

(No Model.)

C. B. DEMAREST.
TABLET ARM FOR CHAIRS.

No. 534,469.

Patented Feb. 19, 1895.

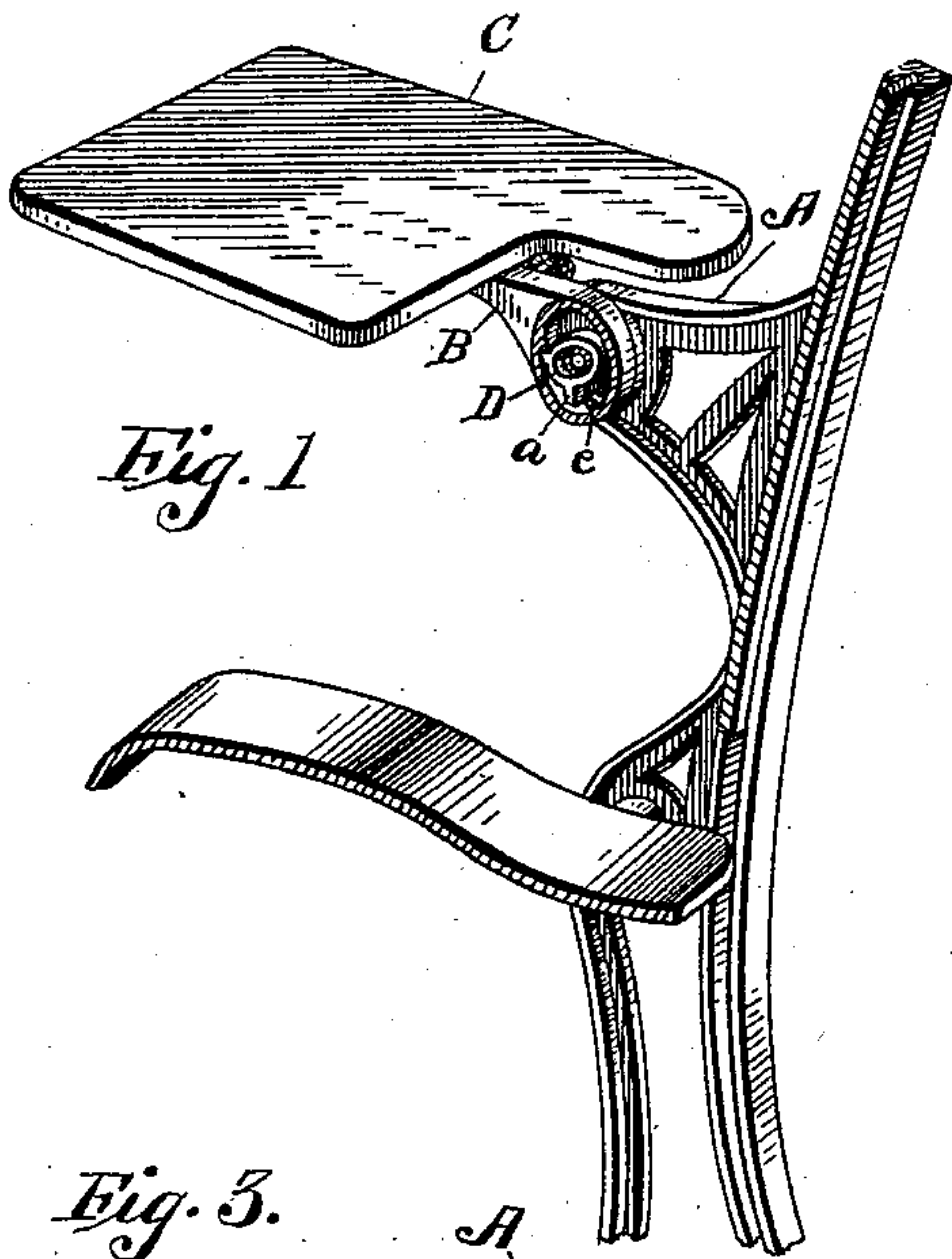


Fig. 1

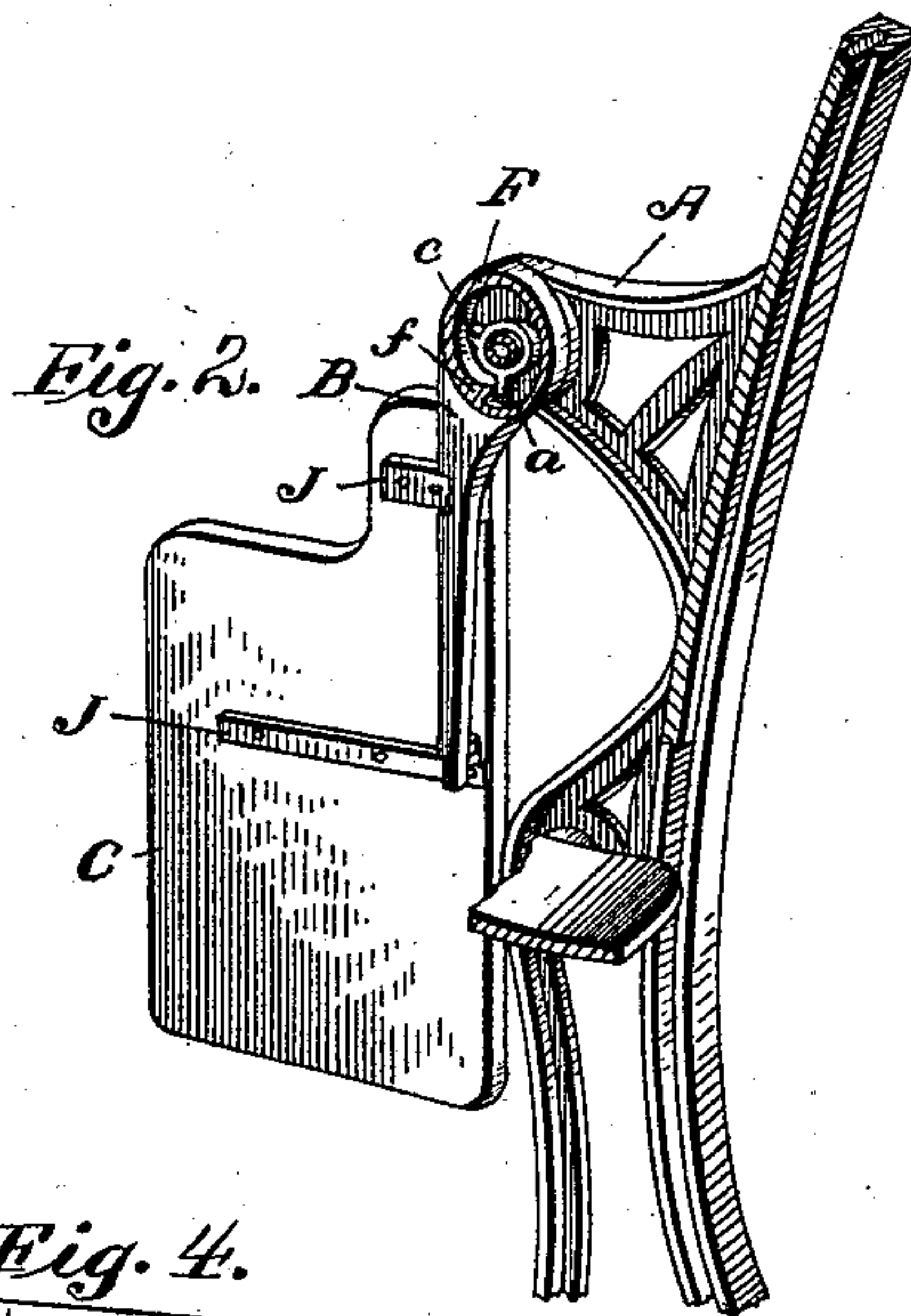


Fig. 2.

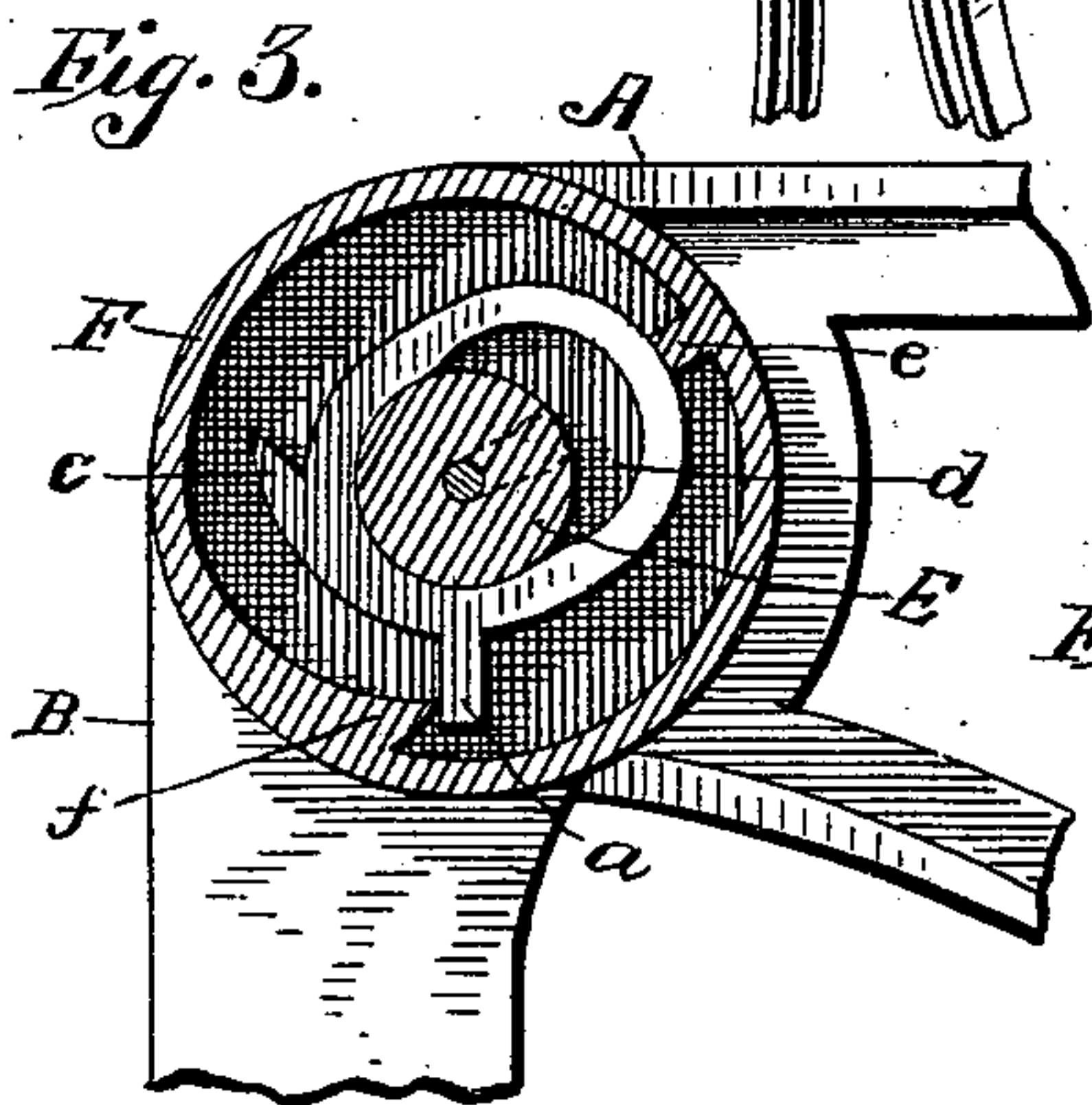


Fig. 3.

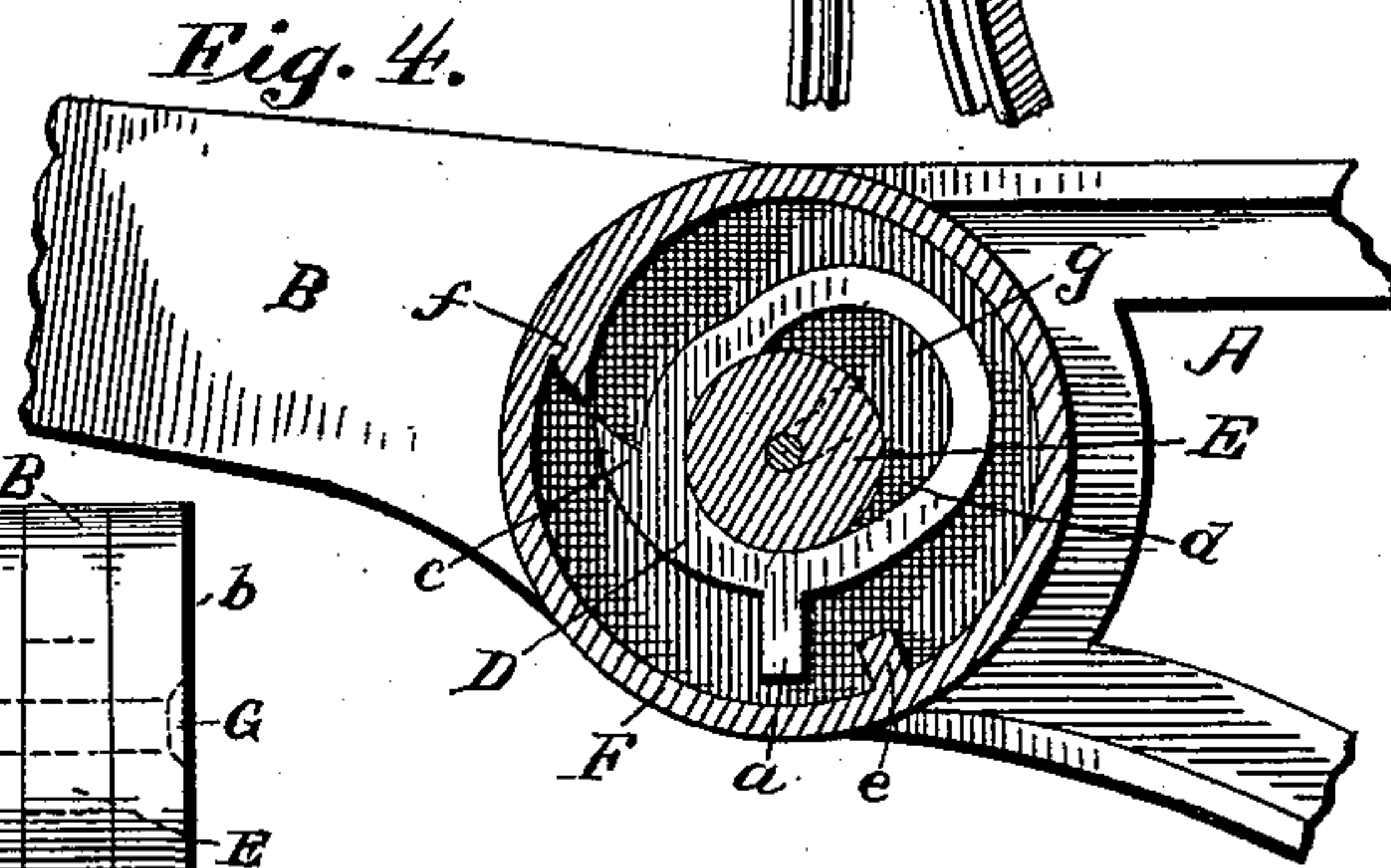


Fig. 4.

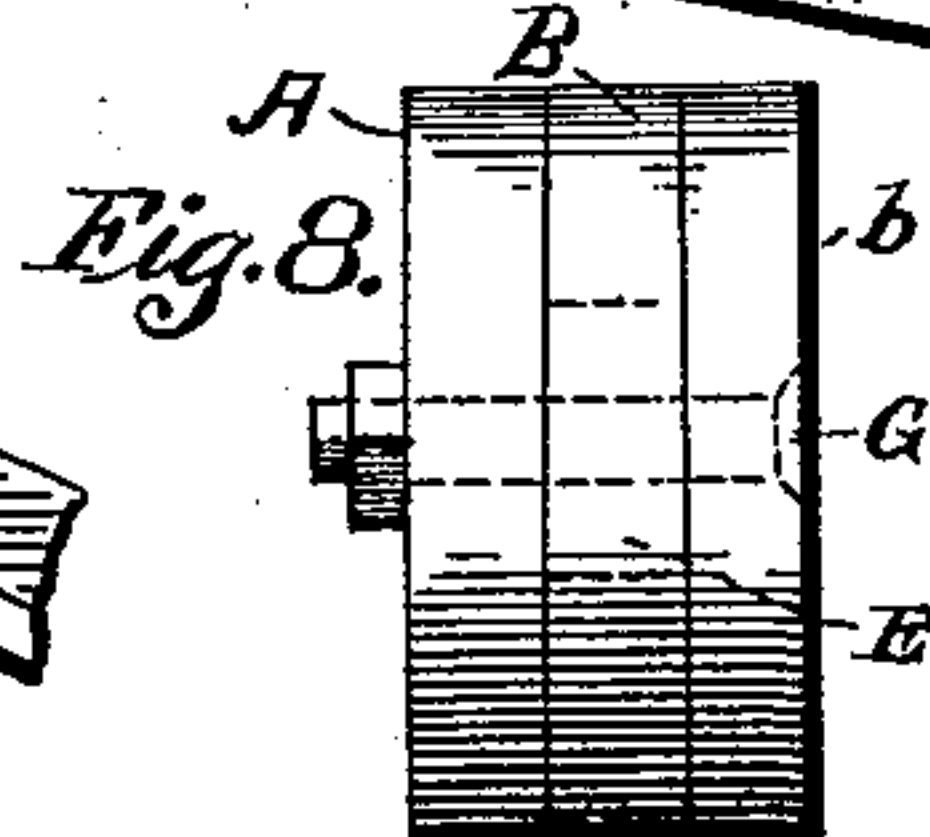


Fig. 5.

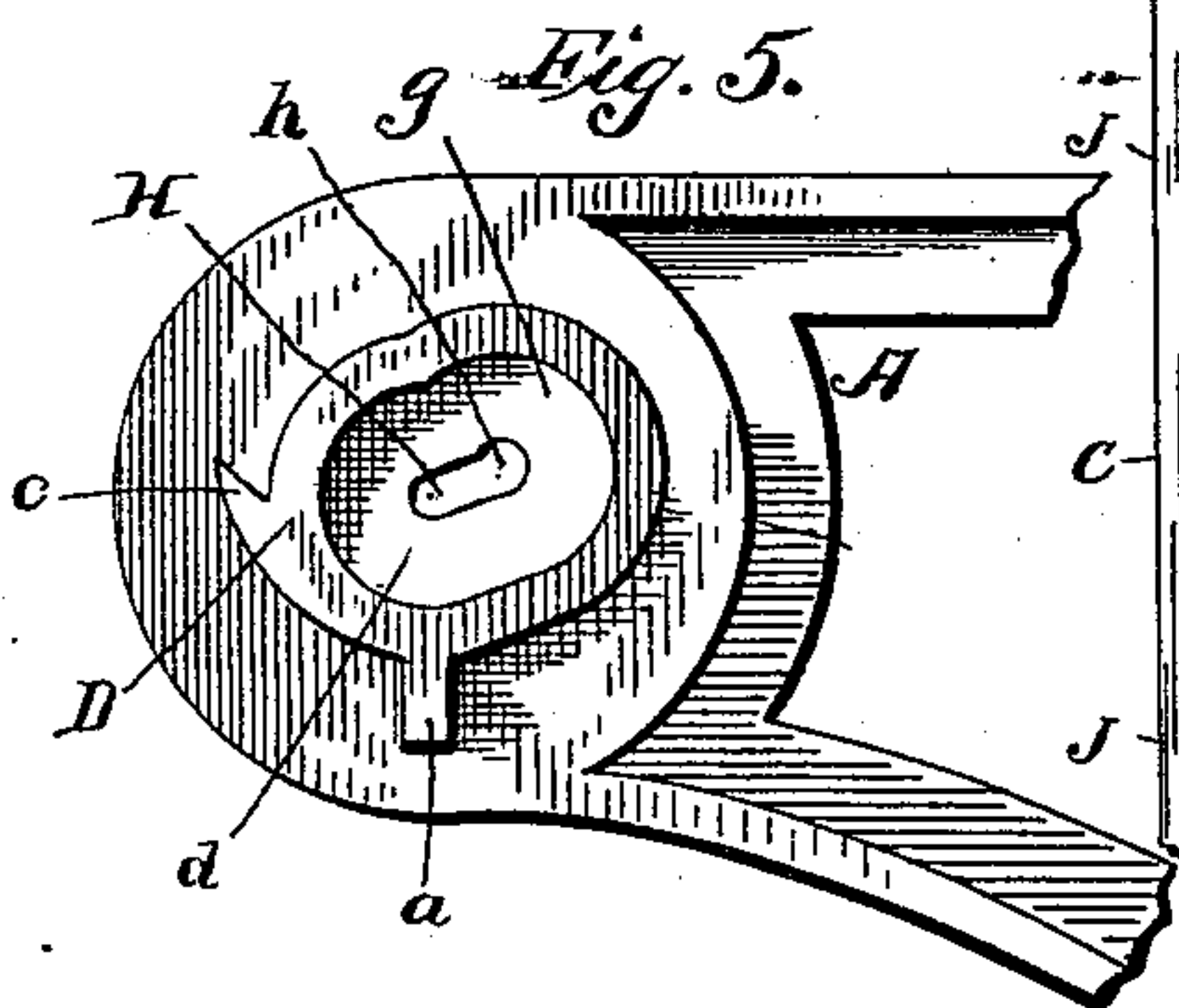


Fig. 6.

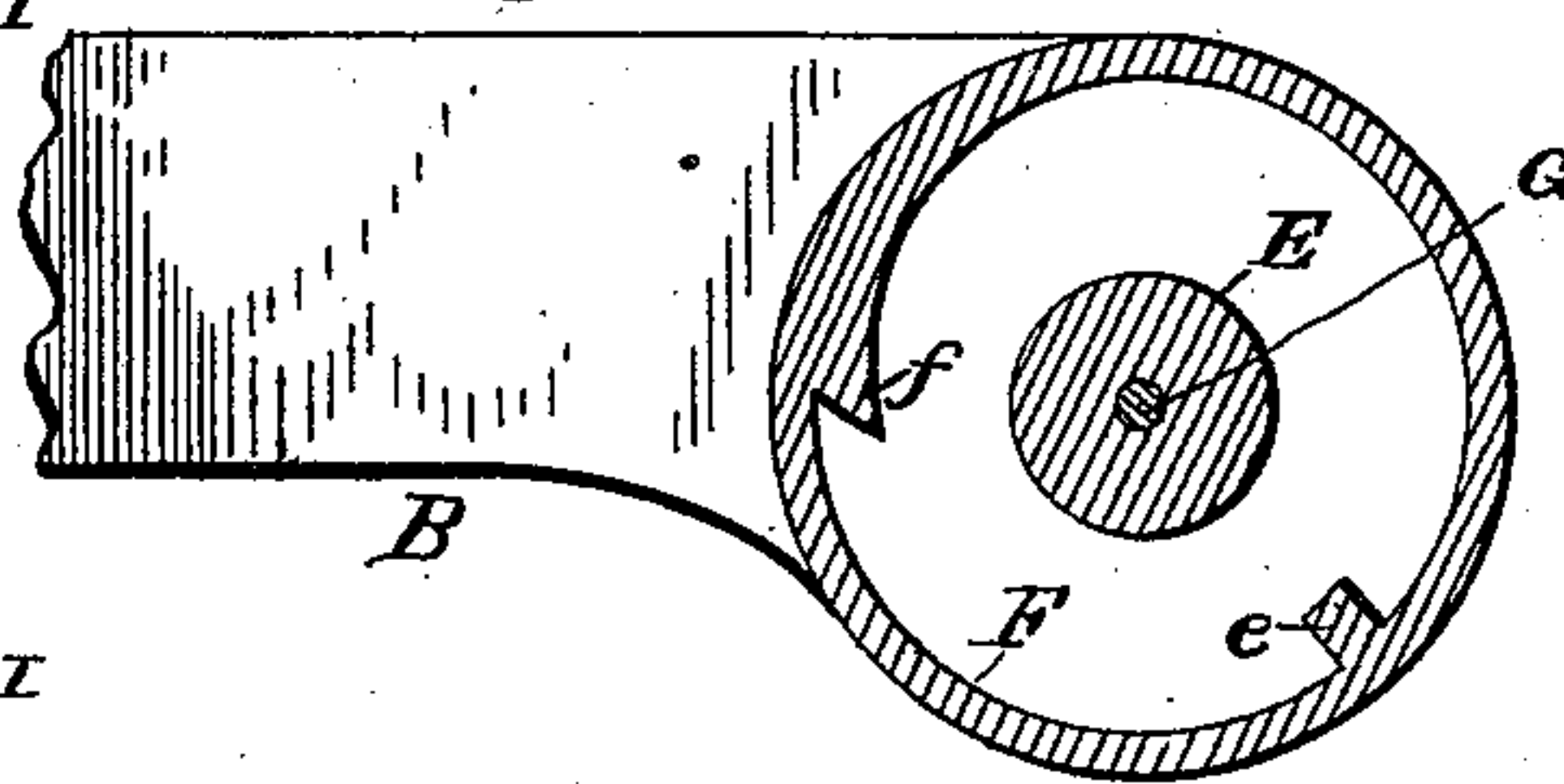


Fig. 7.

Witnesses

Howard D. Orr.

J. H. Griffin.

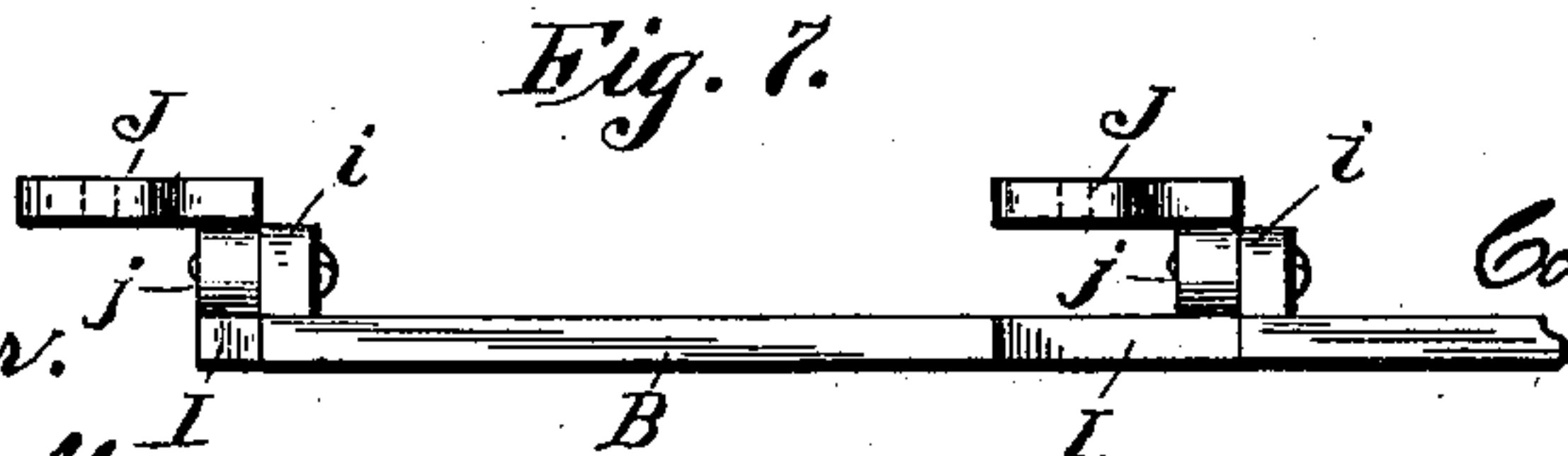


Fig. 8.

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TABLET-ARM FOR CHAIRS.

SPECIFICATION forming part of Letters Patent No. 534,469, dated February 19, 1895.

Application filed March 21, 1894. Serial No. 504,505. (No model.)

To all whom it may concern:

Be it known that I, CORNELIUS B. DEMAREST, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Tablet-Arms for Chairs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as 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 part of this specification.

My invention relates to an improved tablet arm to be used on the arms of chairs in close proximity to each other, as those in colleges, lecture halls and all other places where students are required to take notes of the proceedings, and the object is to provide a joint for such arms so as to enable the movable portion of the arm to be dropped down and placed in such a position that it will be out of the way when not in use, and at the same time to provide a joint that will be most certain in its action and simple in its construction without a tendency to become disengaged when locked in position for use, without the usual complications of mechanism that have heretofore been used in joints for this purpose, which have rendered them uncertain in their action. These objects are accomplished by making the tablet arm in such a form as to enable it to be hinged to the supporting arm connected with the joint, so that when in a raised and horizontal position it may be turned into a vertical position on the supporting arm, and then be dropped down by means of the described joint, into the narrow space between the adjoining chair seats where it remains out of the way until again raised into position for use, and my invention consists in the specific construction hereinafter described and more particularly pointed out in the claims.

Referring to the drawings, Figure 1, is a perspective view, partly broken away, of a chair with the supporting arm and wood tablet in a horizontal position as when in use. Fig. 2, is a similar view with the tablet arm turned into a vertical position on the supporting arm, and then dropped down between the seats of the adjoining chairs as seen when not in use. Fig. 3, is an enlarged view of the joint shown in Fig. 2, when the arm is in the same position,

the cap on the side of the joint of the supporting arm being removed. Fig. 4, is an enlarged view of the joint when the supporting arm is being raised to place it in position shown in Fig. 1, the cap on the side of the supporting arm being removed. Fig. 5, is a side view showing the interior of the joint on the stationary arm of the chair. Fig. 6, is a side view of the part of the joint connected with the supporting arm, the cap being removed. Fig. 7, is a detail view showing the hinged connection between the tablet and the supporting arm. Fig. 8, is a front view showing the edge of the stationary arm of the chair with the supporting arm in a vertical position and the joint covered by the cap.

Similar letters of reference refer to corresponding parts in each figure of the drawings.

A represents the projecting or stationary arm of the chair, and B is a supporting arm which is hinged to the outer end thereof and is provided with suitable means for holding a hinged tablet arm C thereon. On the inner side of the outer end of the stationary arm A of the chair there is a raised or annular oblong flange D which forms a part of my improved joint. Within this flange there is an oblong socket *d*, corresponding in shape to the raised flange, and on the front and outer side of the flange there is an upwardly projecting curved tooth *c*, and beneath the flange there is an outwardly extending lug *a*.

The supporting arm B is provided with an annular projecting flange F of the same depth as that on the stationary arm, which forms the outer part of the joint, and which is covered on one side by a cap *b*, of the same diameter as that of the flange. Within this flange there is a recess having in its center a hub E extending to the top of the flange and upon its inner side next to the extended portion of the supporting arm, there is a curved tooth *f*, projecting downward and inward, and upon the lower rear side of the flange there is a lug *e*, of the same depth of the flange, which extends inward toward the hub E.

In bringing the two parts of the joint together, the annular flange D on the stationary arm, fits within the flange F on the supporting arm and the hub E fits within the flange D and the two parts of the joint are then secured together by a bolt or pivot G through the cap *b*, covering one side of the

flange F on the supporting arm, and through the hub E, and a slot H in the oval socket *d*, formed by the flange D.

When the supporting arm B is dropped 5 down the hub E of the joint rests in the front part of the oblong socket *d*, and the curved tooth *f*, of the outer flange is seated against the lug *a*, of the inner flange as shown in Fig. 3, but when the arm B is raised to be placed 10 in position for use, as shown in Fig. 4, the tooth *f*, of the outer flange passes over the tooth *c*, of the inner flange until the lug *e*, on the inside of the outer flange, strikes the stationary lug *a*, on the inner flange when the 15 leverage thus produced carries the supporting arm B slightly above the plane of the arm A and throws the bolt or pivot pin G into the rear and upper portion *h*, of the curved slot H and thus carries the hub E into the 20 rear and upper part *g*, of the recess *d*. By this action, that portion of the joint connected with the supporting arm B is thrown backward when raised so that the tooth *f*, upon the rim will strike the outer curved portion 25 of the flange D, and when the arm B is lowered into a horizontal position the curved tooth *f*, will engage the tooth *c*, and hold the arm B in a rigid and secure horizontal position as shown in Fig. 1, and thereby prevent 30 the arm B from becoming disengaged when the tablet arm C is being used.

The oblong curved slot H in the oval socket *d*, through which the pivot pin G passes, is inclined at an angle of about twenty degrees 35 from a horizontal plane, except at its rear end, where it is curved more sharply upward forming a recess *h*, in which the pivot will rest when the hub E is thrown back into the recess *g*, of the socket. In this position the 40 pivot pin and hub remain while the supporting arm is lowered and the teeth are locked and the tablet arm C is turned into position for use.

The supporting or hinged arm B has recesses or notches I on its front edge and ears 45 *i*, secured to the side of the arm adjacent to the notches, and the under side of the tablet board C is provided with cross bars J which are rigidly secured thereto. These cross bars 50 have ears *j*, attached at one end, which extend at right angles to their lower surface and are pivotally connected with the ears *i*, of the supporting arm B as shown in Fig. 7. When the tablet board C is turned over into position 55 on the supporting arm B shown in Fig. 1, the cross bars J on its under side will fit into and be held by the notches I in the supporting arm.

In returning the tablet arm C to the position 60 between the chair seats as seen in Fig. 2, the tablet arm should first be turned to a vertical position on the supporting arm B, then the arm should be slightly raised to disengage the tooth *f* from the tooth *c*, and then 65 carried forward far enough to allow the tooth *f*, to pass over and down in front of the tooth *c*. The act of raising the supporting arm B

for the purpose of releasing it from its hold, allows the hub E to drop into the lower part of the recess *d*, and the pivot G to move down 70 into the lower portion of the slot H. When the hub has reached the forward end of the socket, the teeth will pass each other as the supporting arm is let down, and the tablet is then dropped in a vertical position between 75 the front portions of the adjoining chair seats.

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

1. The combination with a stationary chair 80 arm and a tablet arm, of a sliding joint connecting the arm, said joint having an engaging tooth on each arm, the chair arm provided with an oblong recessed socket having a curved slot therein, and the tablet arm with 85 a hub working in the socket and a pivot pin working in the curved slot, the arms provided with contacting devices for throwing the teeth into engagement, as and for the purpose set forth. 90

2. The combination with a stationary chair arm provided at its outer end with an annular flange forming an oblong socket having a recess in its rear end and a tooth on the outer 95 face of the flange, of a tablet arm having an annular flange working over the flange of the chair arm, a hub working in said socket and a tooth to engage the tooth on the flange of the chair arm, the arms provided with contacting 100 devices for throwing the teeth into engagement, as and for the purpose set forth.

3. The combination with a fixed arm of a chair having on its outer end an annular flange forming an oblong socket, a recess in the rear end of the socket, and a tooth and 105 lug on the outer face of the flange, of a tablet supporting arm having an annular flange fitting over the flange on the fixed arm, and a hub working in the said oblong socket, the flange on the supporting arm having a tooth 110 and lug engaging the tooth and lug on the flange of the stationary arm, substantially as and for the purpose set forth.

4. The combination with a fixed arm of a chair having on its outer end an annular 115 flange forming an oblong socket having a recess in its rear end and a curved slot in the center of the socket extending through the side of the arm, and a tooth and lug on the outer face of the flange, of a tablet arm hav- 120 ing an annular flange fitting over the flange of the fixed arm, with a lug working in the oblong socket, and a pin in the curved slot, the flange on the supporting arm having a tooth and lug engaging the tooth and lug 125 on the flange of the stationary arm, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CORNELIUS B. DEMAREST.

Witnesses:

HENRY D. WARNER,
JAMES E. REDMAN.