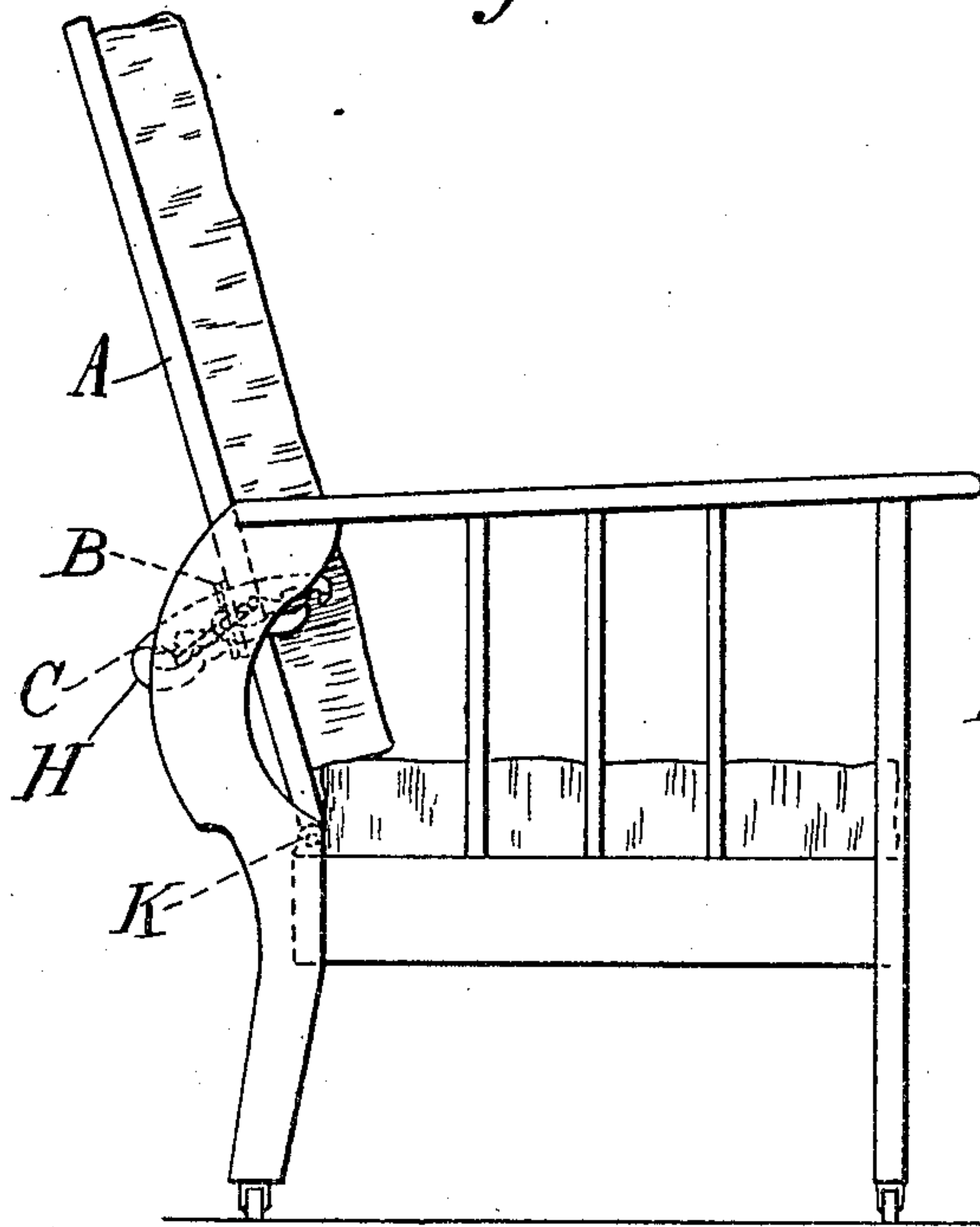


A. B. DISS.  
ADJUSTABLE CHAIR.  
APPLICATION FILED APR. 24, 1909.

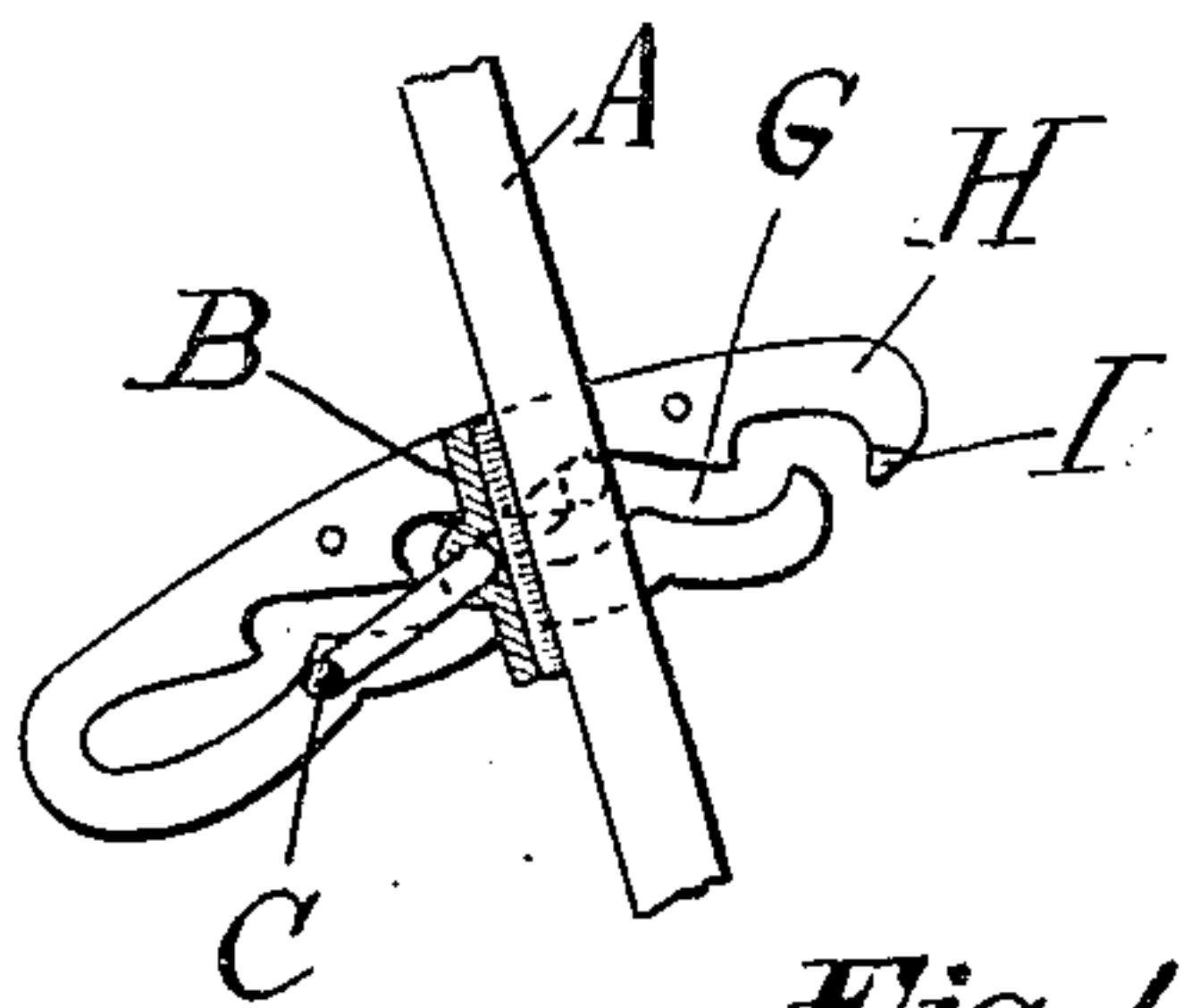
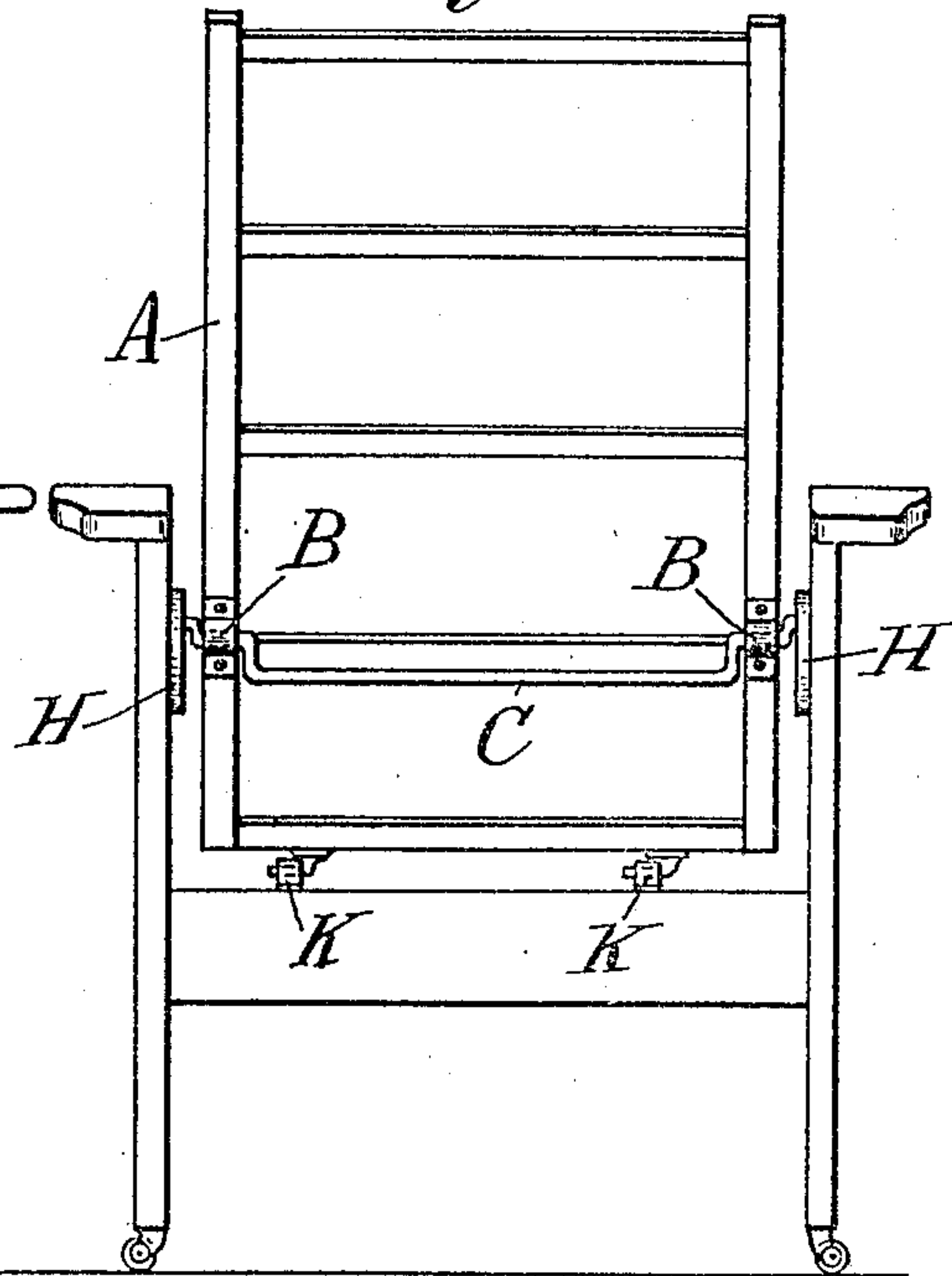
943,920.

Patented Dec. 21, 1909.

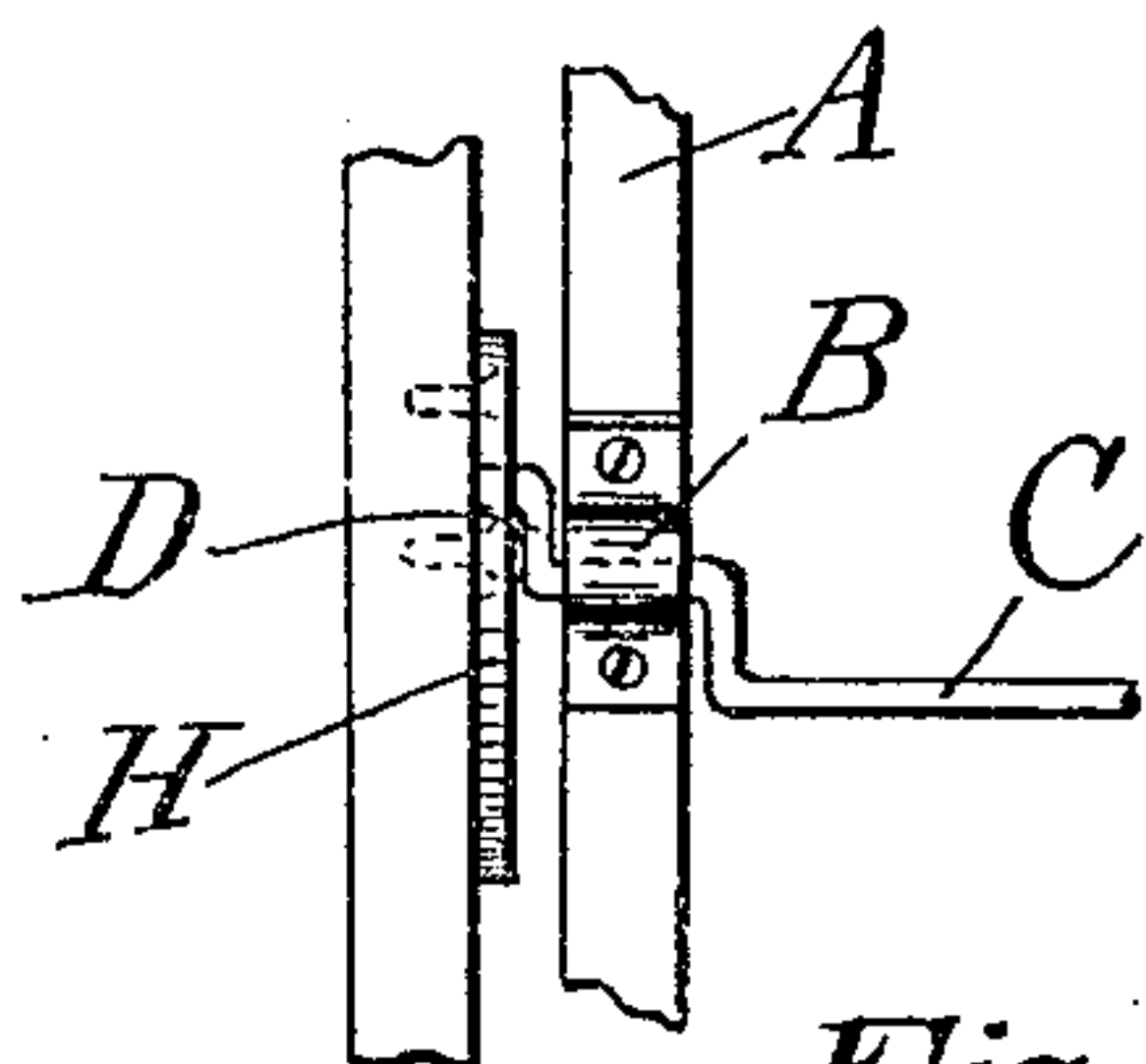
*Fig. 1*



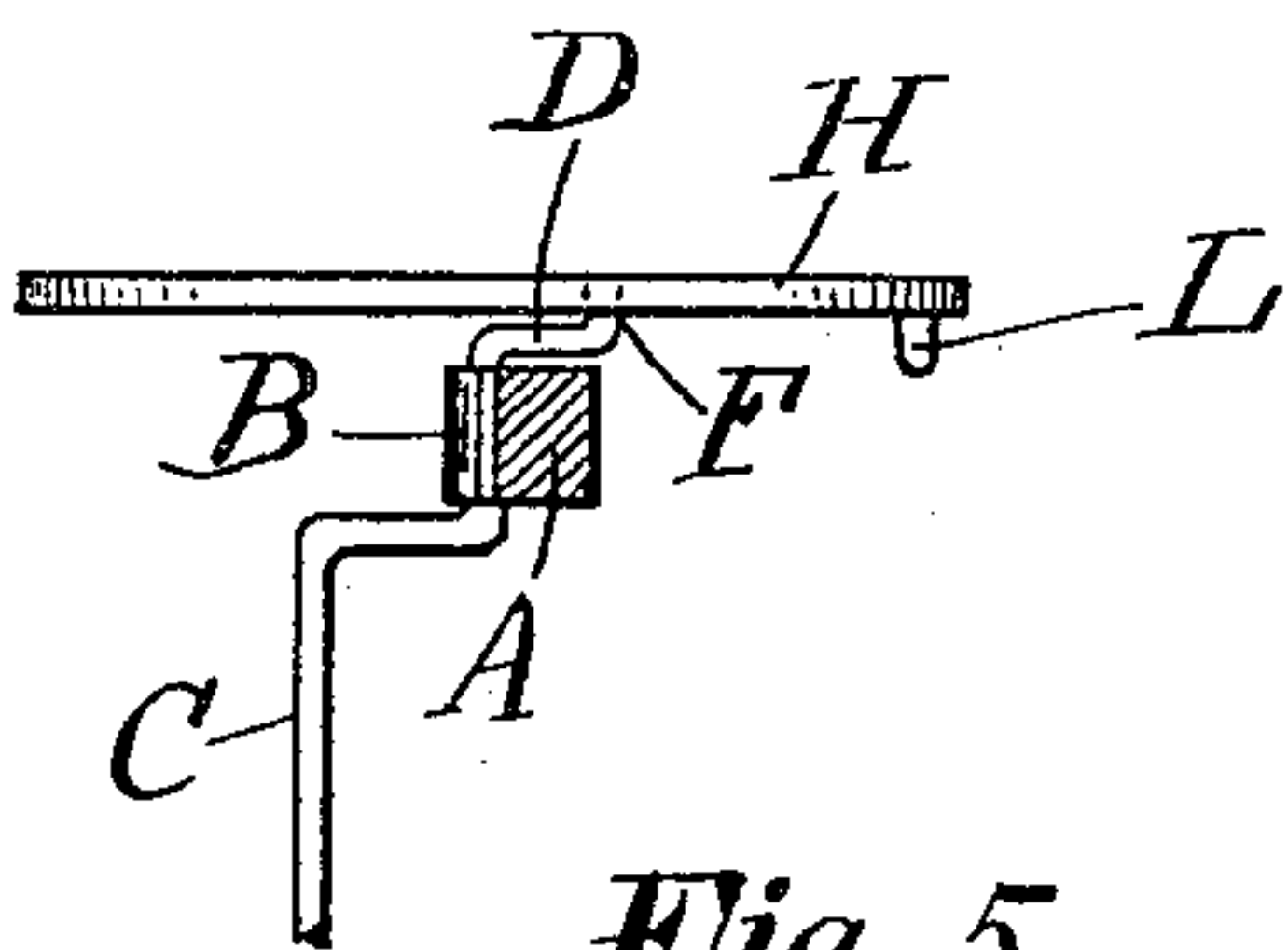
*Fig. 2*



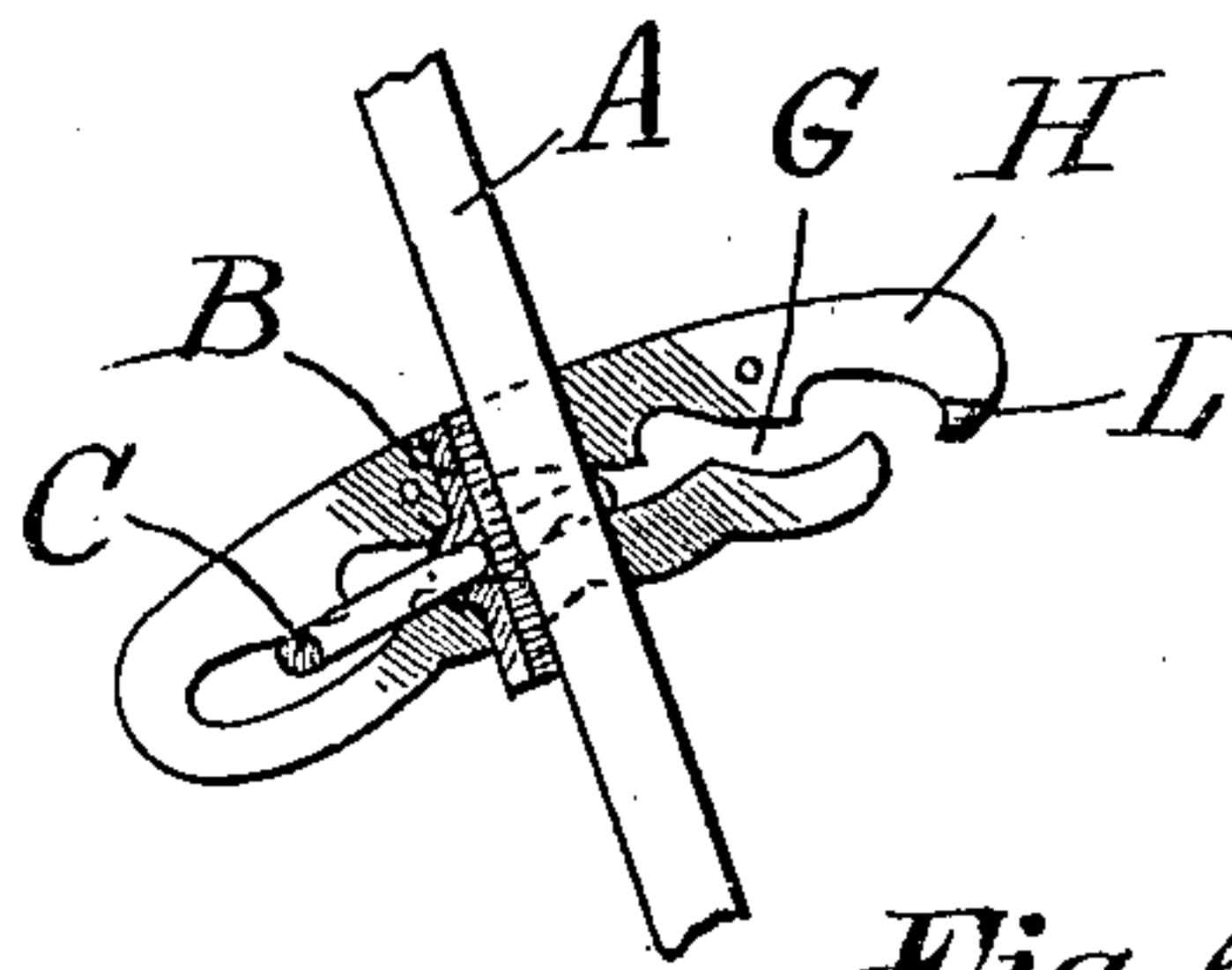
*Fig. 4*



*Fig. 3*



*Fig. 5*



*Fig. 6*

Witnesses  
*E. P. LaGay*  
*A. Carham*

*Albert B. Diss* Inventor  
By his Attorneys  
*Quincy, Mestick & Ogden*



# UNITED STATES PATENT OFFICE.

ALBERT B. DISS, OF NEWARK, NEW JERSEY, ASSIGNOR TO UNIVERSAL CASTER & FOUNDRY COMPANY, A CORPORATION OF NEW JERSEY.

## ADJUSTABLE CHAIR.

943,920.

Specification of Letters Patent. Patented Dec. 21, 1909.

Application filed April 24, 1909. Serial No. 491,998.

*To all whom it may concern:*

Be it known that I, ALBERT B. DISS, a citizen of the United States, and a resident of Newark, New Jersey, have invented certain new and useful Improvements in Adjustable Chairs, of which the following is a specification accompanied by drawings.

The invention relates particularly to adjustments for the back of Morris chairs and other chairs, and its object is to produce means for adjusting the back of the chair which shall combine simplicity and reliability in construction and in operation.

Figure 1 is a side elevation and Fig. 2 is a rear elevation of a chair showing the improvement in its most preferred form. Fig. 3 is a detail rear view of one end of the adjustable back supports. Fig. 4 is a view of the same details as seen looking outward from the chair back and therefore showing the bar in section and omitting portions of the back and the arms of the chair. Fig. 5 is a plan view of the same in detail. Fig. 6 is a view similar to Fig. 4, showing the catch disengaged and ready to move along the catch slot or rack.

On the rear side of the chair back there is pivotally mounted in the two bearings B a duplex lever formed of a strong bent rod, the middle portion C of which forms a combined handle, connecting bar, and weight for actuating the catches. At each end this bar is bent forward and then outward to form a rock-shaft or fulcrum in the bearing B and then is bent forward to form an arm D and finally again outward to form a catch F. Each catch F extends into the slot G of a catch-plate H so as to engage the teeth shown on the upper side of the slot. Each of the catch plates or racks H is secured to the stationary arm of the chair so that in combination with the duplex catch lever the two plates form an adjustable support for the back A of the chair which is pivotally mounted or hinged at K. The bar C acting as a weight in the rear of the fulcrums causes the catches on the arms F to press upward and engage the rack teeth of the catch-plate. Also, the bar C acting as a handle is conveniently reached and may be raised to disengage the catches. Thirdly, extending from side to side of the back and connecting the two catches, it acts as a connecting rod and makes it easy to operate

both catches by taking hold of the rod C at any point along the back of the chair.

The slots G in the catch-plates H are made narrow enough to substantially guide the motions of the catches F from one tooth to another and prevent the accidental missing of one tooth in the backward movement of the chair back. This will be clear from a consideration of Figs. 4 and 6. On raising the handle C from the position shown in Fig. 4 and releasing the catch from its tooth, the chair back A is allowed to tilt backward but the lower side of the slot G will guide the catch, as plainly seen in Fig. 6, so that it will strike and engage the next tooth. The handle C must be raised or held up to prevent this engagement if it is desired to allow the back to move farther than the next tooth of the catch-plate.

In the forward motion of the chair back it will be seen that the guide slot G guides the catch F freely past the successive teeth until the reversely directed tooth or stop L is reached. This reverse tooth is near the open end of the slot and it engages the catch and prevents the accidental passage of the catch through the open end of the slot. To "knock down" the chair or take it apart, the open end of the slot is provided. By raising the handle C each catch F passes clear of the tooth L and out of the slot G, allowing the chair back to come forward to a flat position or to be detached from the chair in any well known manner.

It will be seen that the invention comprises very great simplicity of construction and of operation with neatness of appearance, strength and reliability.

What I claim is:

1. In combination in a Morris or like chair having a pivoted or hinged back, a double lever consisting of a single bent rod and comprising a combined handle, connecting bar and weight for actuating the catches, two rock-shaft fulcrums pivoted in bearings on the said back forward of the said handle, and two catch arms projecting forward from the said fulcrums and having out-turned catches, and two catch plates secured to said chair and having slots and catch teeth, said slots receiving and guiding the said catches toward the said teeth, for substantially the purposes set forth.

2. In combination in a Morris or like



chair having a pivoted or hinged back, a double lever pivoted to the said back at either side thereof and comprising a combined handle, connecting bar and weight 5 which is disposed in the rear of the fulcrums or pivotal points, and catch arms provided with catches at the respective ends of the lever, and two catch plates mounted on the said chair and engaging the said catches, for 10 substantially the purposes set forth.

3. In combination in a Morris chair and the like having a pivoted or hinged back, catch plates having series of downward directed teeth secured to the chair and a double 15 lever provided with upward acting catches for engaging the said teeth, said lever being pivoted to the said back and comprising a connecting bar disposed in the rear of the fulcrums or pivotal points for actuating the 20 two catches simultaneously, for substantially the purposes set forth.

4. In combination in a Morris chair and the like having a pivoted or hinged back, a pair of connected catches movably mounted 25 on the back and having means for actuating them in direction to engage with cooperating catch plate teeth, and a catch plate for each

said catch mounted on the neighboring parts of the chair and each having a slot for the catch, a series of teeth for engaging and 30 holding the catch in the backward adjustment of the chair back, an open forward end for permitting the catch to pass out and a reverse tooth or stop for engaging the catch 35 near the open end, for substantially the purposes set forth.

5. In combination in a Morris chair and the like, having a pivoted or hinged back, a series of catch teeth mounted on the chair at 40 either side and a double lever pivoted to the said back, comprising a middle portion, portions extending forward and then outward, forming rock shafts or fulcrums by which the said lever is pivoted to the back, and 45 catch portions extending forward from the said fulcrums for engaging the said catch teeth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses this 20th day of April, 1909. 50

ALBERT B. DISS.

Witnesses:

DANIEL B. DISS,  
JULIUS RUPPRECHT.