

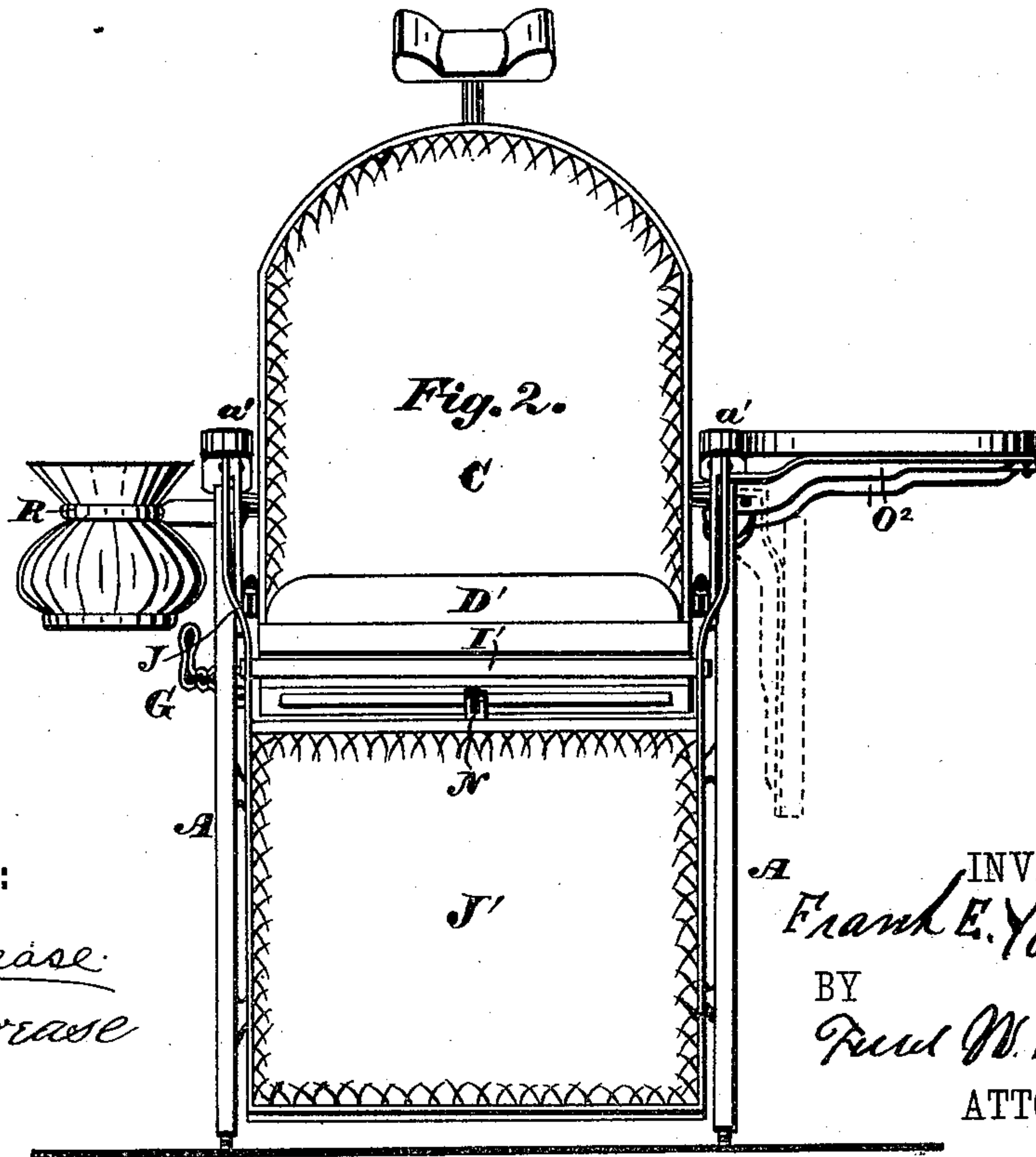
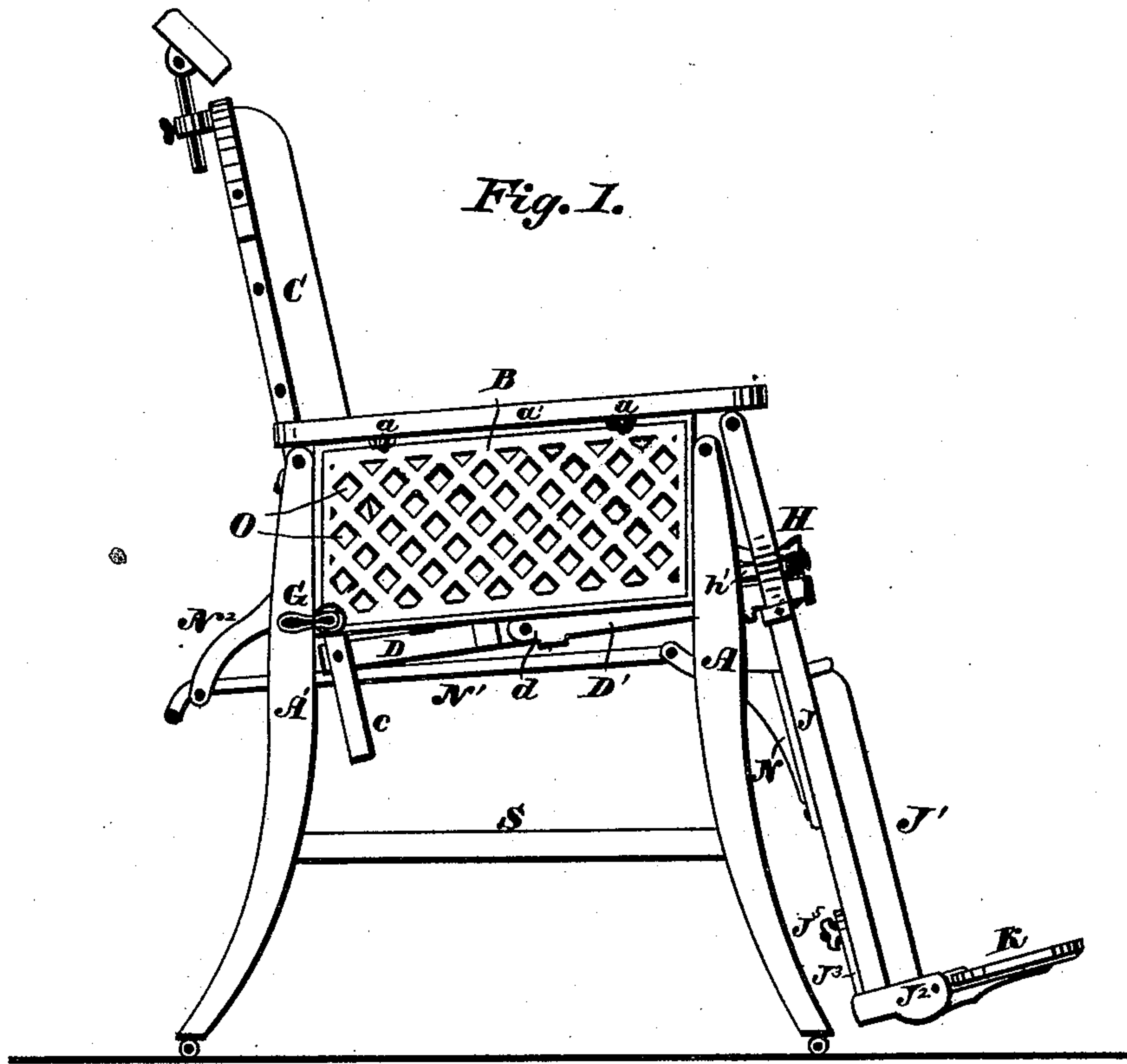
(No Model.)

3 Sheets—Sheet 1.

F. E. YOUNG.  
SURGICAL CHAIR.

No. 343,216.

Patented June 8, 1886.



WITNESSES:

*Harry Frease*  
*Joseph Frease*

INVENTOR

*Frank E. Young*

BY

*Paul W. Bond*

ATTORNEY

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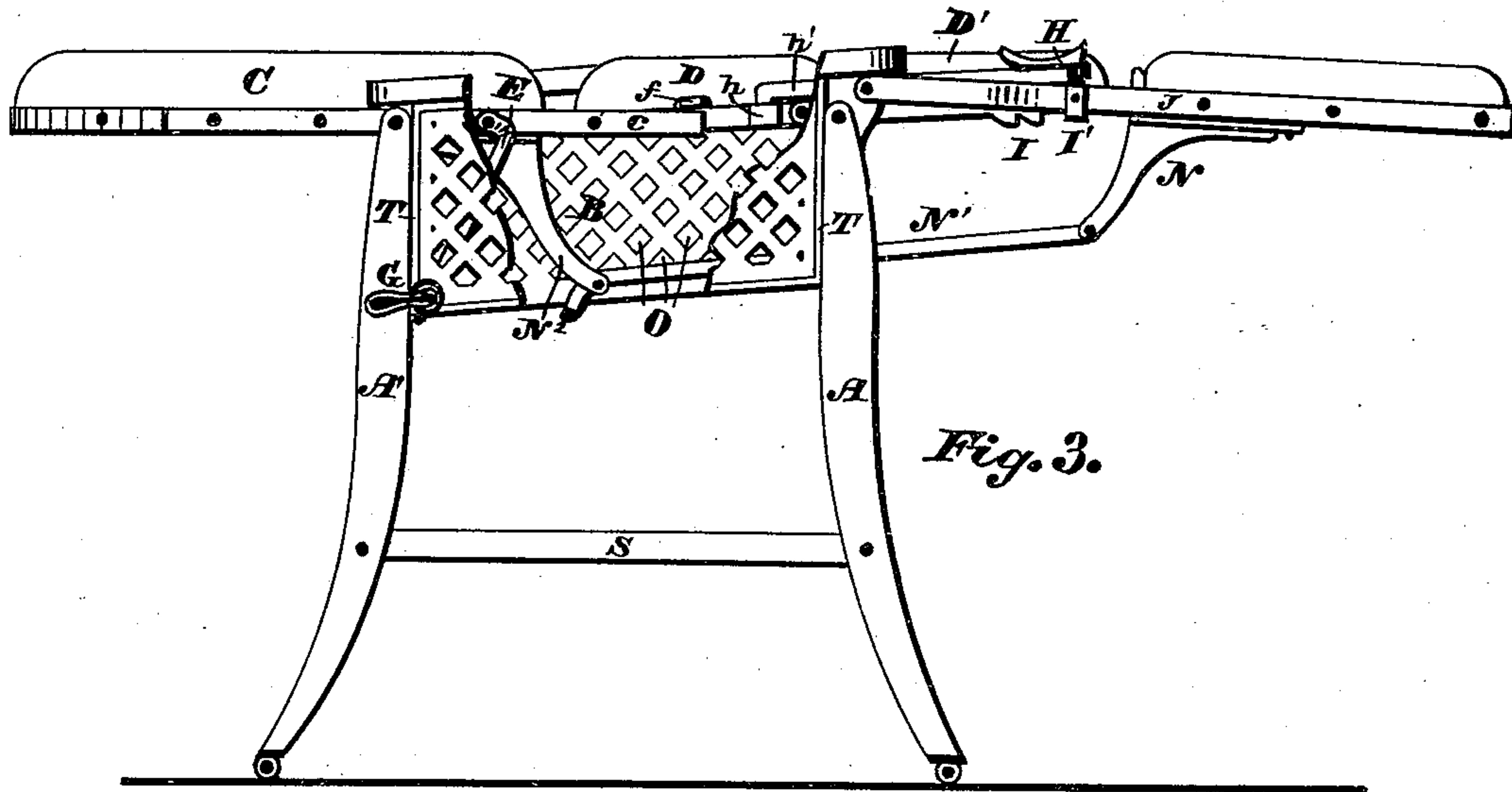


Fig. 3.

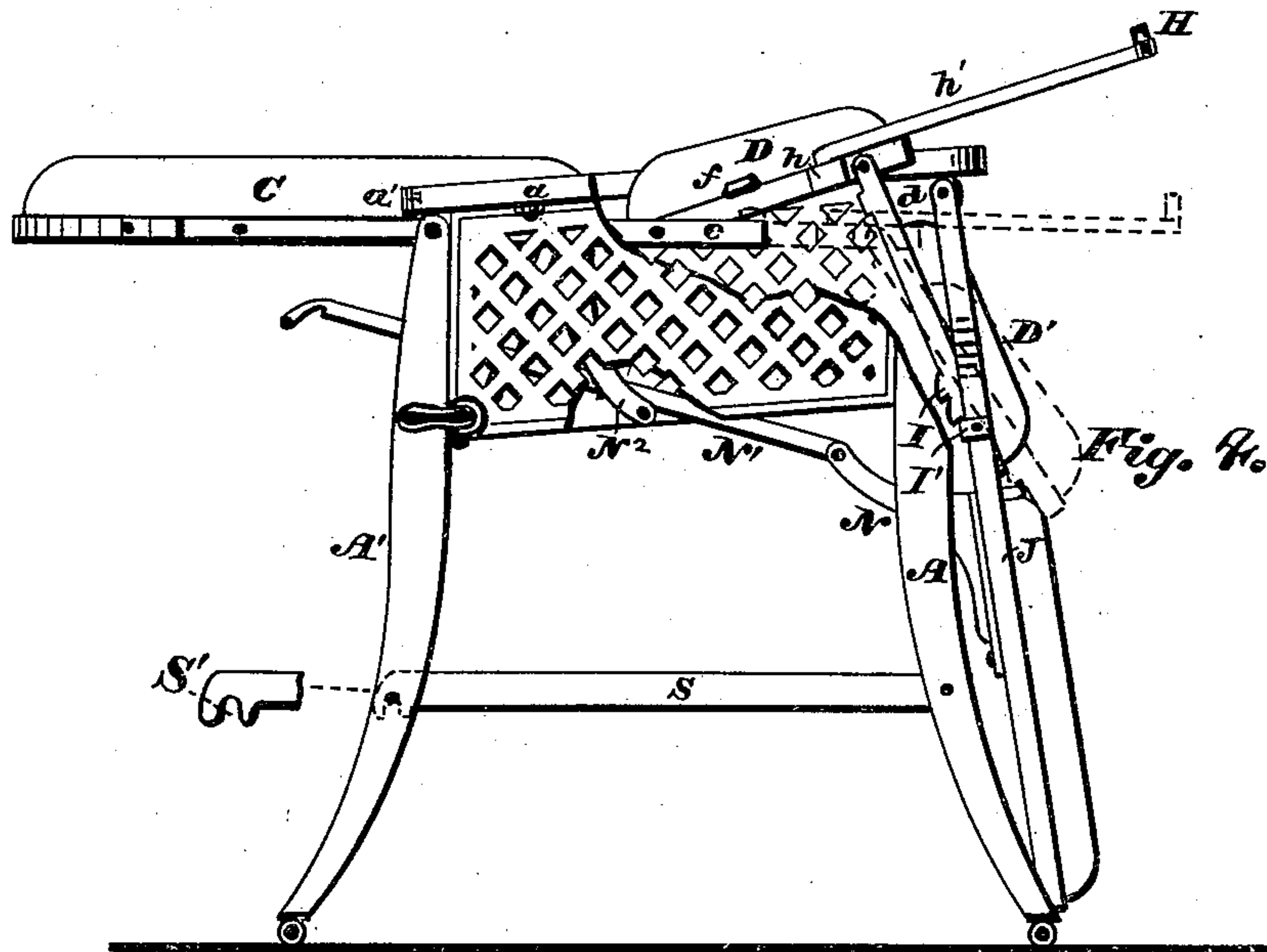


Fig. 4.

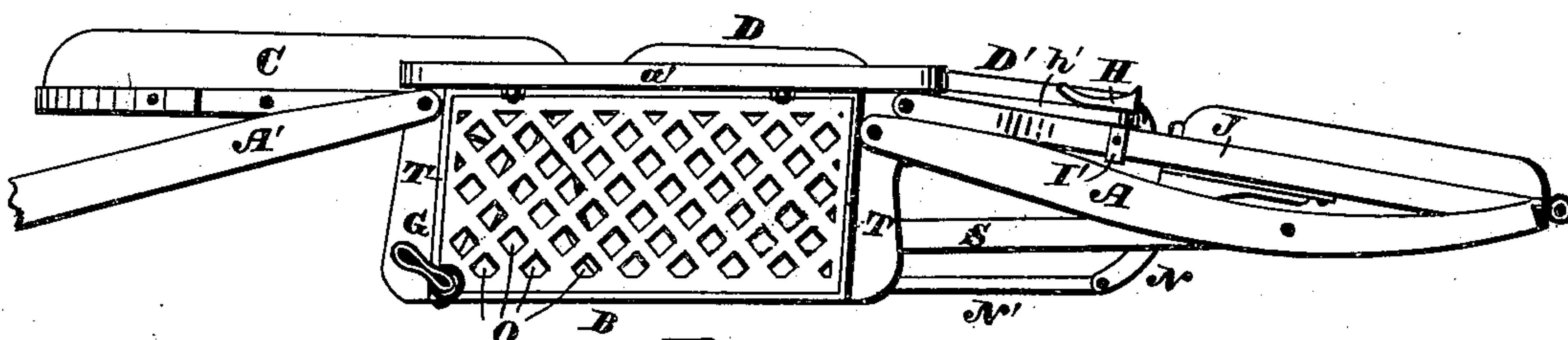


Fig. 5.

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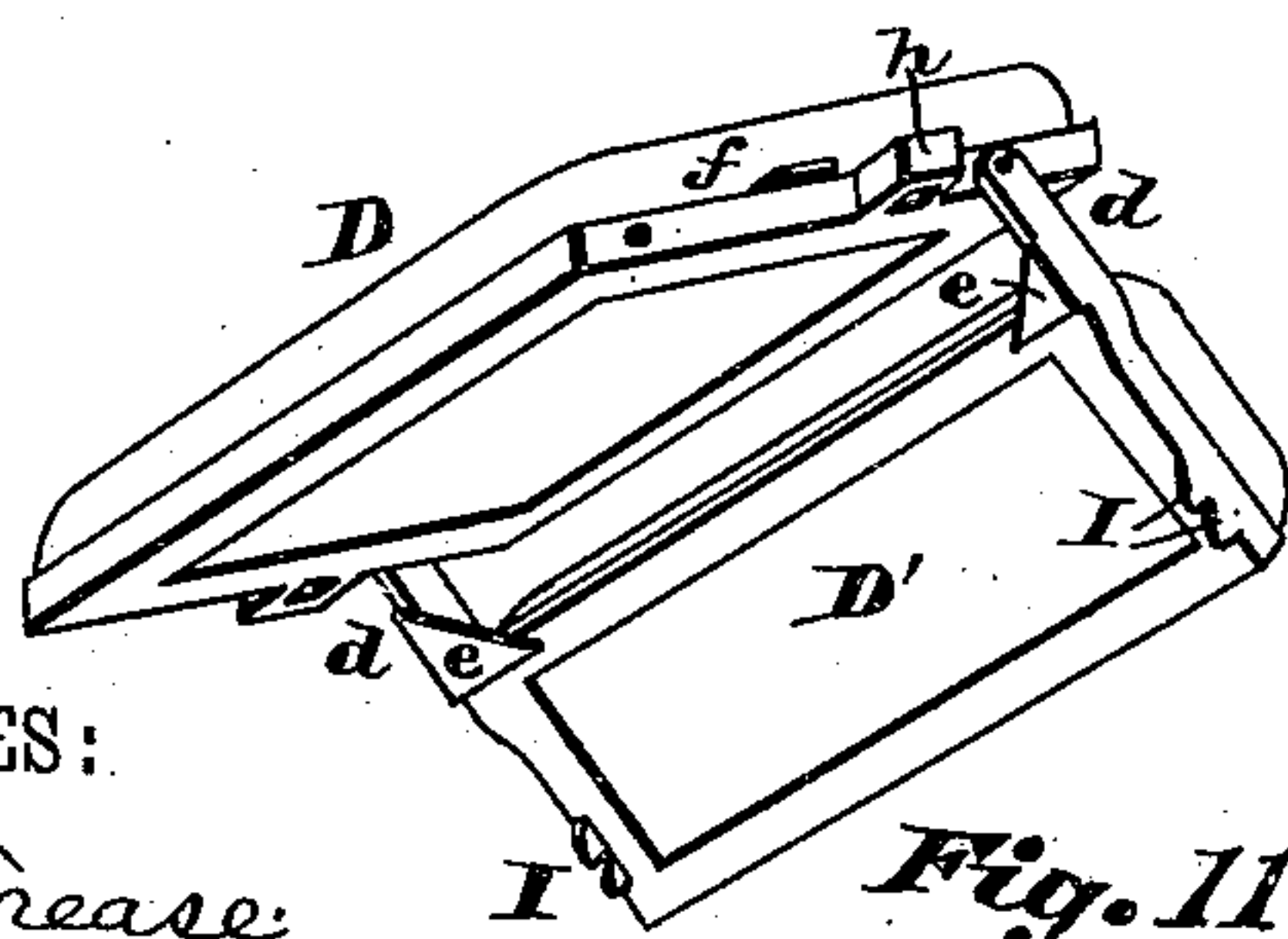
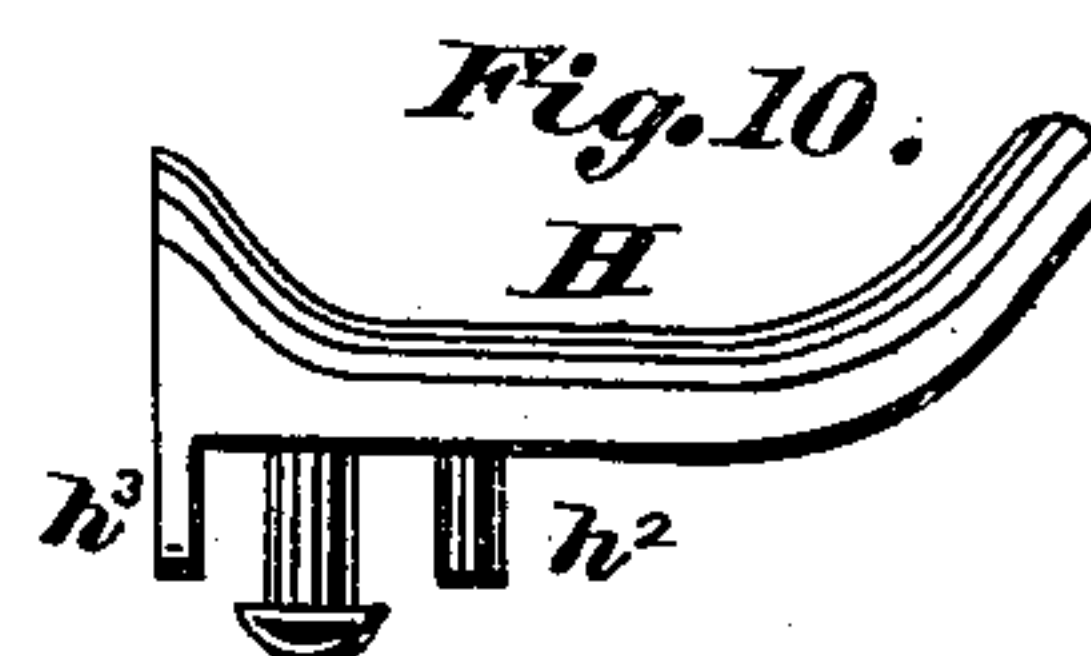
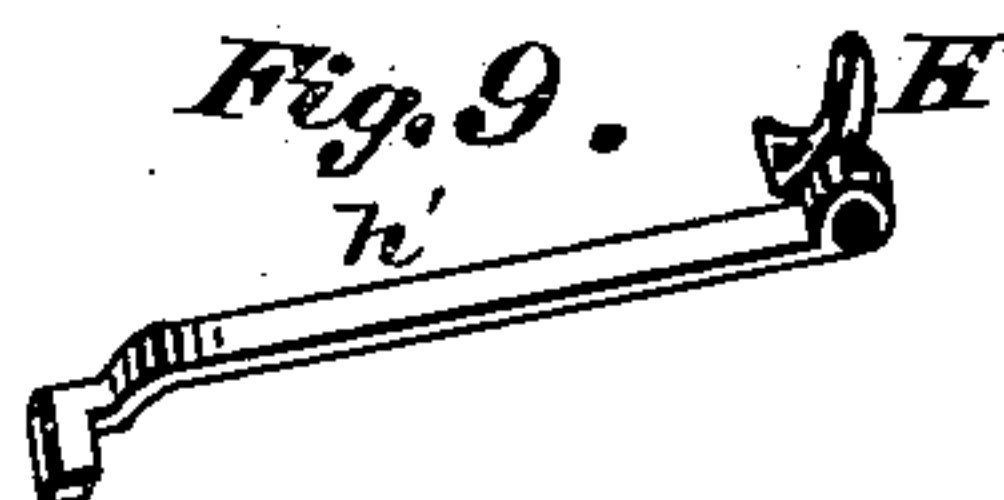
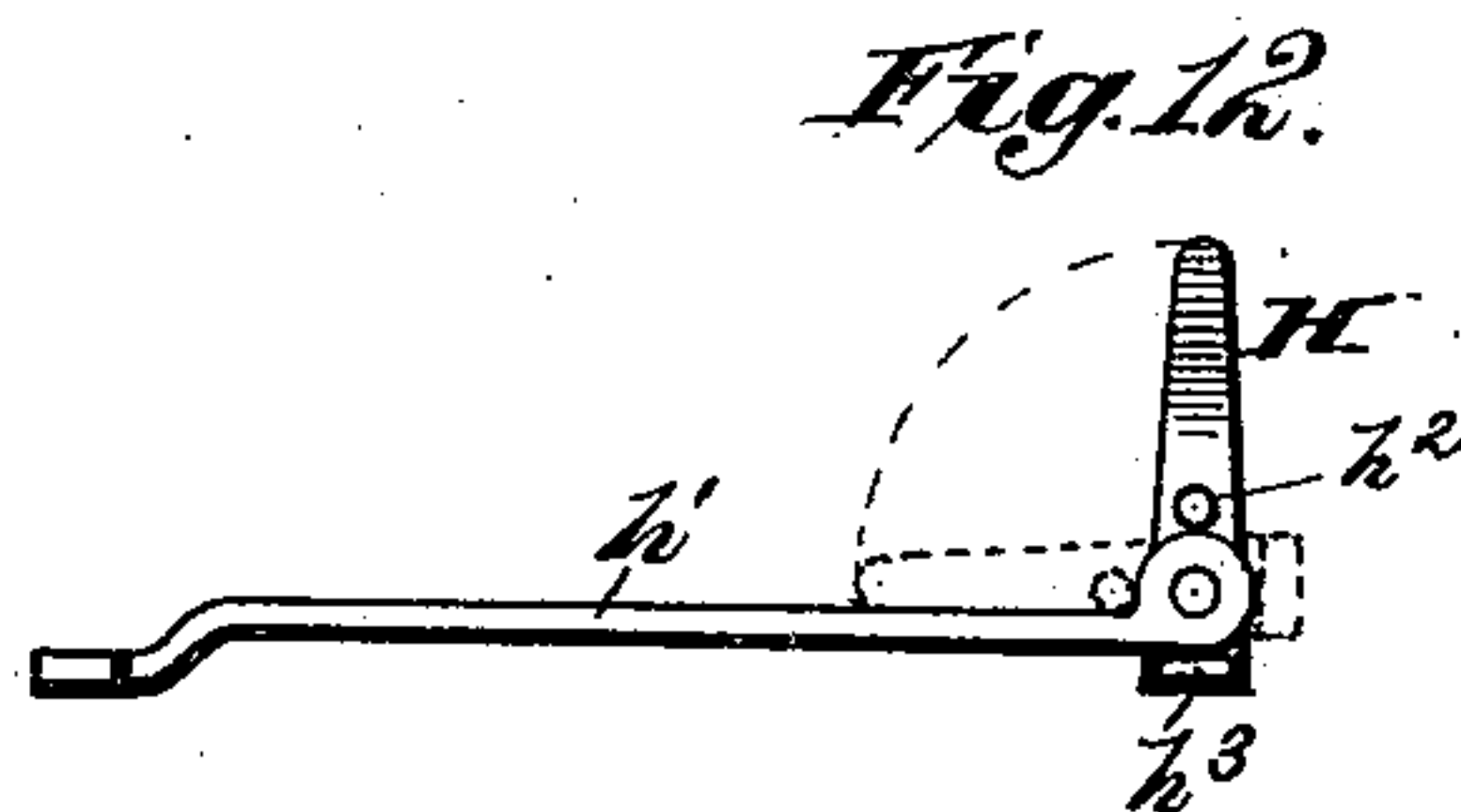
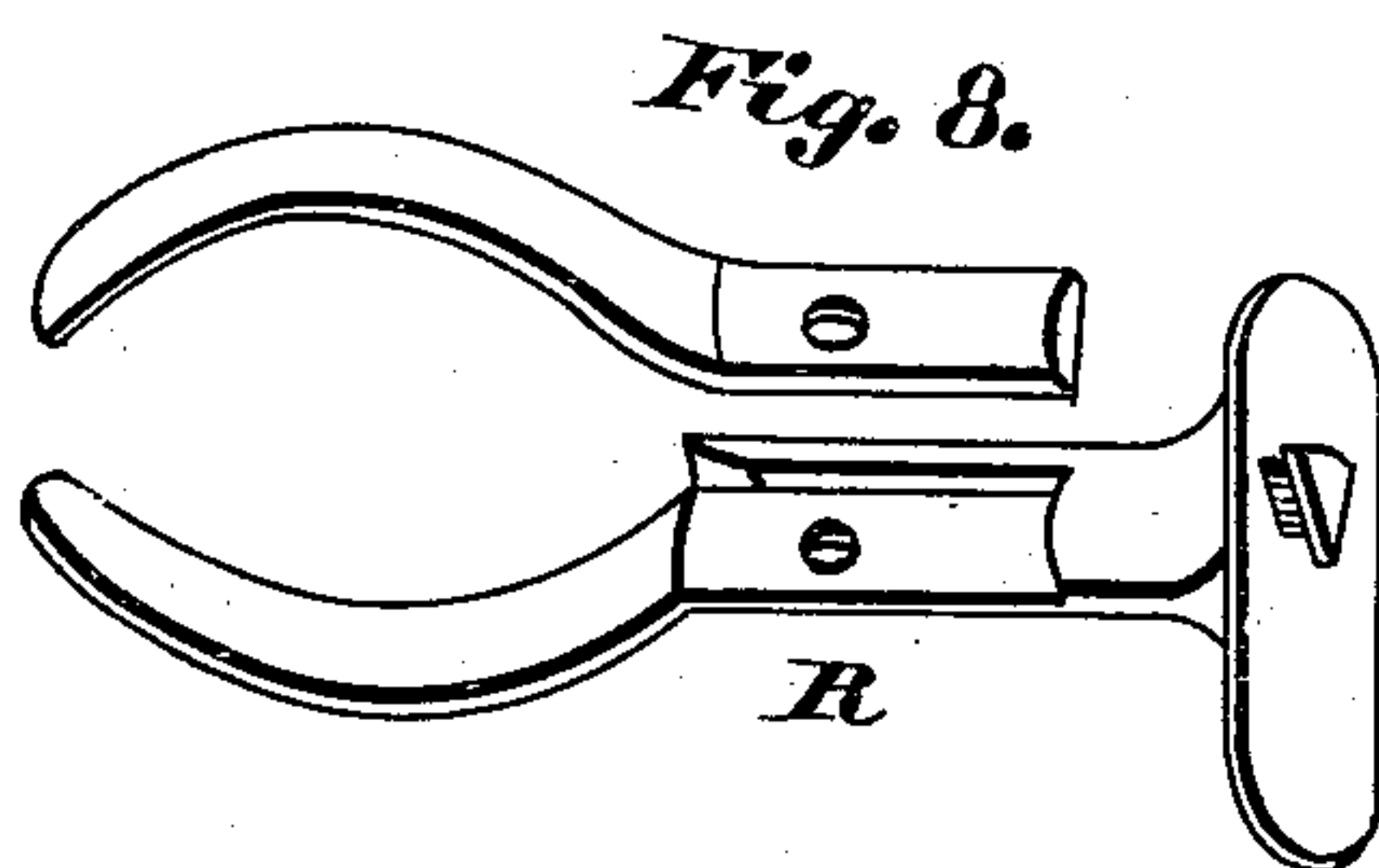
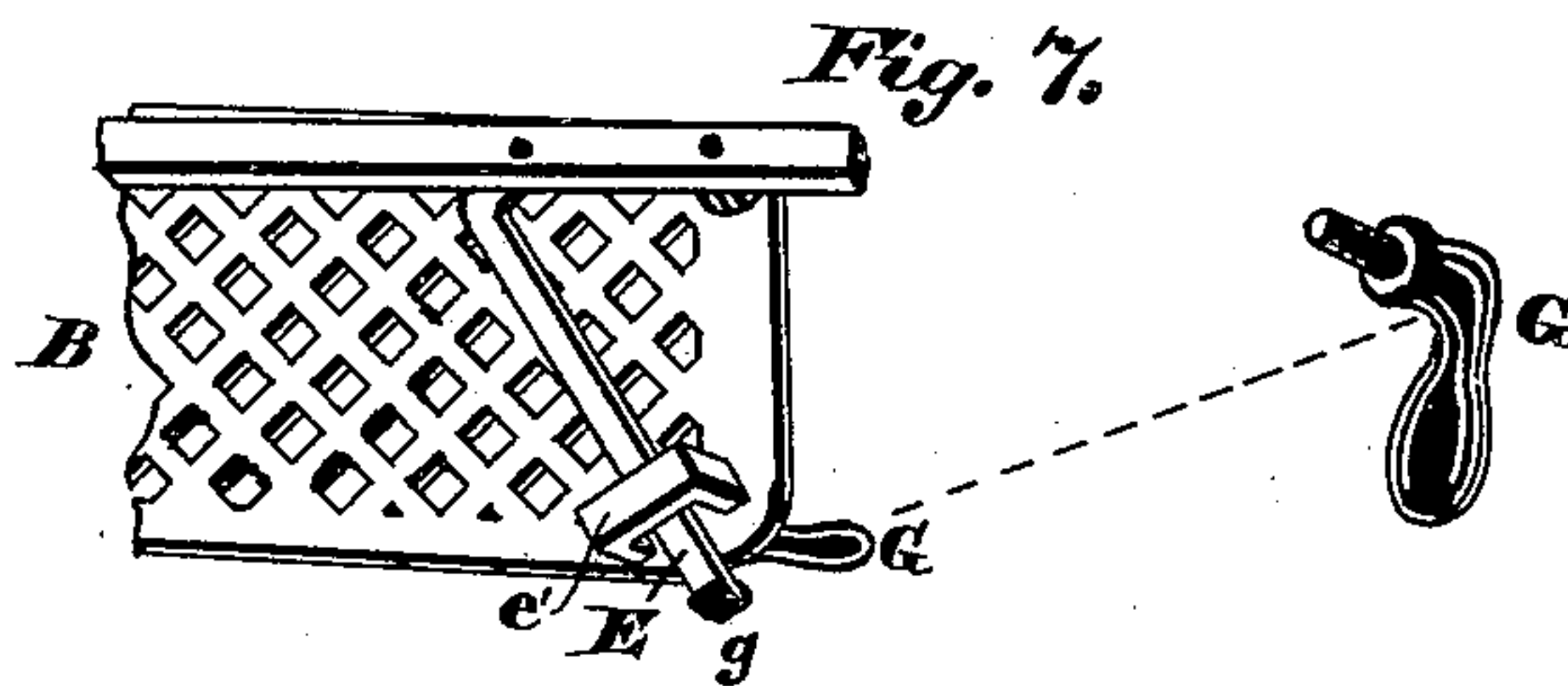
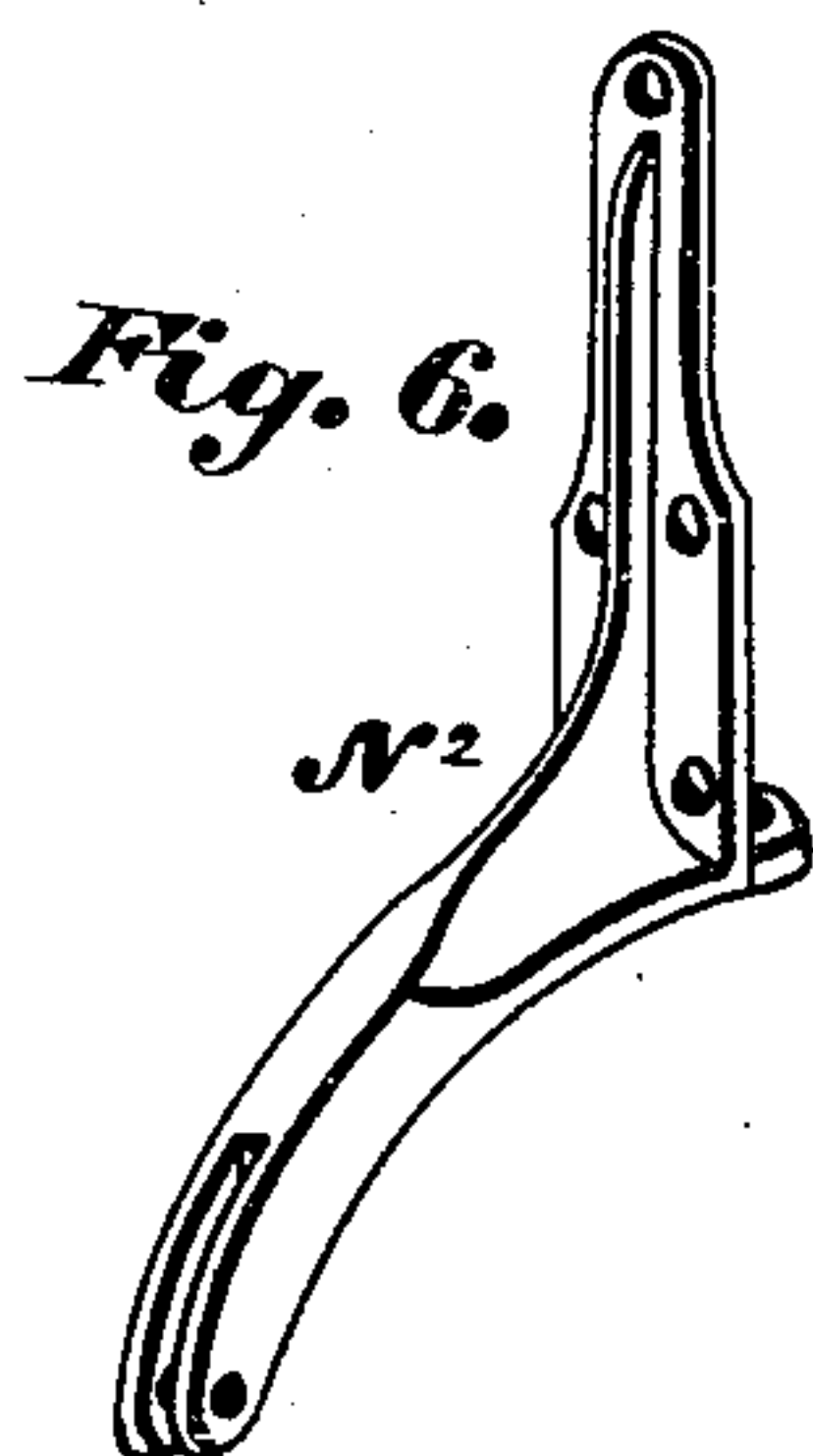
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*Fig. 11.*

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# UNITED STATES PATENT OFFICE.

FRANK E. YOUNG, OF CANTON, OHIO.

## SURGICAL CHAIR.

SPECIFICATION forming part of Letters Patent No. 343,216, dated June 8, 1886.

Application filed August 28, 1885. Serial No. 175,547. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK E. YOUNG, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Surgical Chairs; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon, in which—

Figure 1 is a side elevation showing the back of the chair proper slightly inclined and the seat-sections on the same plane and the leg-rest dropped. Fig. 2 is a front view showing side table or leaf and cuspidor attached. Fig. 3 is a side view showing the back, seat-sections, and leg-rest in a horizontal position. Fig. 4 is a side view showing the back of the chair in a horizontal position and the rear seat-sections slightly inclined, and the front seat-section, together with the leg-rest, dropped. Fig. 5 is a side elevation showing the chair folded for shipment or storing. Fig. 6 is a detached view of the bifurcated arm or bracket. Fig. 7 is an inside view of one of the side plates, showing the adjusting-bar attached, and a detached view of the hand-screw. Fig. 8 is a detached view of the cuspidor-bracket. Fig. 9 is a detached view of the stirrup and its shank or arm. Fig. 10 is a detached view of the stirrup proper. Fig. 11 is an under side view of the seat sections, showing them detached from the chair. Fig. 12 is a bottom view of the stirrup with the supporting shank or arm, illustrating the construction and relation of the parts whereby movement in a quarter-circle is permitted.

The present invention has relation to surgical chairs; and its nature consists in the different parts and combination of parts hereinafter described, and particularly pointed out in the claims.

Similar letters of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings, A represents the front or forward legs of the chair, which are substantially of the form in the drawings. A' represents the rear legs.

The legs A and A' are pivotally attached at their top or upper ends to the side plates, B, substantially as shown in the drawings.

The legs A and A', together with the side plates, B, constitute the supporting-frame of the chair, to which the different parts of the chair are attached, as hereinafter described.

The top or upper portion of the side plates, B, are provided with lips or extensions *a*, which are for the purpose of attaching the arm-rests *a'*, as shown in the drawings. Said arm-rests may be made of wood and left plain, or, if desired, they may be upholstered.

The back C consists of a suitable frame, and is upholstered in any desired style. This back C is pivoted to the side plates, B, and also to the top or upper ends of the legs A'.

The pivot which connects the back to the legs A' and to the side plates, B, may be a long bolt or bar extending through or across the back, and held in the desired position by means of an ordinary head and burr or nut; or, if preferred, two short rivets or clamping-bolts may be used.

The seat of the chair proper consists of two sections, D and D'. Said sections are composed of two frames, and are upholstered or cushioned in any desired style.

The seat-section D is pivotally attached to the arms *c*, which arms may be continuations of the back strap or frame, the point of pivoting said section D being about one-half the distance from the bottom or lower part of the back C to the lower ends of the arms *c*.

To the front or forward portion of the seat-section D is pivotally attached the seat-section D' by means of the extensions or arms *d*, and arranged substantially as shown in Fig. 11; and for the purpose of holding the seat of the chair proper in a rigid condition when the two sections are in line or on the same plane the plates *e* are provided, which receive and securely hold the front or forward part of the section D; and, for the purpose of holding said section D in the position indicated by the dotted lines, Fig. 4, the projections or extensions *f* are provided, which engage the arms *c*, as indicated in said Fig. 4.

For the purpose of securely holding the back C at any desired position the adjusting-bar E is pivotally attached to the lower side portion



of the back C, and extends downwardly and backwardly through the mortise-slot  $e'$ ; and for the purpose of preventing the back C from passing or falling below a horizontal position the knob or pin  $g$  is located at the bottom or lower end of the adjusting-bar E, which engages the bottom or under side of the mortise-slot  $e'$ ; and for the purpose of securely locking the said adjusting-bar E in the mortise-slot  $e'$  the hand-screw G is provided, which passes through the side plate, B, directly opposite of said adjusting-bar E.

The sides of the seat-section D are provided with the mortise-slots  $h$ , which are for the purpose of receiving the rear ends of the stirrup shanks or arms  $h'$ . The front or forward ends of the stirrup shanks or arms  $h'$  are provided with the stirrups H, which are pivotally attached to said shanks or arms  $h'$ .

The bottom or under side of the stirrups H are provided with the two pins or stops  $h^2$  and  $h^3$ , which are for the purpose of limiting the movements of said stirrups to a quarter of a circle.

The seat-section D' is provided with the notches I, which are located on the bottom or under side of said seat-section, as shown in Figs. 3 and 11. In said figures two notches are shown, but more or less may be used, if desired, and are for the purpose of engaging the cross-bar I' and automatically raising the front or forward portion of the seat-section D', together with the stirrups H, as shown in Fig. 4, and also adjusting said seat-section D', together with the stirrups H, to any desired point within the limits of the notches I.

To the side plates, B, are pivotally attached the leg-rest arms J. Said arms J may be continuations of the leg-rest strap or frame, the leg-rest proper being suitably upholstered in any desired style.

The foot-rest K is connected with the leg-rest J' in any suitable manner.

To the top or upper end of the leg-rest J' is securely attached the bifurcated arm or bracket N, to which arm or bracket is pivotally attached the connecting and operating rod N', the opposite end of said connecting and operating rod being removably attached to the bifurcated arm or bracket N<sup>2</sup>, said arm or bracket N<sup>2</sup> being securely attached to the lower portion of the back C.

It will be seen that the arms or brackets N and N<sup>2</sup>, together with the connecting and operating rod N', may be duplicated, and one set placed on each side of the chair proper, the connecting and operating rod N' being for the purpose of elevating and extending the seat and leg-rest as the back C is lowered, as shown in Fig. 3, thus providing or forming a full-length operating-table.

In the treatment of rectal and uterine diseases in the dorsal position, it is desirable to have the hips of the patient at the edge of the lounge, table, or chair, and in other contrivances the operator has to have the co-opera-

tion of the patients or lift them into position, thus adapting the patient to the lounge, table, or chair. I, however, adapt the chair to the patient, and avoid all lifting or handling of the patient. It will be seen that by placing the feet in the stirrups H, and disconnecting the operating-rod from the bifurcated arm or bracket N<sup>2</sup>, the leg-rest will assume the position shown in Fig. 4, and automatically elevating the hips and feet of the patient; or, if desired to have the hips and feet of the patient lowered, bring the lower or forward portion of the seat-section D' forward, which disengages the notches I from the cross-bar I', when the seat-section D, together with the stirrups H, will assume the position shown by the dotted lines in Fig. 4. It will be seen that the seat-section D' is not pivoted in front, thus leaving it free to be placed in the different positions desired independently of the leg-rest.

The cuspidor support or bracket R is attached to the side plates, B, in any suitable manner. Said support or bracket consists of two pieces or parts properly held together by means of a countersunk bolt or bolts, and arranged so as to embrace the neck of the cuspidor proper, as shown in Fig. 2.

For the purpose of folding the chair proper more compactly for transportation or other purposes, the stay-bars S are provided at one end with the hooks or recesses S', which are for the purpose of detaching said stay-bars S, when the chair can be folded in the position shown in Fig. 5; and for the purpose of holding the chair rigid when in an upright position flanges T are located on the plates B, which flanges form suitable bearing-supports for the legs or standards A and A'.

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

1. The legs or standards A and A', pivotally attached to the side plates, B, and said side plates provided with the flanges T, substantially as and for the purpose specified.

2. The back C, provided with the arms  $c$ , in combination with the seat-section D, provided with the projections or extensions  $f$ , substantially as and for the purpose specified.

3. The seat-section D', provided with the arms  $d$ , in combination with the seat-section D, substantially as and for the purpose specified.

4. The seat-section D', provided with the plates  $l$  and arms  $d$ , in combination with the seat-section D, substantially as and for the purpose specified.

5. The seat-section D', provided with the notches or recesses I, and having arms  $d$ , in combination with the cross-bar I' and seat-section D, substantially as and for the purpose specified.

6. The stirrup H, provided with the pins or stops  $h^2$  and  $h^3$ , in combination with the shank or arm  $h'$ , substantially as and for the purpose specified.

7. In a surgical chair, the combination, with detachable stirrup-shanks  $h'$ , adapted to engage with mortise-recesses  $h$ , and provided with a rounded end having an opening, of the  
5 stirrup H, having a pivot engaging with the opening, and studs  $h^2$   $h^3$  upon each side the pivot, substantially as described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

FRANK E. YOUNG.

Witnesses:

JOSEPH FREASE,  
FRED W. BOND.