

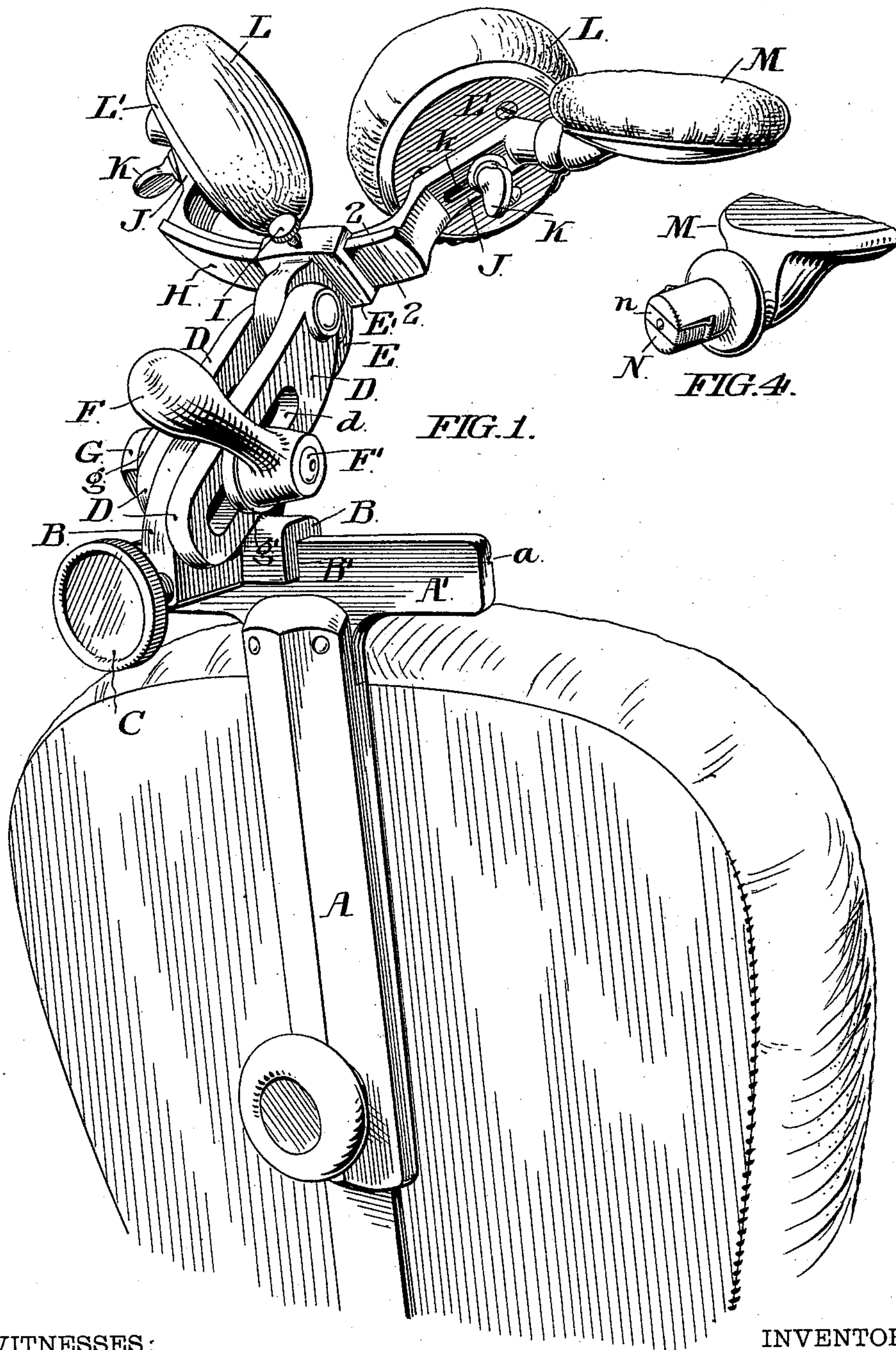
(No Model.)

2 Sheets—Sheet 1.

A. W. BROWNE.
HEAD REST.

No. 522,192.

Patented July 3, 1894.



WITNESSES:

Edw. F. Simpson, Jr.
J. D. McGood

INVENTOR

A. W. Browne
By Atty. J. P. Peyton.

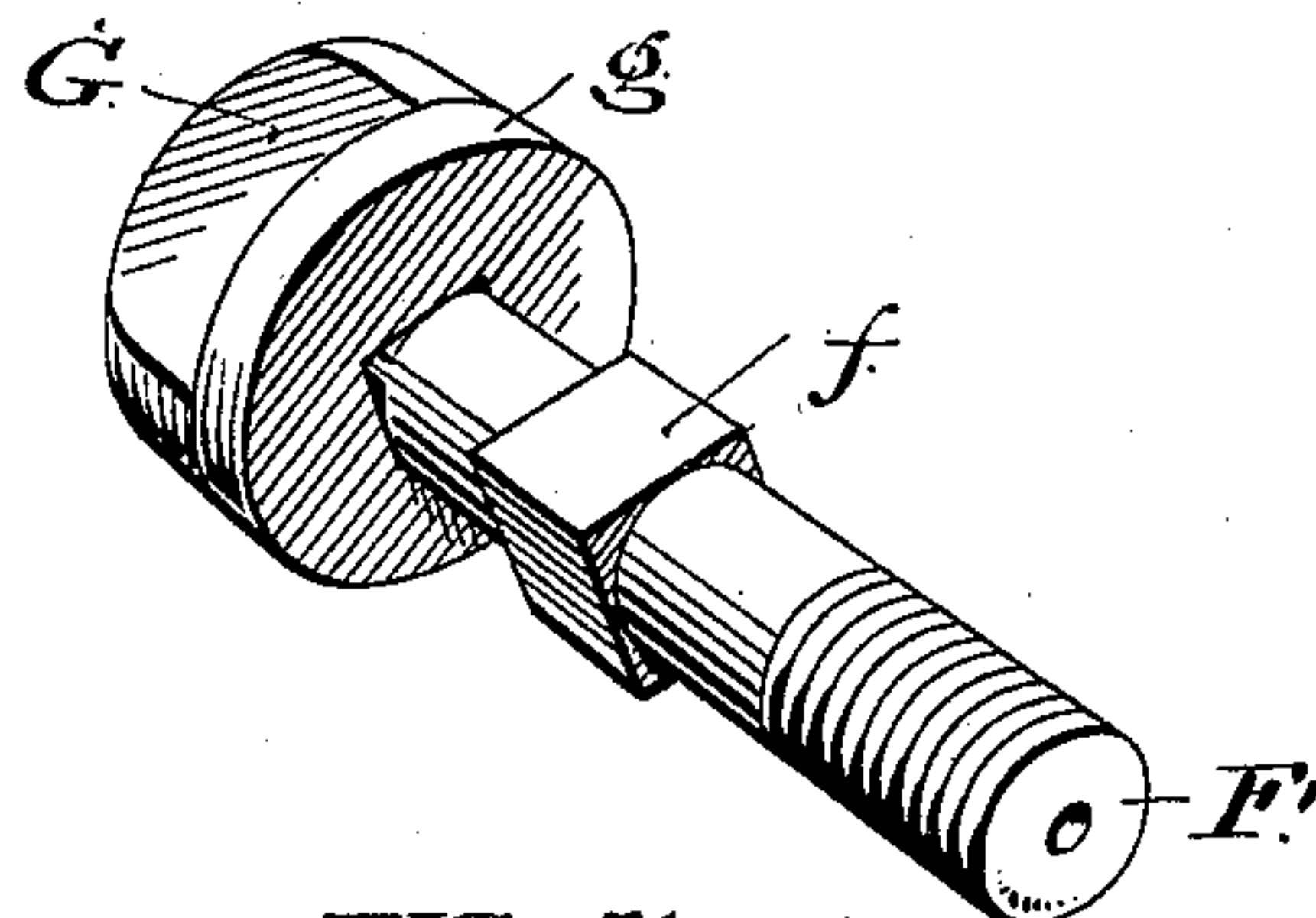
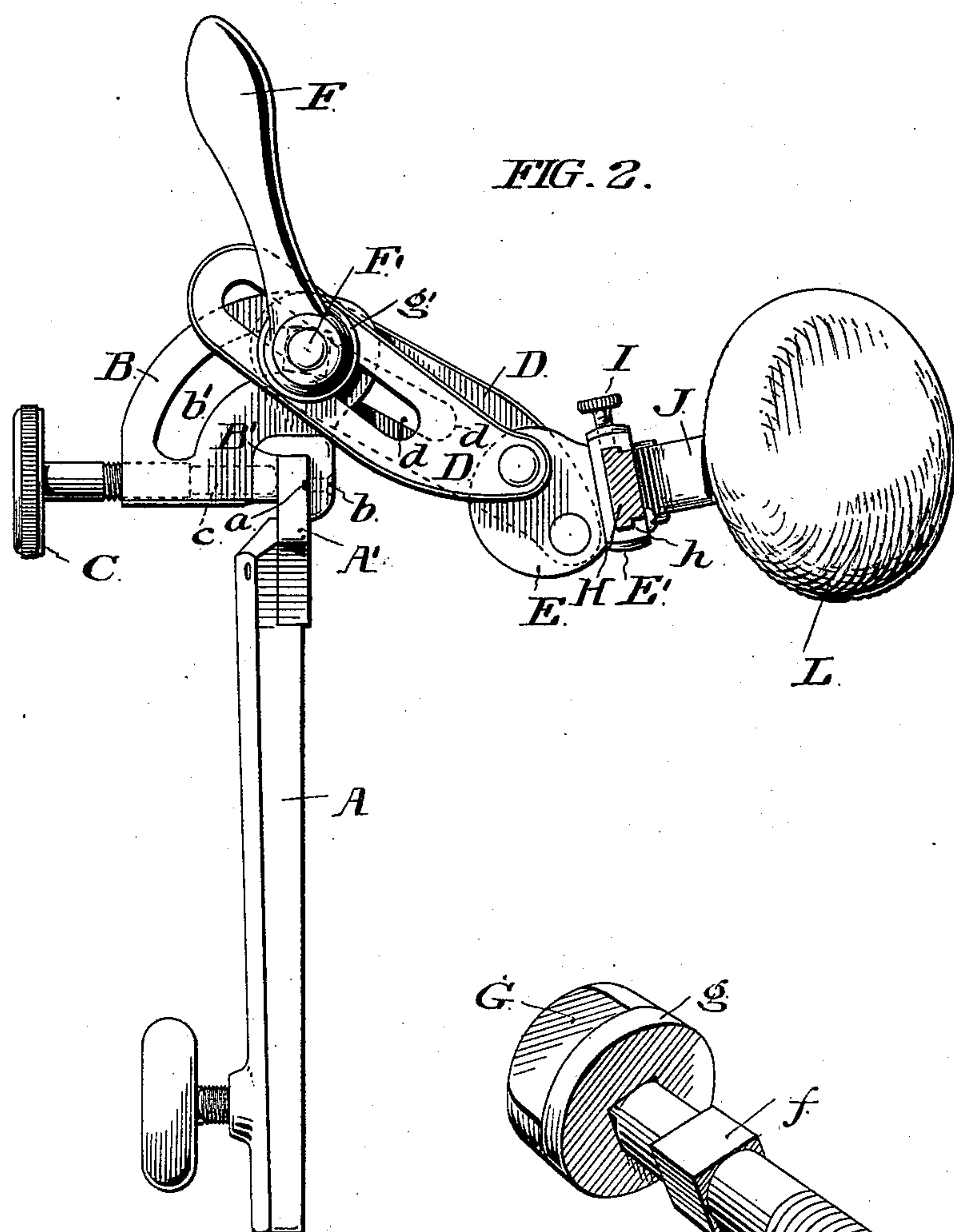
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HEAD REST.

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WITNESSES:

Edw. F. Simpson, Jr.
J. M. Goods

INVENTOR

A. W. Browne
By atty J. H. Peters

UNITED STATES PATENT OFFICE.

ARTHUR W. BROWNE, OF PRINCE'S BAY, NEW YORK, ASSIGNOR TO THE S. S. WHITE DENTAL MANUFACTURING COMPANY, OF PHILADELPHIA, PENNSYLVANIA.

HEAD-REST.

SPECIFICATION forming part of Letters Patent No. 522,192, dated July 3, 1894.

Application filed February 13, 1893. Serial No. 462,114. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR W. BROWNE, of Prince's Bay, in the county of Richmond and State of New York, have invented certain new and useful Improvements in Head-Rests for Dental Chairs, of which the following is a specification.

My invention relates to certain improvements, as hereinafter specifically claimed, in head rests applicable to dental chairs.

My objects are to provide a readily actuated head rest adjustable backward and forward, sidewise, in height and in inclination.

In the accompanying drawings representing a suitable adaptation of my invention to a dental chair, Figure 1 is a view in perspective, a portion of the chair being shown. Fig. 2 is a view in side elevation, partly in section on the line 2 of Fig. 1. Fig. 3 is a detail view on an enlarged scale, representing portions of clamping mechanism employed; and Fig. 4 is a detail view, also on an enlarged scale, representing a portion of the arm rest.

A main head rest support A is adapted for attachment to the back of a chair so as to be vertically adjustable as usual. As shown this support slides on a fixed guide rib of the chair back and a clamp screw serves to lock it in its adjusted position. The support is provided at top with a transverse bar or cross head A' having a guide groove *a*. A slotted adjusting block B is fitted to slide on the cross head A', lengthwise thereof, by means of a guide way groove B'. A screw *b* in the grooved portion of the adjusting block projects into the cross head groove *a* and maintains the parts in proper working relation. The slot *b'* of the adjusting block is curved and extends from near the front upper extremity thereof to near its lower rear portion. A clamp screw C works in the adjusting block and acts by way of a plug washer *c* upon the cross head to lock the cross head and adjusting block together. The cross-head, it will be seen, projects horizontally from each side of the main support A toward opposite sides of the chair, and extends parallel, or substantially so, with the chair back.

Two adjusting arms D D provided with longitudinal slots *d d* have each connection at one end with an attachment by way of which

the head rest pad is supported. This attachment as shown consists of an attachment block E having a guide piece E'. The adjusting arms are pivoted to opposite sides of the attachment block and eccentrically to each other.

Suitable devices for clamping the adjusting arms in the desired position are provided, consisting as shown of the following means: A clamping lever F is threaded to engage a screw bolt F' which passes through the slots of the adjusting arms and adjusting block B, and is provided with a fixed shoulder or enlargement *f* to enter the slot *b'* of the block and thus prevent turning of the bolt when the clamping lever is actuated. The bolt is provided with a nut G and a washer *g* is interposed between the nut and the adjusting arm adjacent thereto, the bolt being squared to receive the washer. A washer *g'* is interposed between the clamping lever and the adjusting arm next to it. By squaring the bolt to lock the washer *g* against turning, the accidental turning of the nut G during manipulations of the clamp is prevented. Obviously were the washer left free to be turned upon the bolt by frictional contact with the adjacent adjusting arm, it would become liable to disturb the adjustment of the nut G, and consequently vary the range of movement of the lever F in clamping and unclamping. As there is room for but limited play of this lever it is important that its range of adjustment be not disturbed. A curved bar H is mounted to slide endwise in the groove *h* of the guide piece of the attachment block E. A screw I constitutes a clamp which serves to lock this slide bar in the desired position. The slide bar has at each end a longitudinally slotted angular projection or arm J. A clamp screw K passes through the slot *k* of each arm and washers are interposed between the screw heads and the arms. A head rest pad is shown as made in two parts L L each of these sections being provided with a threaded hole in the back plate L'. The clamp screws K engage these holes and serve to adjustably secure the pad sections in place. The sections of the pads being independently mounted may be adjusted separately as desired to increase or lessen the distance between them

by loosening the clamps and sliding them either outward or inward in the slots of the arms of the slide bar, and then tightening the clamps. When the clamp screws are loosened they may serve as pivots to allow the pad sections to be turned as desired. A padded arm rest M is detachably secured to one of the arms J of the slide bar, a supporting stud N of the arm rest being provided with a spring catch n for yieldingly engaging in well known way with a recessed socket at the extremity of the slide bar arm.

From the above description it will be seen that the head rest may be adjusted sidewise of the chair by movement of the adjusting block B along the cross head of the main support; that a similar adjustment is attained by movement of the slide bar H in the attachment block guide piece E'; that owing to the curvature of this slide bar an angular adjustment of the head rest is provided for, as obviously when the bar is clamped at one side of its center one of its ends or projecting arms J (that farthest from the guide piece) will be advanced beyond the other, consequently inclining the head of a patient seated in the chair, more or less to the right or left according to adjustment; and that by making the pad in two sections independently mounted and adapted to be moved toward and from each other, the pad may be nicely adjusted to suit different sized heads, and accommodate it to the dressing of the hair of female patients. It will further be seen that as the adjusting arms D D are pivotally connected with the attachment block eccentrically to each other this block can have no movement about or independently of the adjusting arms so long as they are clamped to the slotted adjusting block B; that when the adjusting arms are released from the action of their clamp the attachment block may be rocked vertically with the adjusting arms and the head rest be moved backward or forward and that the attachment block and consequently

the head rest pad may be rocked about its pivotal connection with one of the arms (either of them) while the other arm slides endwise upon the screw bolt of the clamp, thus adjusting inclination of the head rest pad.

Instead of the two part pad a single pad, or "slack strap" connected at its opposite ends to the arms of the slide bar, might be employed, while still retaining novel features of my invention.

I claim as my invention—

1. The combination of the vertically adjustable main support terminating at top in the cross-head projecting from each side of the support parallel with the chair back, the slotted adjusting block sliding on said cross-head, the clamp screw by which to lock the adjusting block in position, the slotted adjusting arms, the clamp bolt passing through the slots of said block and arms and having an actuating handle, the head rest pad, and the attachment block with which it has supporting connection and to which the adjusting arms are each pivoted at one end eccentrically to each other, substantially as set forth.

2. The combination, in an adjustably supported head-rest, of the slotted adjusting block, the slotted adjusting arms, the clamp bolt passing through the slots of said block and arms and having an actuating handle, the attachment block provided with the guide piece and to which said adjusting arms are each pivoted at one end eccentrically to each other, the curved slide bar having sliding adjustment in said guide piece, the head rest pad carried by the curved slide bar, and the clamp for locking said bar in position, substantially as set forth.

In testimony whereof I have hereunto subscribed my name.

ARTHUR W. BROWNE.

Witnesses:

SEYMOUR CASE,
WM. TOMPKINS.