

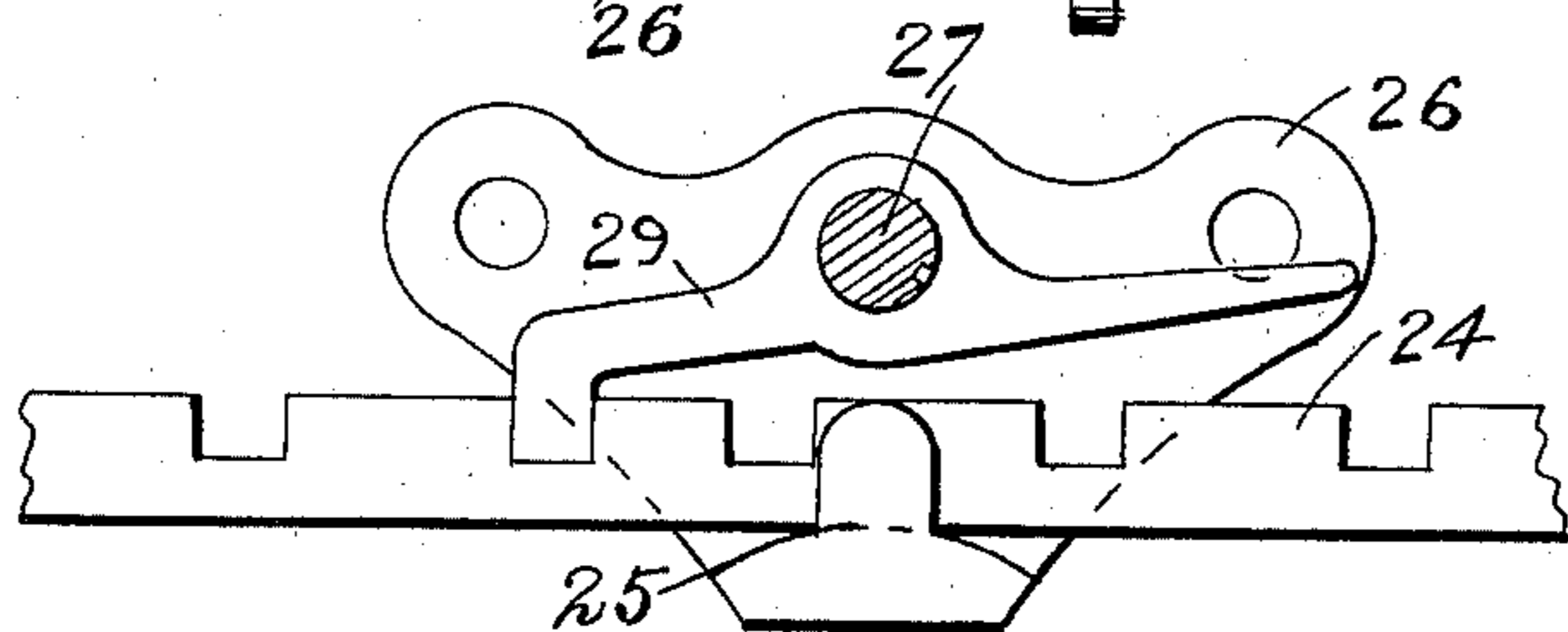
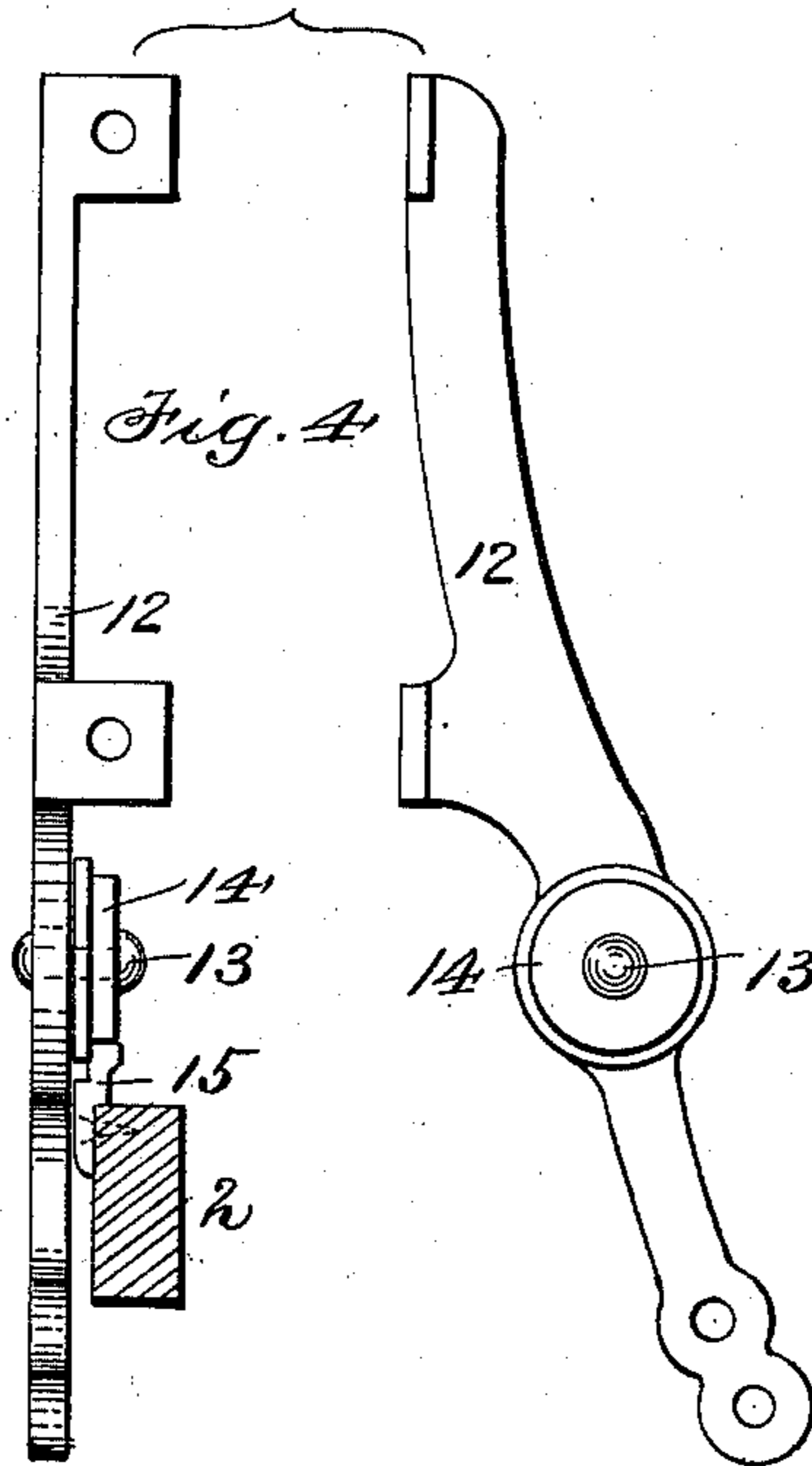
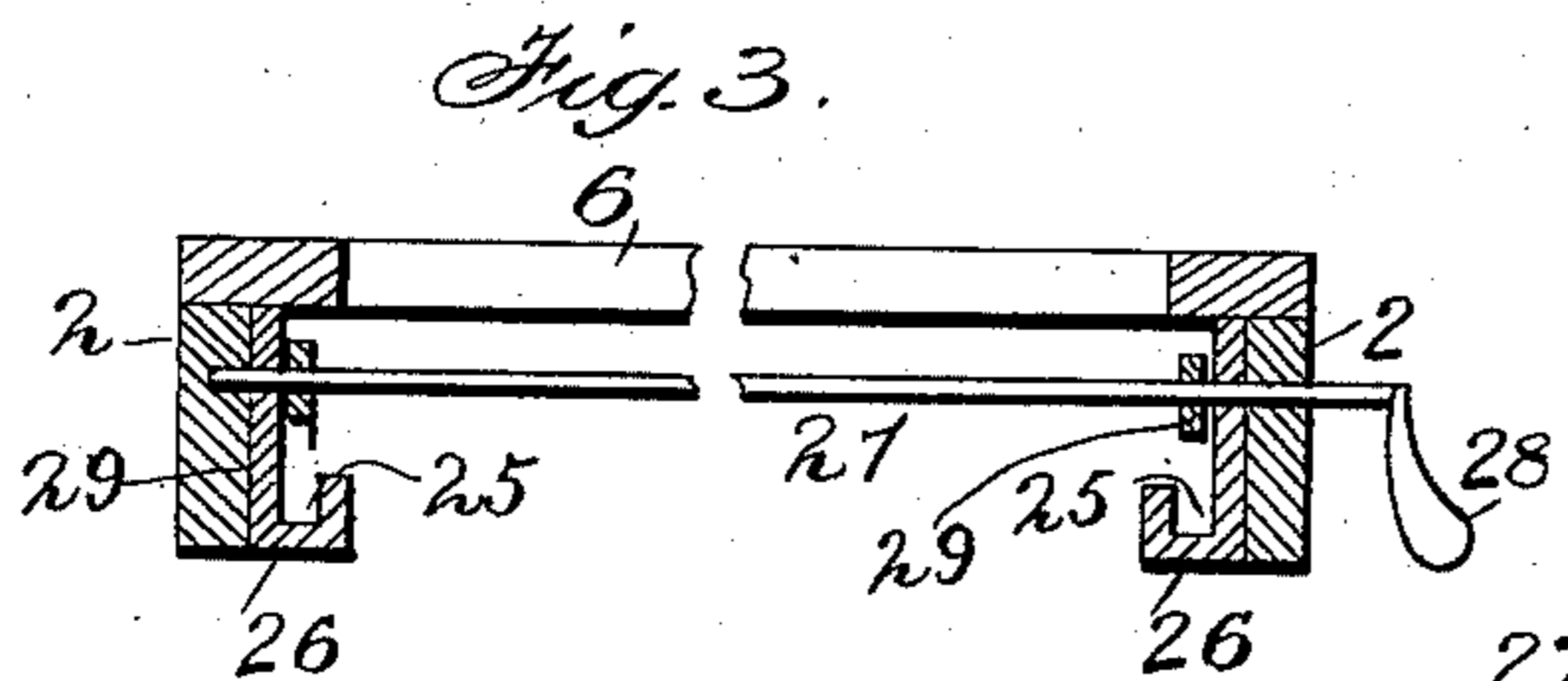
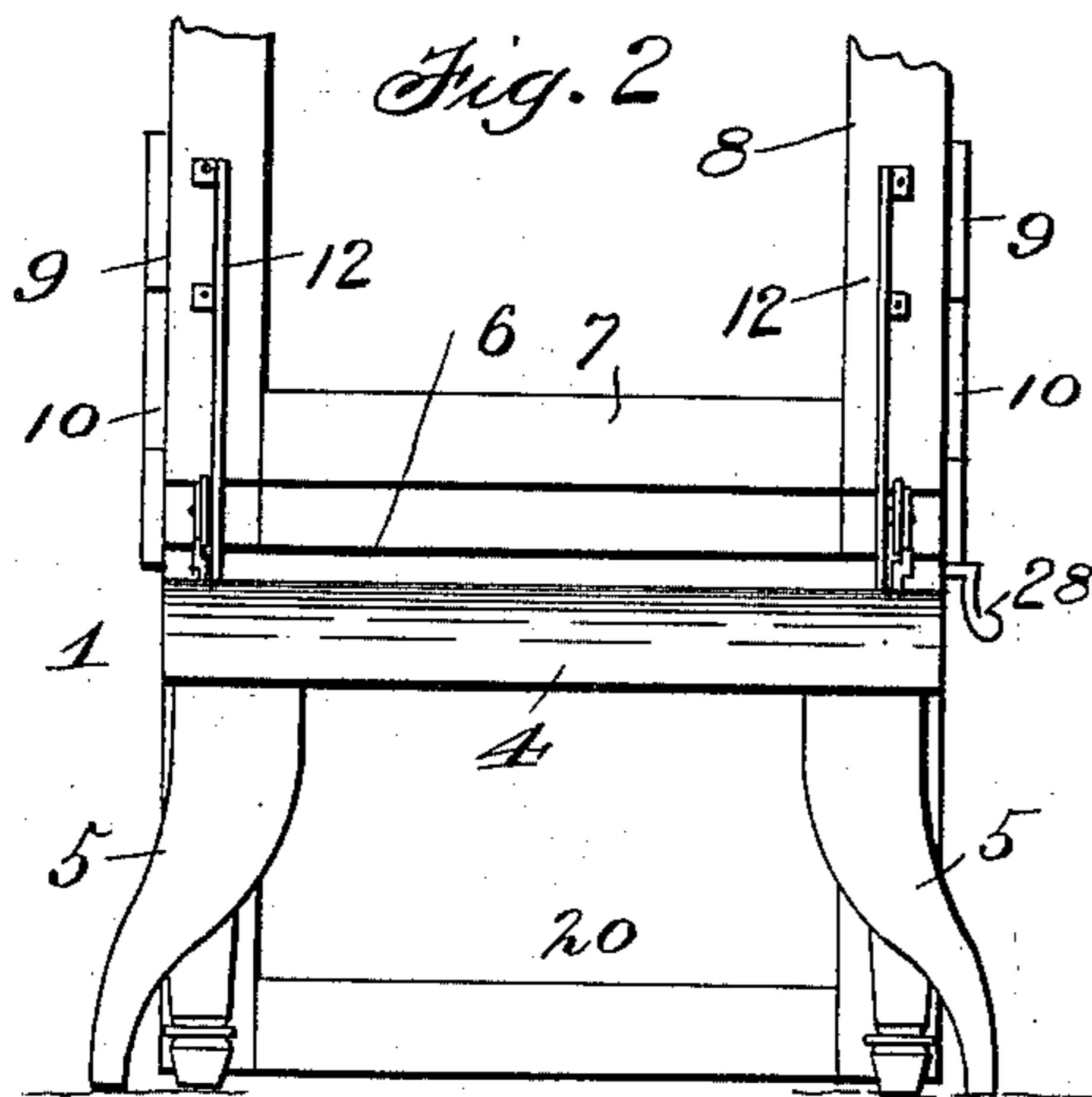
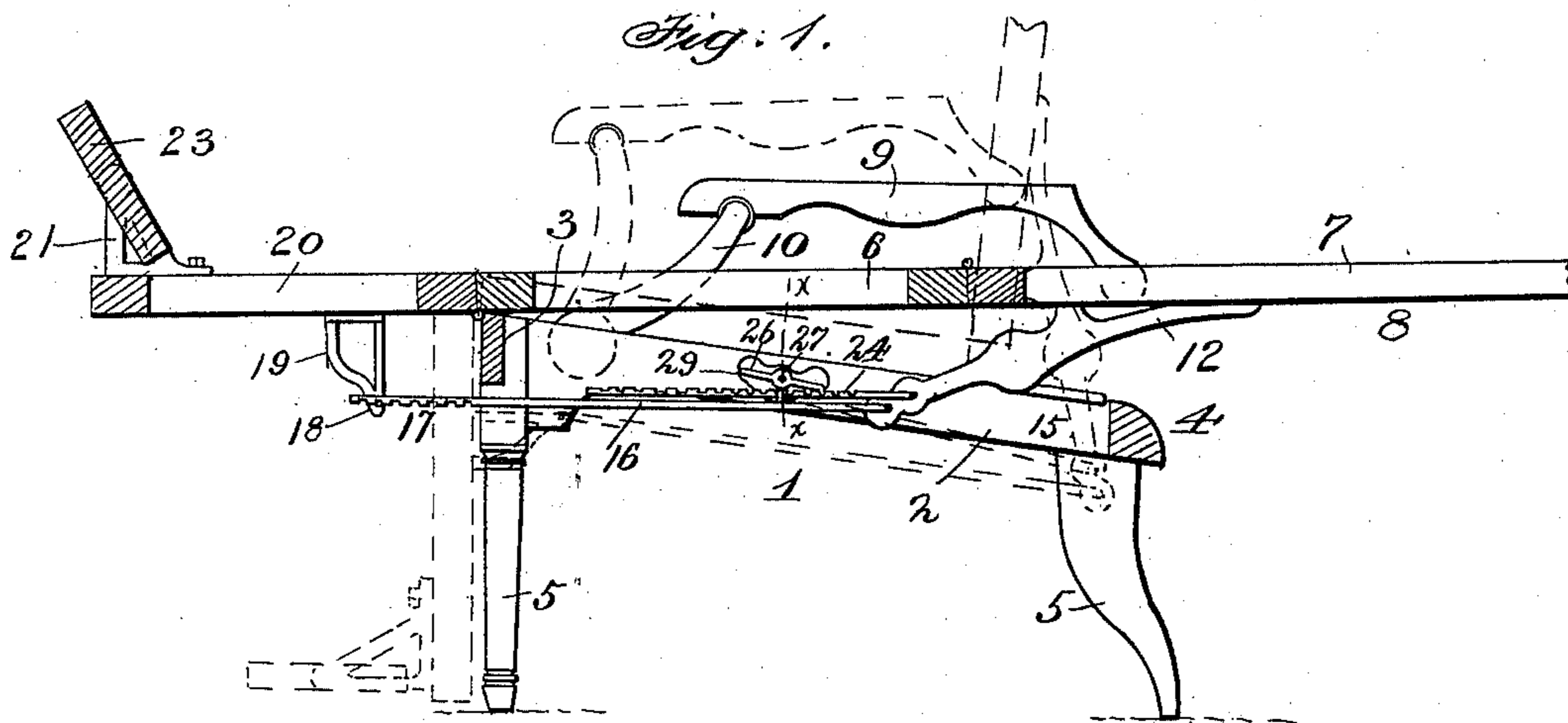
No. 610,925.

Patented Sept. 20, 1898.

M. J. SPRIGEL.  
RECLINING CHAIR.

(Application filed Mar. 13, 1897. Renewed Feb. 9, 1898.)

(No Model.)



Witnesses:  
Frank L. Omand  
J. L. Coombs

Inventor:  
Marcus J. Sprigel,  
by Louis Baggett & Co.  
Attorneys.

# UNITED STATES PATENT OFFICE.

MARCUS J. SPRIGEL, OF EASTON, PENNSYLVANIA, ASSIGNOR OF ONE-HALF  
TO JACOB D. UPDEGROVE, OF SAME PLACE.

## RECLINING-CHAIR.

SPECIFICATION forming part of Letters Patent No. 610,925, dated September 20, 1898.

Application filed March 13, 1897. Renewed February 9, 1898. Serial No. 669,713. (No model.)

*To all whom it may concern:*

Be it known that I, MARCUS J. SPRIGEL, a citizen of the United States, and a resident of Easton, in the county of Northampton and State of Pennsylvania, have invented certain new and useful Improvements in Reclining-Chairs; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to reclining-chairs of that class or description which comprise in their structure a seat and a back and foot-rest hinged thereto in such manner that they may be brought into line with each other in a slightly-inclined position, so as to form a couch.

The object of the invention is to provide improved means whereby when the back is lowered the foot-rest will be raised and the rear end of the seat slightly elevated, thus producing a reclining-chair, and when the back is again raised to an approximately vertical position the seat and foot-rest will be lowered, so as to form an ordinary or upright chair.

The invention consists, essentially, in the novel construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a longitudinal sectional view of a chair constructed in accordance with my invention. Fig. 2 is a rear view of the same. Fig. 3 is a cross-section on the line  $x x$ , Fig. 1. Figs. 4 and 5 are detail views.

In the said drawings the reference-numeral 1 designates the chair-frame, comprising the side rails 2, front rail 3, back rail 4, and legs 5.

The numeral 6 designates the seat, hinged at its front end to the front rail 3, and to its rear end is hinged the back 7. Pivoted to the side rails 8 of the back are the side arms 9, the front ends of which are pivotally connected with bars 10, which in turn are pivoted to the side rails 2. Secured to the rear side of the said side rails 8 of the back 7 are downwardly-extending levers 12, provided on

their inner sides, at or near the center, with studs 13, on which are journaled flanged wheels 14, which move or roll on plates 15, secured to the upper sides of the side rails 2, near the rear ends thereof. To the lower ends of said levers are pivoted forwardly-extending bars 16, having notches 17 at their front ends, which engage with pins 18, carried by brackets 19, secured to a foot-rest 20, which is hinged to the front end of the seat 6. The front end of said foot-rest is provided with a bracket 21 at each side, in which is journaled a foot-board 23. Also pivoted to said levers 12, near the lower ends thereof, are forwardly-extending rack-bars 24, which are supported in ways 25 of brackets 26, secured to the inner sides of the side rails 2. Journaled in said brackets is a transverse shaft 27, one end of which passes through one of the side rails 2 and is provided with an operating-crank 28. Secured to this shaft near each end is a pawl 29, adapted to engage with the teeth of the rack-bar 24.

The operation is as follows: Supposing the chair is in use as an upright chair, as seen by the dotted lines in Fig. 1, and it is desired to convert it into a reclining-chair, then the shaft 24 is turned by its crank so as to throw the pawls 29 out of engagement with the rack-bars and releasing the latter. The back is now lowered, the wheels 14 on the levers 12 moving forwardly on the plates 15 until the back and levers assume the proper inclined positions. At the same time the rear end of the seat will be elevated and the bars 16 will be moved forward, raising the foot-rest, when the parts will assume the positions shown in the full lines, Fig. 1.

While I have shown in the full lines in Fig. 1 the back, seat, and foot-rest in line with each other, it is obvious that they may be at an angle to each other which will correspond with the inclination of the back and will be held in such position by the before-mentioned pawls engaging with the rack-bars connected with the levers. It will also be noted that the foot-rest can be adjusted irrespective of the seat and back by disengaging the pins 18 from the notches in the bars 16 and engaging them with other notches therein.

Having thus described my invention, what I claim is—

1. In a reclining-chair, the combination with the frame, the seat hinged thereto, the hinged  
5 foot-rest and the hinged back, of the levers secured to said back, the wheels journaled thereto, the plates upon which said wheels work, and the bars connected with said levers and with the foot-rest, substantially as de-  
10 scribed.

2. In a reclining-chair, the combination with the frame, the seat hinged thereto, the hinged foot-rest and the hinged back, of the levers secured to said back, the wheels journaled  
15 thereto, the plates on which said wheels move, the bars connected with said levers and foot-rest, the rack-bars pivoted to said levers, the supporting-brackets, the shaft and the pawls secured thereto, substantially as described.

3. In a reclining-chair, the combination with 20 the frame, the seat hinged thereto, the hinged foot-rest and the hinged back, of the levers secured to said back, the wheels journaled thereto, the plates on which said wheels travel, the bars pivotally connected with said levers, 25 having notches in their front ends, and the pins connected with the foot-rest engaging therewith, whereby said foot-rest can be adjusted automatically by the movement of the seat and back or independently thereof, sub- 30 stantially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

MARCUS J. SPRIGEL.

Witnesses:

AUG. SAUSSER,  
H. W. CLARK.