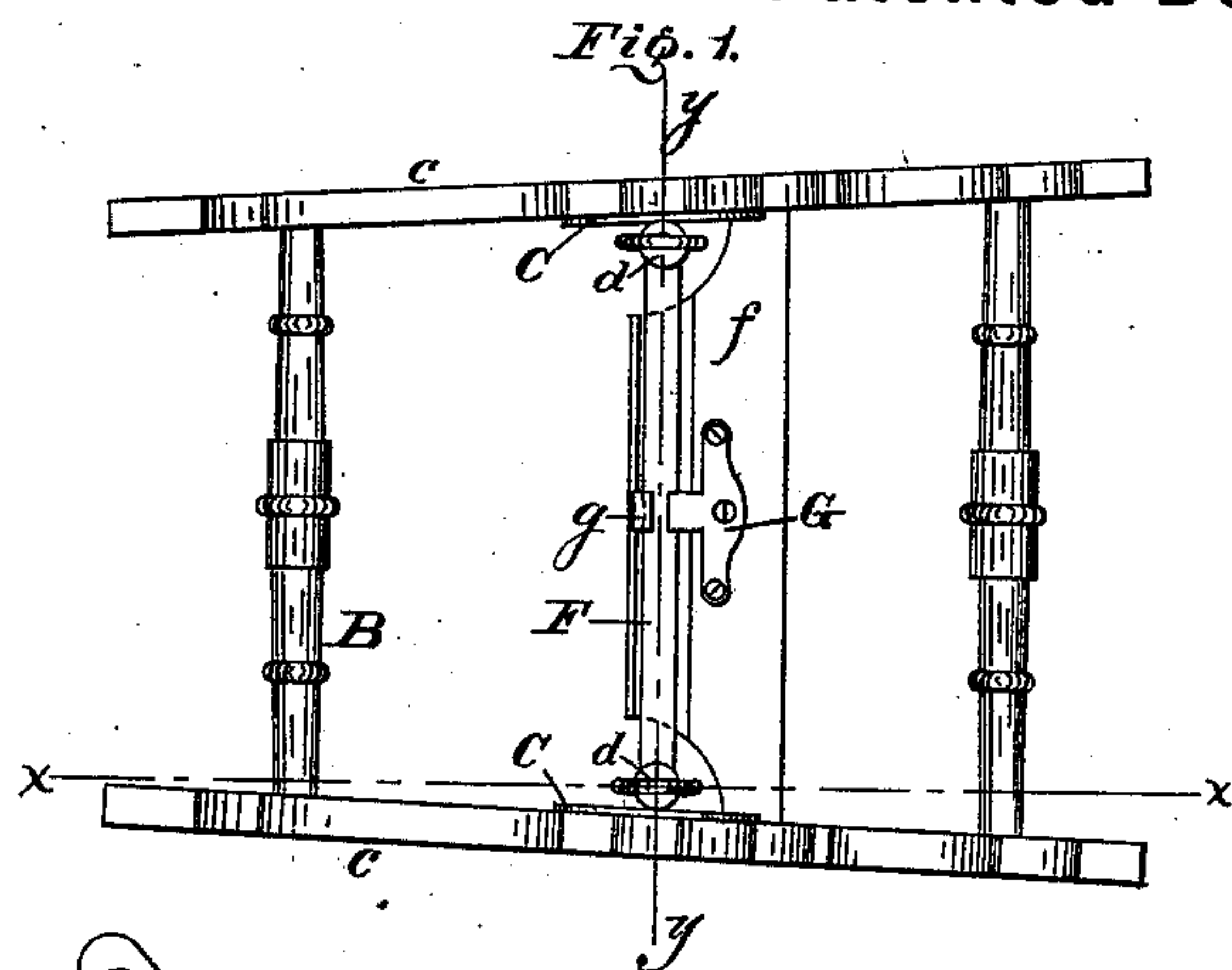


(No Model.)

W. H. HAMAN.
Spring Rocking Chair.

No. 235,232.

Patented Dec. 7, 1880.



Witnesses:

A. P. Grant,

W. F. Kircher

Fig. 4.



Inventor:

Wm H. Haman,

by John A. Diederichsen,

ATTORNEY.

UNITED STATES PATENT OFFICE.

WILLIAM H. HAMAN, OF PHILADELPHIA, PENNSYLVANIA.

SPRING ROCKING-CHAIR.

SPECIFICATION forming part of Letters Patent No. 235,232, dated December 7, 1880.

Application filed March 27, 1880. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. HAMAN, a subject of Prussia, having declared intentions of becoming a citizen of the United States, and residing in the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Spring Rocking-Chairs, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a bottom view of the rocking-chair embodying my invention. Fig. 2 is a vertical section in line *x x*, Fig. 1. Fig. 3 is a transverse vertical section in line *y y*, Fig. 1. Fig. 4 is a horizontal section of a detached part enlarged.

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

My invention consists of the rocking and base portions of the chair connected by a spring, which is secured to the base portion, and has its ends rested on hemispheres formed with or secured to stirrups, which are suspended from pins projecting from brackets attached to the rocking portion.

Referring to the drawings, A represents the rocking portion of the chair, and B the base, on which said portion A is rested. From the inner sides of the rockers *a* are secured brackets C, the feet *b* of which project downwardly on the inner faces of side pieces, *c*, of the base B, and projecting inwardly from each bracket is a pin or stud, D, from which is suspended a stirrup, E, consisting of a metal frame having at its base a semi-cylindrical bulb or hemisphere, *d*, from the center of which rises a pin or stud, *e*.

F represents a flat metal spring, which is secured centrally to the connecting cross-piece *f* of the base B by means of a bracket, G, whose lips embrace the spring, the part of the spring in contact therewith being slightly cut away or notched, as at *g*, to prevent shifting or side play of the spring. On each end of the spring is an opening, which receives the respective pin or stud *e* of the stirrup E.

It will be seen that I provide a single spring, which assists the operation of rocking, and its ends ride over the bulbs or hemispheres *d*, which prevent strain on said ends and breakage thereof, it being noticed that when the chair is rocked the spring curves and is subjected to torsion, wherefore the ends of the spring bearing on the curved surfaces of the bulbs or hemispheres conform to said surfaces, and are thus guarded and prevented from injury.

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

1. The combination, with the rocking portion A and base B, and the spring F, having perforated ends, of the suspended stirrups E, provided with bulbs or hemispheres *d*, substantially as and for the purpose set forth.

2. The portion A, base B, bracket C, with pins D, stirrups E, with bulbs *d* and pins or studs *e*, spring F, having slotted ends, and bracket G, combined and operating substantially as and for the purpose set forth.

WILLIAM H. HAMAN.

Witnesses:

JOHN A. WIEDERSHEIM,
W. F. KIRCHER.