

(No Model.)

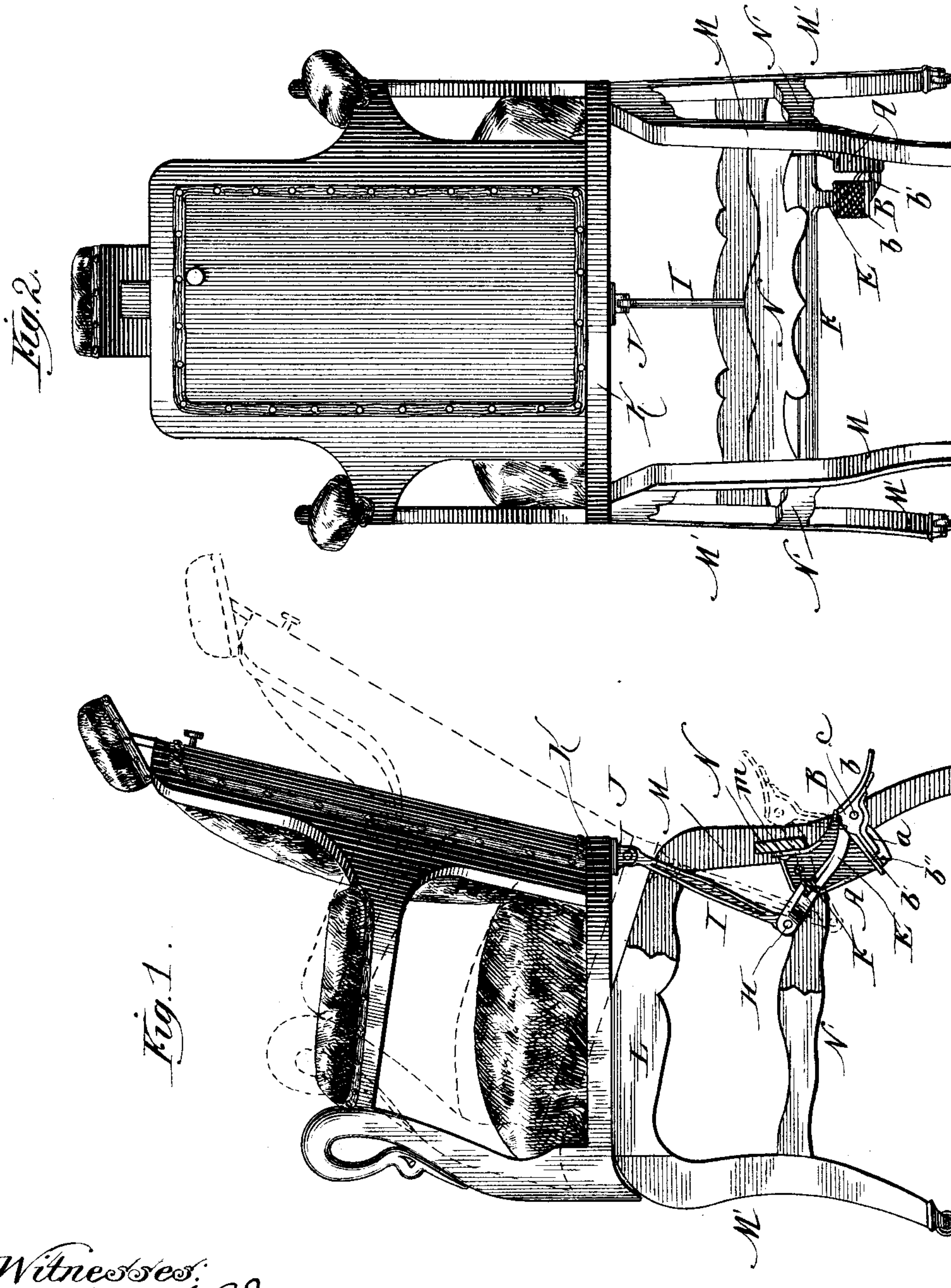
2 Sheets—Sheet 1.

F. MELCHIOR.

BARBER'S CHAIR.

No. 388,211.

Patented Aug. 21, 1888.



Witnesses:
Albert H. Adams.
O. W. Bond-

Inventor:
Fred Melchior.

(No Model.)

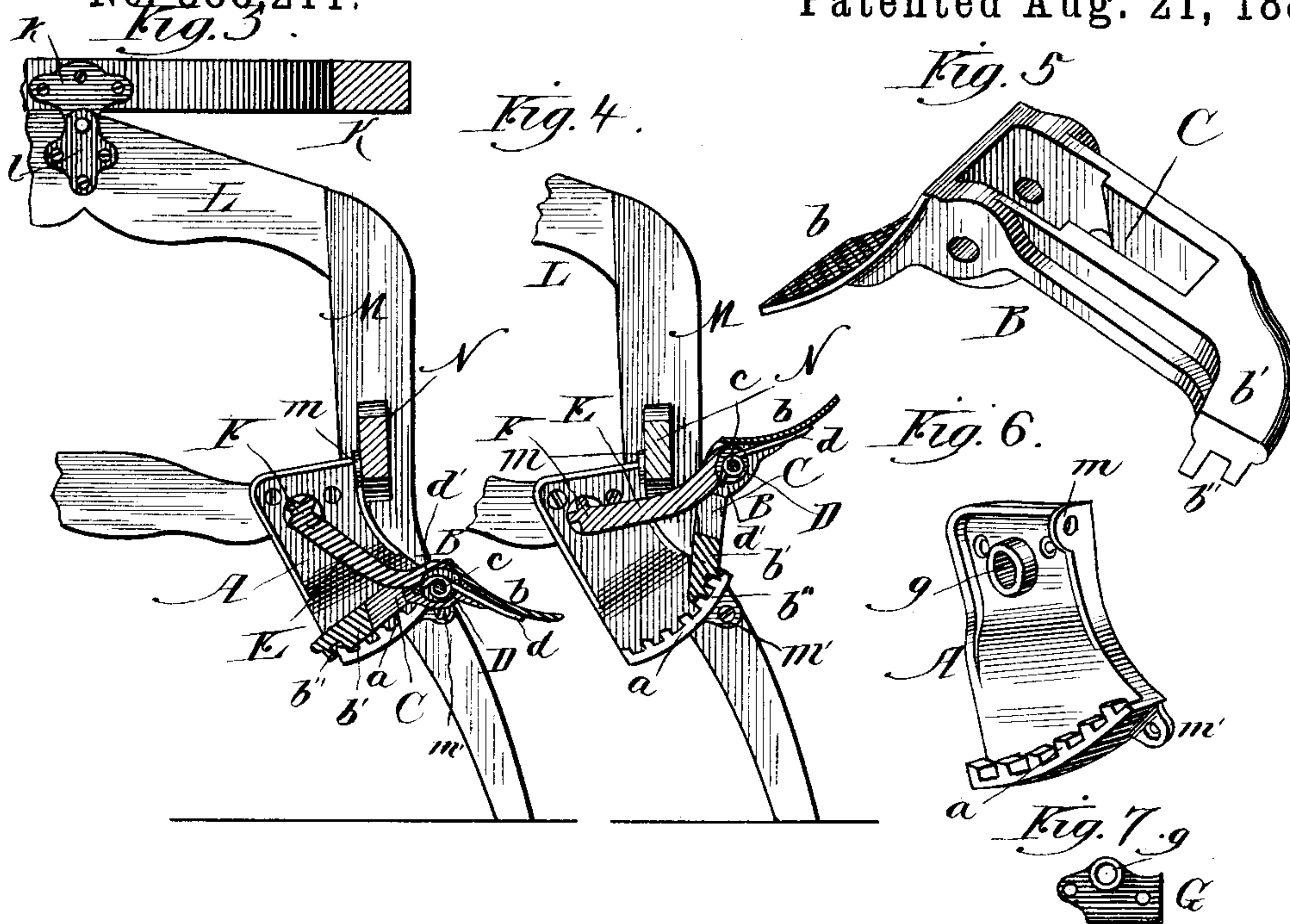
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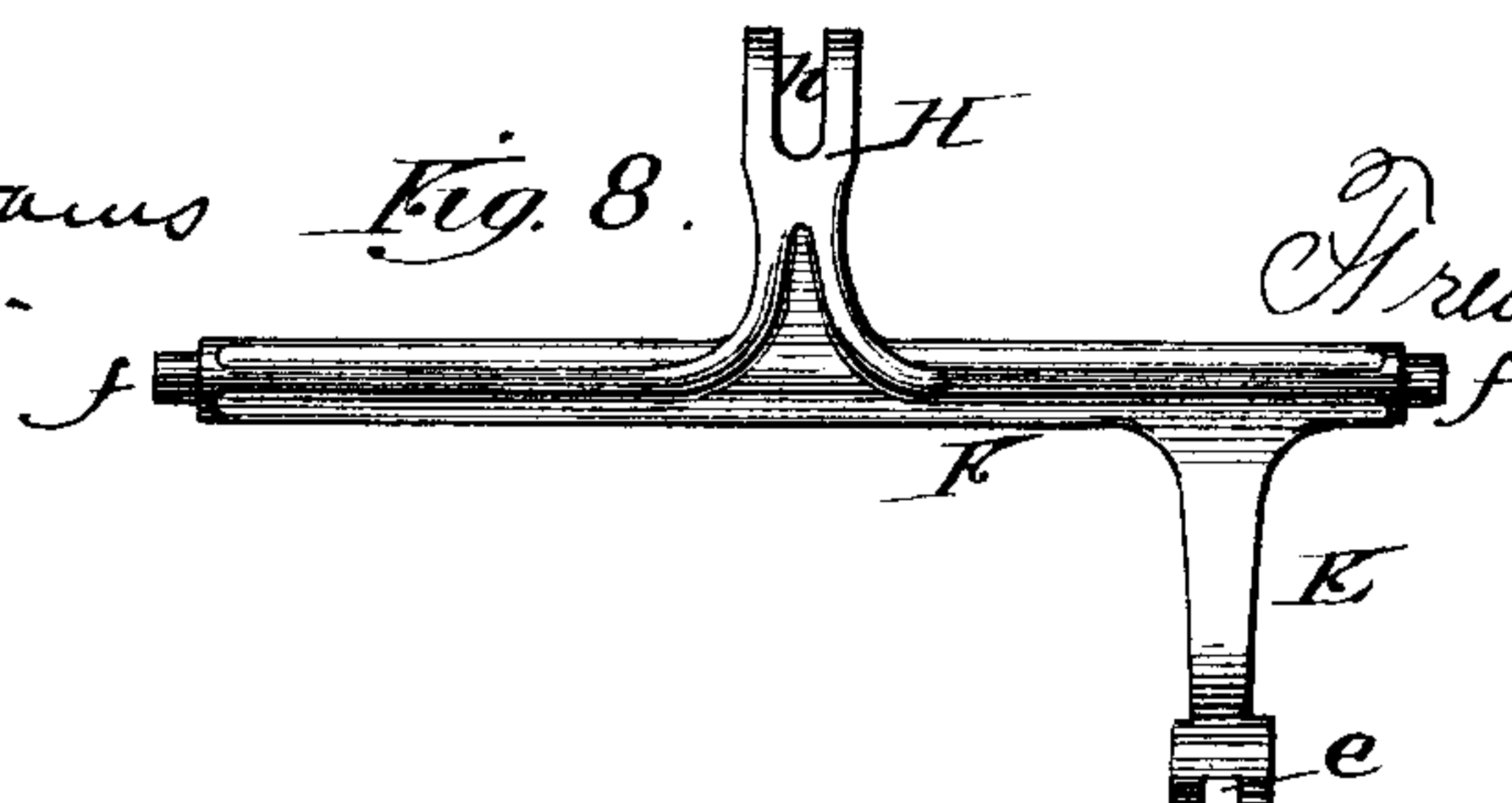
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Fig. 8.



Inventor:
Fred Melchior.

UNITED STATES PATENT OFFICE.

FRED MELCHIOR, OF CHICAGO, ILLINOIS, ASSIGNOR TO HIMSELF AND
HUGO MELCHIOR, OF SAME PLACE.

BARBER'S CHAIR.

SPECIFICATION forming part of Letters Patent No. 388,211, dated August 21, 1888.

Application filed February 5, 1887. Serial No. 226,684. (No model.)

To all whom it may concern:

Be it known that I, FRED MELCHIOR, residing at Chicago, in the county of Cook and State of Illinois, and a citizen of the United States, have invented a new and useful Improvement in Barbers' Chairs, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation showing in full lines the seat of the chair raised and in dotted lines tipped back; Fig. 2, a rear elevation with the seat of the chair raised; Fig. 3, a detail, partly in section, showing the seat-operating treadle and other devices in position with the seat raised; Fig. 4, a detail, partly in section, with the operating-treadle and other devices in position with the seat tipped back; Fig. 5, a perspective view of the operating-treadle; Fig. 6, a perspective view of the rack with which the treadle coacts; Fig. 7, a detail showing one of the bearing-plates for the crank rod or shaft; Fig. 8, a detail, being a top or plan view of the crank rod or shaft.

The object of this invention is to enable the operator to readily throw the seat and back of a chair into an upright position, by the use of the foot and without any great amount of strength, and at the same time have the locking devices, when released by the foot of the operator, as the occupant of the chair is in position, readily permit the back and seat to assume an inclined position; and it consists in the several parts and combinations of parts, as hereinafter described, and pointed out in the claim.

In the drawings, A represents a plate having at one end a rack, *a*, which plate can be made of malleable iron or other suitable material, with the rack on a circle that will allow the operating-treadle to be disengaged therefrom or engaged therewith, as required.

B represents the operating-treadle having an end or portion, *b*, flattened out to be pressed by the foot of the operator, and having an arm, *b'*, provided with an interlocking projection, *b''*, which will engage with the rack *a*.

C represents a mortise or slot in the treadle B.

D represents a spring, one end, *d*, of which engages with the under face of the foot portion *b* of the treadle and the other lies in con-

tact with the lifting arm of the rock shaft or rod.

E represents the lifting-arm of the rock shaft or rod, the outer end of which arm enters the mortise C, and is pivotally connected with the treadle B by the pin or pivot *c*, which passes through the treadle and the end of the arm, and, as shown in Figs. 3 and 4, the spring D is coiled around the pin or pivot *c*, its body lying within a recess, *c*, in the end of the arm, to have its end *d'* engage with the under face of the arm E.

F represents the rock shaft or rod, extending out from which is the arm E.

G represents a plate adapted to be secured to the lower side bar or other portion of the base of the chair, and having a bearing, *g*, to receive a trunnion, *f*, on the end of the shaft F, the other end of which shaft is provided with a trunnion, *f*, which enters a bearing, *g*, on the plate A, so that the shaft F is mounted in its bearings to have a free rock from the raising and lowering of the arm E through the foot-treadle B.

H represents an arm extending out from the rock-shaft F on the opposite side thereof, as shown in Figs. 1 and 8, and, as shown in Fig. 8, this arm H has a slot, *h*.

I represents a bar one end of which is pivoted in the slot *h* of the arm H by a suitable pin or pivot, *i*.

J represents a bracket having ears between which the upper end of the rod I is pivotally secured by a suitable pin or pivot, *j*.

K represents the frame of the seat, to the rear side of which is secured the bracket J. This seat is to have a back and arms connected therewith, and the chair as a whole is to be upholstered, as usual.

L represents the side rails of the base, to which the seat is hinged by plates *k l*, as usual; M, the rear legs, and M' the front legs, of the base; N, the rear cross-bar running from rear leg to rear leg, and N' the cross-bars running from the rear leg to the front leg on each side.

As shown in Figs. 1 and 2, and with the arrangement detailed in Figs. 3 and 4, the plate A has at its upper corner an ear, *m*, through which a screw can be passed for attaching the plate to the cross-bar N, and at the lower cor-

ner of the plate A is an ear, m' , through which a screw can be passed for attaching the plate to one of the rear legs; and with the plate A connected in this manner the lifting-arm E of the rock-shaft F is at one end of such shaft and in such relation to the plate A as that the end b' of the foot-treadle B when the treadle is pivoted to the end of the arm E will be in position for the tooth b'' to engage with the rack a .

The parts are assembled by securing the plate A to the cross-bar N and rear leg, M, by the ears $m m'$, and then inserting the trunnion f of that end of the rock-shaft F which has the arm E into the bearing g of the plate A, and then inserting the trunnion f at the other end of the rock-shaft F into the bearing g of the plate G, and securing such plate in place to mount the rock-shaft between the plates A and G in the bearings g . The foot-treadle B is attached to the arm E by slipping the end of the arm into the socket C, and the spring D is then placed in the recess e , so that the pin or pivot e can be passed through the foot-treadle, the end of the arm E, and the coil of the spring D, and have the end d of the spring bear against the under side of b and the end d' of the spring bear against the under side of the end of the arm E, the bearing force of the spring being such that it throws the end b' of the foot-treadle down to engage the tooth b'' with the rack a . The rod I is connected at one end to the arm II and at the other end to the bracket J by the respective pins or pivots $i j$. When the device is ready for use, and in use when the occupant of the chair is seated therein with his head on the head-rest, as usual, the operator by pressing down on the foot portion b of the treadle B raises the tooth b'' from the rack a , which unlocks the seat, so that the weight of the occupant will tip the chair back into the position shown in dotted lines in Fig. 1, or such inclined position as the operator may desire, and when the chair has been tipped sufficiently the operator, by removing his foot from the foot-portion b of

the treadle, allows the spring D to act and throw the tooth b'' into engagement with the rack a , locking the seat and back in the inclined position.

The seat and back are raised from the inclined position by the operator pressing on the foot portion b of the treadle, which raises the tooth b'' from its engagement with the rack a , so that by the operator continuing the pressure on the foot portion b the arm E will be carried down, rocking the shaft F and raising the arm H, which, through the connecting-rod I, will raise the seat from the back, and as the arm H is of a shorter length than the arm E the balance of power is in favor of the arm E, and the arm II, being extended forward, gives an incline to the bar I, which, in connection with the leverage of the arm E over the arm H, requires but little force on the part of the operator to press down the treadle B and the arm E and thereby raise the seat, and when the seat is raised the release of the foot-treadle from the foot of the operator allows the spring D to act and throw the tooth b'' into engagement with the rack a , locking the seat and back in their raised position. The leverage of the arm E is sufficient to enable the operator to raise the back and seat without the assistance of the hand, as is now required in the practical operation of barbers' chairs of the ordinary construction.

What I claim as new, and desire to secure by Letters Patent, is as follows:

In a tilting-chair, the combination, with the pivoted rod F, arm II, connected therewith, and rod I, connecting said arm with the chair-seat, of the arm E, rigidly connected at one end with the rod F, treadle B, pivoted to the other end of said arm, rack a , for engaging the lower end of said treadle, and a stop to limit its motion relative to the arm E, substantially as described.

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Witnesses:

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