

M. Eberhard,

Invalid Chair,

N^o 16,006.

Patented Nov. 4, 1856.

Fig. 3.

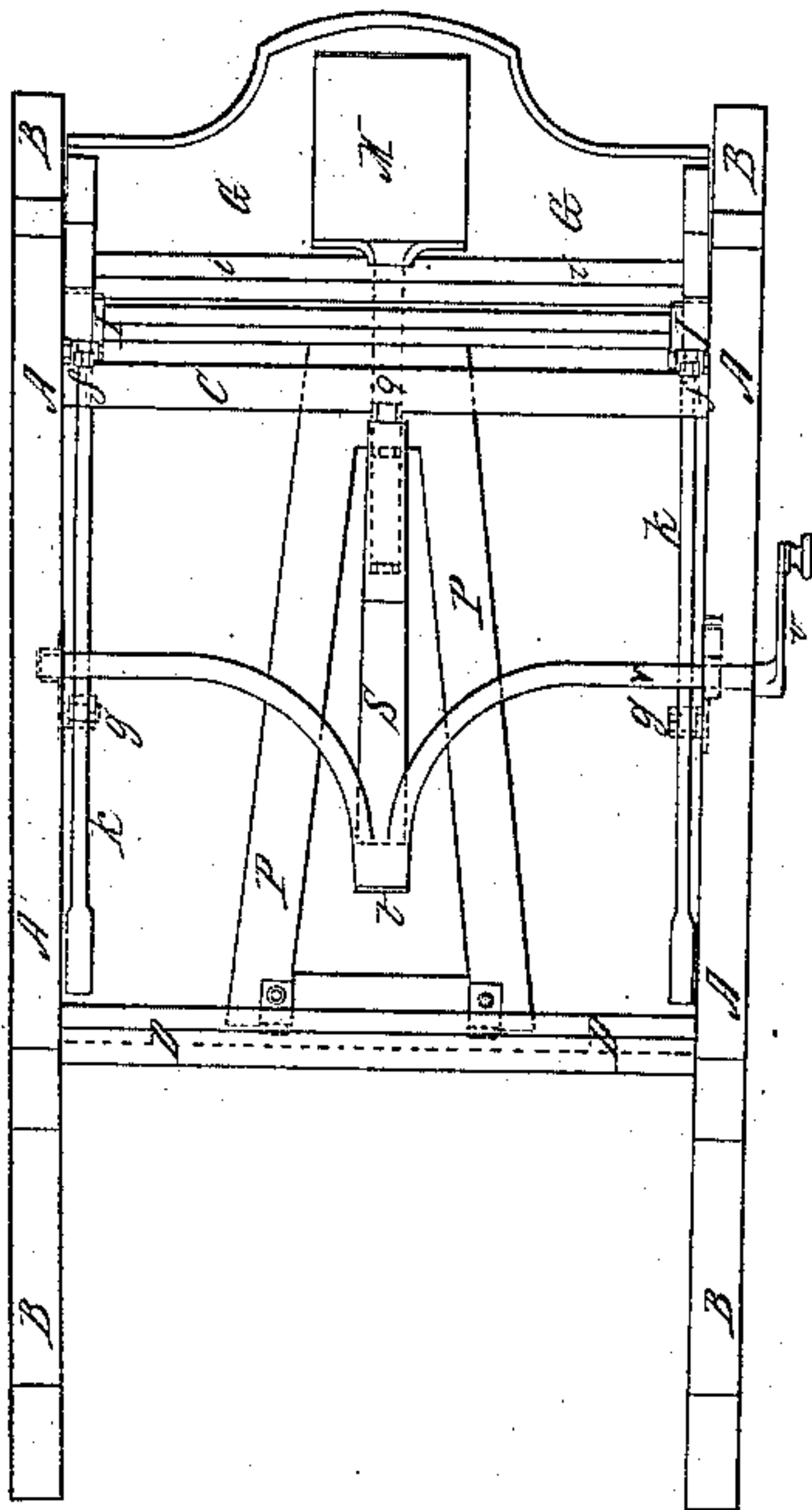


Fig. 4.

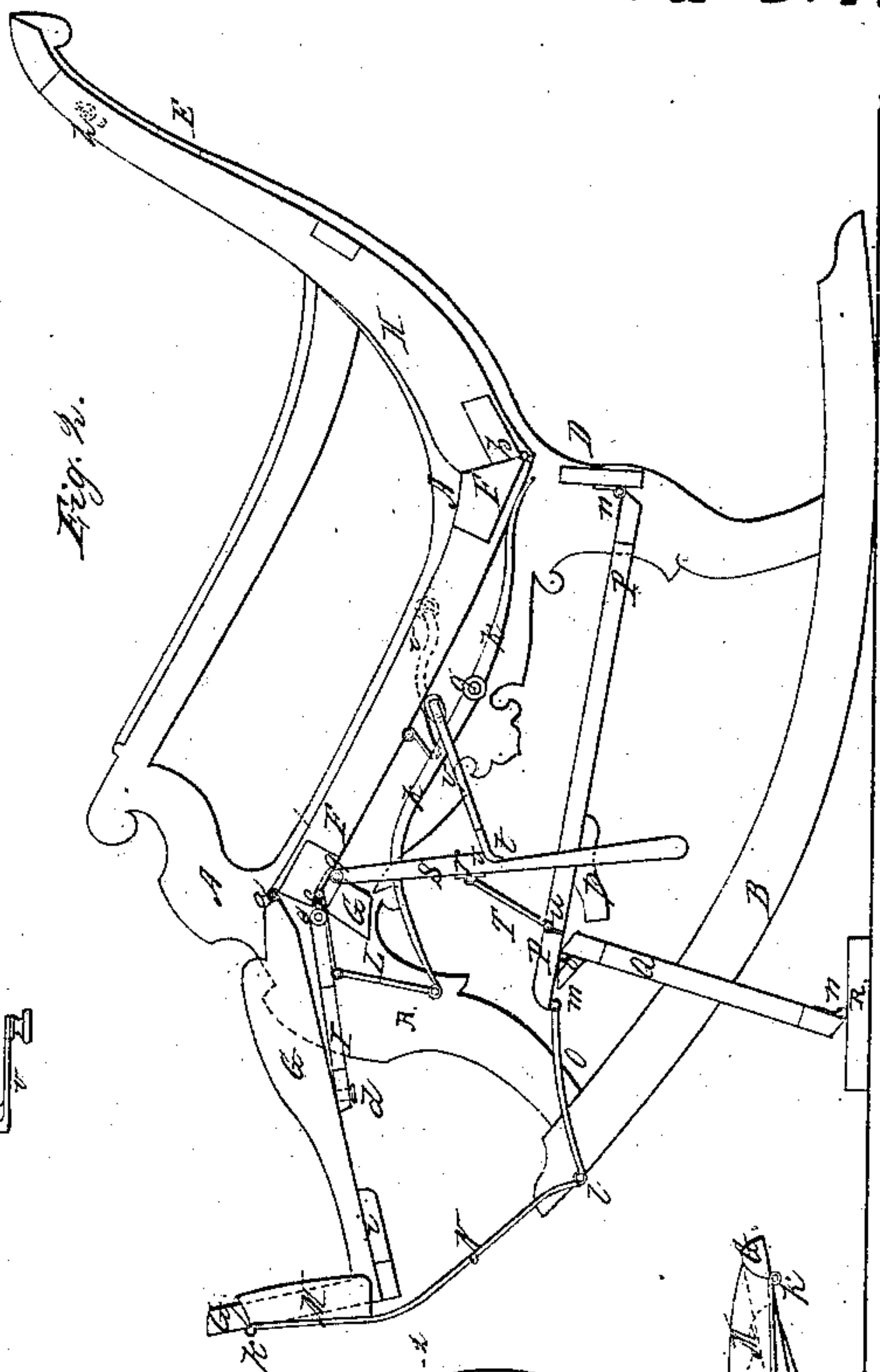
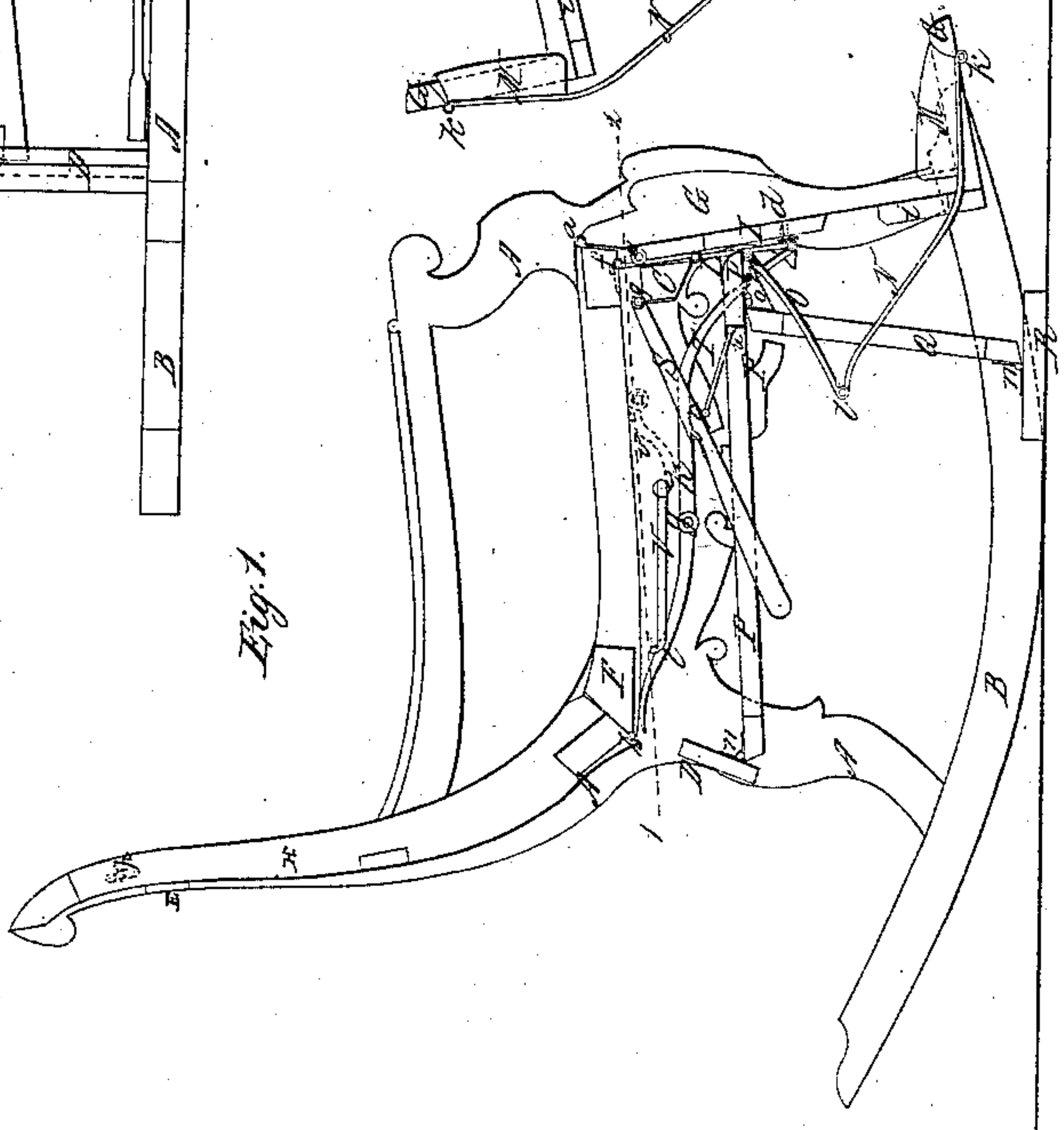


Fig. 1.



Witnesses.
Theodore Bergner
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Inventor:

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UNITED STATES PATENT OFFICE.

MARTIN EBERHARD, OF PHILADELPHIA, PENNSYLVANIA.

ROCKING-CHAIR.

Specification of Letters Patent No. 16,006, dated November 4, 1856.

To all whom it may concern:

Be it known that I, MARTIN EBERHARD, of the city of Philadelphia and State of Pennsylvania, have invented a new and Improved
5 Chair for Rocking and Reclining; and I do hereby declare, that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing and to the figures and letters
10 of reference marked thereon.

My invention relates firstly: to an improved adjustable foot rest, which can be raised and lowered to any desirable position, by the foot, and which is combined with the
15 seat of the chair in such a way, that the weight of the occupant will retain it in any given position; secondly: to a new mode of keeping the chair in a rocking motion by a slight action of the heel, without
20 other exertion to the body and without bringing the foot to the ground; and thirdly: to a new mode of giving the chair a reclined position by means of a small crank, which is in convenient reach for the
25 occupant of the chair and by a partial turn causes its shaft to act upon levers in such a way, that they will raise up the front part of the chair and thereby give it a reclined position. (By turning the crank in the op-
30 posite direction, the chair at once assumes the nature of a rocking chair).

In order to enable others skilled in the art to make and use my invention I will now proceed to describe its construction and
35 operation.

On reference to the drawing, which forms a part of this specification, and in which the same letters of reference allude to similar parts throughout the several view: Fig-
40 ure 1 is a sectional side elevation of my improved chair for rocking and reclining; Fig. 2 is the same view of the chair in its reclined position; Fig. 3 is a sectional plan of the chair on the line 1—2 Fig. 1.

45 A A are the two side frames of the chair, secured at the bottom to the runners B, B, and connected together in front by the crosspiece C, and at the back by pieces D and E. F is the seat of the chair, to which
50 by means of hinges *a*, is attached the adjustable foot rest G and to which is also connected by hinges *b* the back H.

The two side pieces of footrest G are provided with pins *d*, actuating upon levers
55 I, which have their fulcrums at *e* and connect to the seat F at joint *f*, thereby causing

it to rise or fall, when the position of the footrest is changed.

The double levers K, K have their fulcrums at *g* and are at one end connected to
60 levers I by means of links L, bearing at the other end against the bottom of the back of seat G, the seat being by these means made to rise or lower the same at the back as in front, carrying with it the back H, which
65 for this purpose is provided near the top with pins *h*, sliding in slots in the side-frames A, A. The weight of the occupant of the seat causes it to act upon the short arm of levers I in such a way as to counter-
70 balance the weight of the footrest in any position it may be placed by the foot of the occupant. It therefore requires but a slight upward dragging with the foot against the footrest G to elevate it to any desired
75 height, while a moderate pressure of the heel against its crosspiece *i* will bring it down.

The footboard or rest G is cut out in the middle, to admit the treadle M, radiating on
80 hinges *k*. To the bottom of this treadle is secured the arm N, connected at joint *l* to link O, which at its opposite joint *m* is attached to a horizontal frame P, which frame is connected by hinges *n* to the crosspiece D
85 and near its other end rests on the upright Q, to which it is also jointed by hinges and which by means of joint *n'* is attached to a small floor plate R, which merely rests on the floor without being otherwise secured,
90 therefore allowing the chair to be moved about at pleasure.

To keep the upright Q always within the limits for the proper action of the parts connected with it, it is provided at its top with
95 a projection *o*, which, when bearing against the frame P, prevents the upright from inclining farther toward the back of the chair, while the stop *p* limits its inclination in the
100 opposite direction.

When a rocking motion is imparted to the chair, the treadle M radiates on its hinges
105 *k*, and when pressed against by the heel during its descent, effects by means of its arm N and link O a backward pressure upon the frame P, thereby assisting the backward movements of the chair to a sufficient extent to keep it in motion, the extent or rapidity of motion being regulated by the amount of pressure applied to the treadle during the
110 backward movements of the chair.

At the middle of the crosspiece C is the

fulcrum q of the lever S , to which is connected at r the link T , which joints at its opposite end u to the horizontal frame P . This lever S , during the rocking of the chair
5 receives a slight radiating movement and is then of no purpose. When however the occupant of the chair desires to place himself in a stationary backward reclining position, he turns the crank U in the direction of the
10 arrow (Fig. 1). This crank gives motion to its shaft V , which has its bearings in the side frames A A , and in the center is bent out in the shape of a double crank (as shown at Fig. 3), to form the face t , which coming
15 in contact with the lower end of the lever S , causes it to attain the position shown in Fig. 2, when it is prevented from turning farther by an offset v in the lever. The lever S and link T forming a knuckle joint,
20 with a stationary bearing at u , cause the front part of the chair to be raised by the turning of the crank U , until it arrives at the position shown at Fig. 2.

Whenever the occupant desires to change
25 his position, he turns the crank in the oppo-

site direction to the arrow, when the chair at once assumes its previous nature.

Having now described the nature of my invention, I wish it to be understood, that I do not desire to confine myself to the exact
30 form of the frame or working parts; but

What I do claim, and desire to secure by Letters Patent, is:

1. The lever I , the link L and lever K in combination with the seat F and adjustable
35 footrest G , the whole operating substantially in the manner and for the purpose set forth.

2. The treadle M , its arm N , and link O in combination with the frame P and foot-
40 rest G , operating substantially as described and for the purpose specified.

3. The crankshaft V , the lever S and link T , in combination with the crosspiece C and frame P , substantially in the manner
45 and for the purpose set forth.

MARTIN EBERHARD.

Witnesses:

THEODORE BERGNER,
CONRAD FRÄNKEL.