

(No Model.)

C. E. AKELEY.
HEAD REST.

No. 547,390.

Patented Oct. 1, 1895.

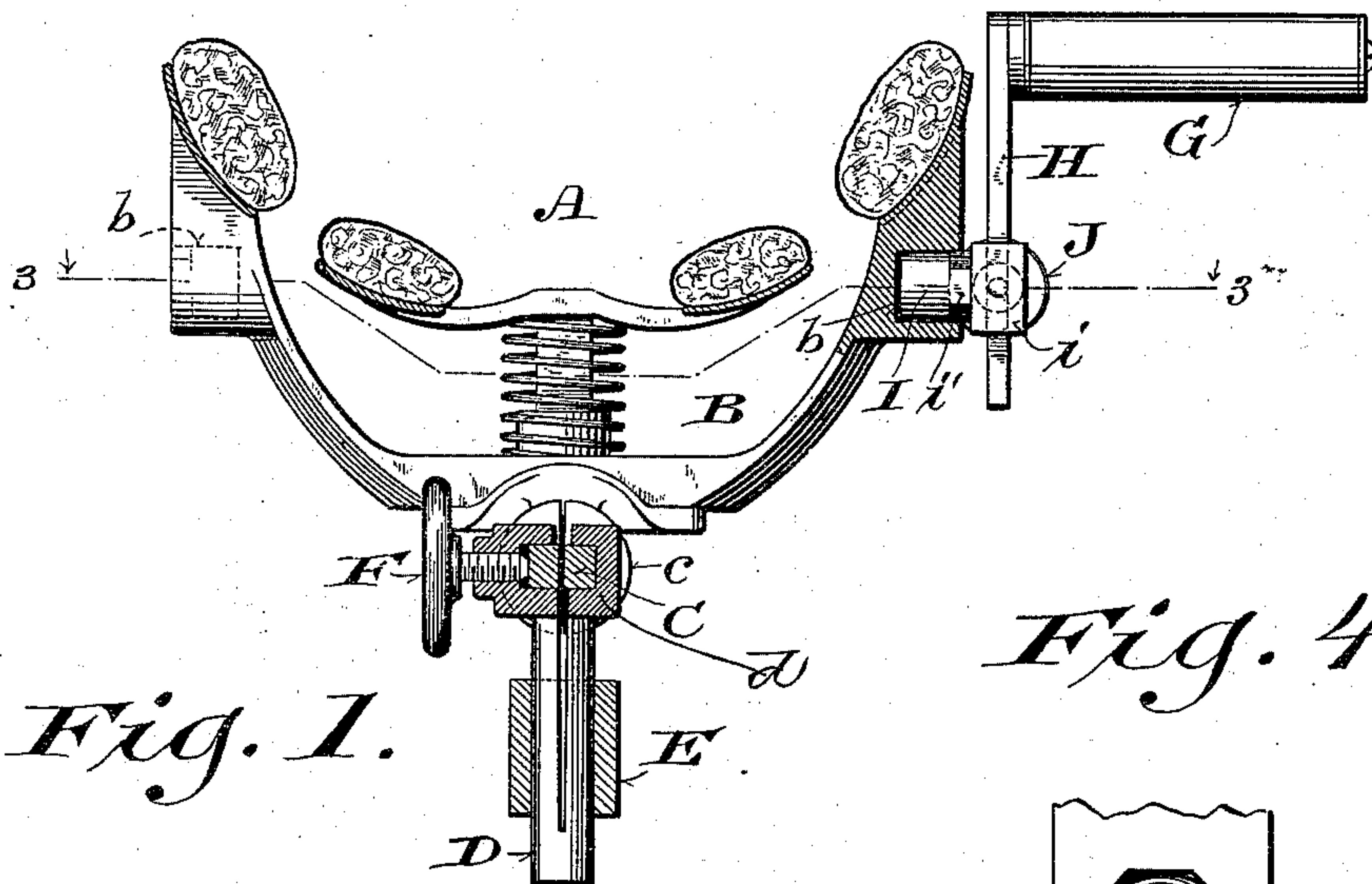


Fig. 1.

Fig. 4.

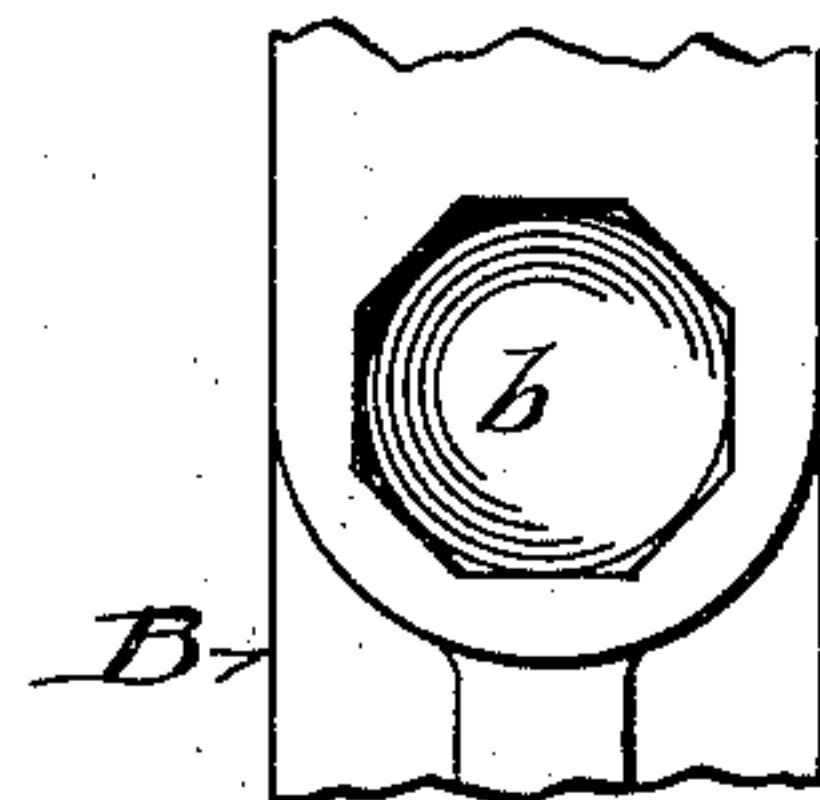


Fig. 2.

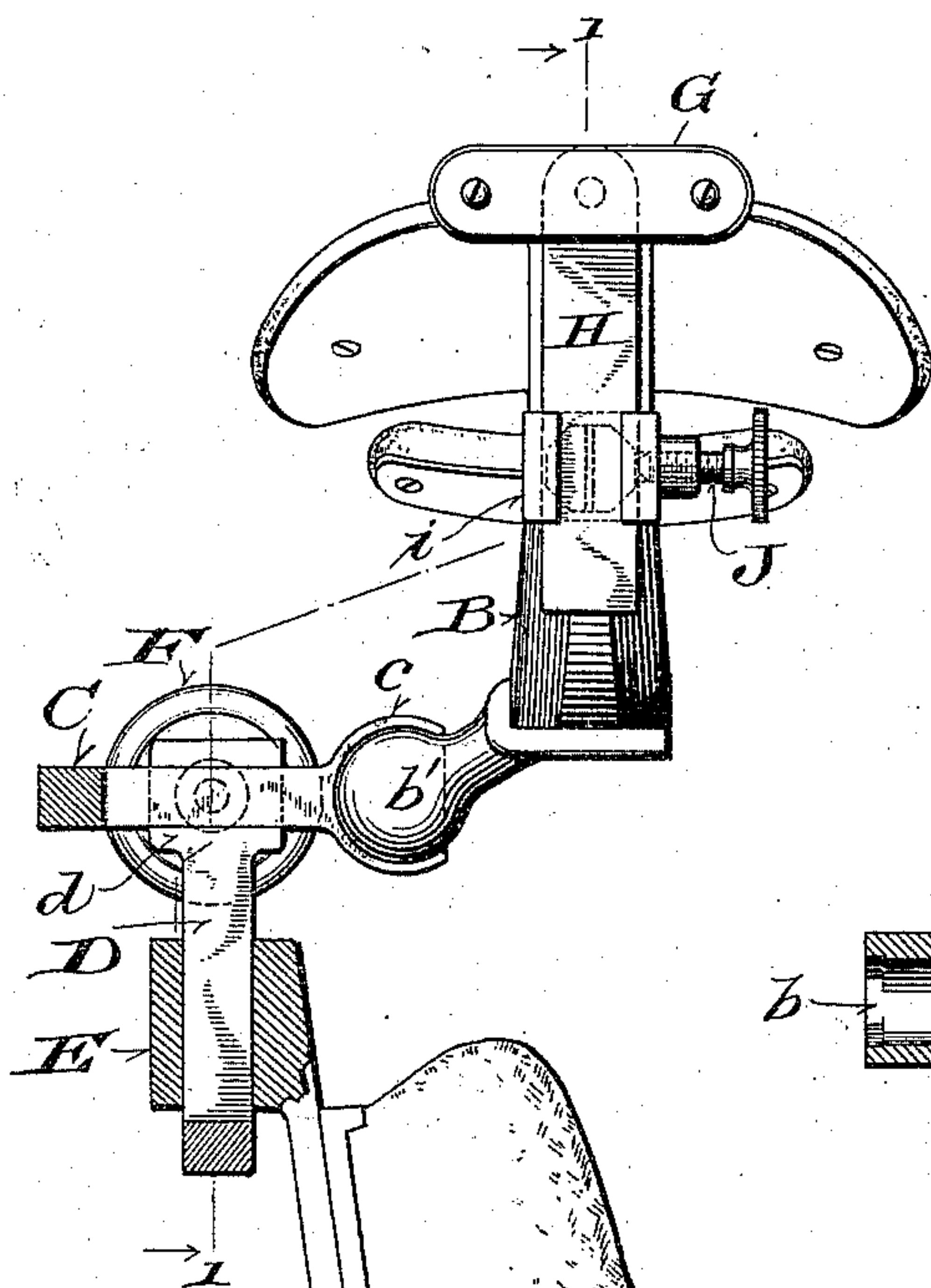
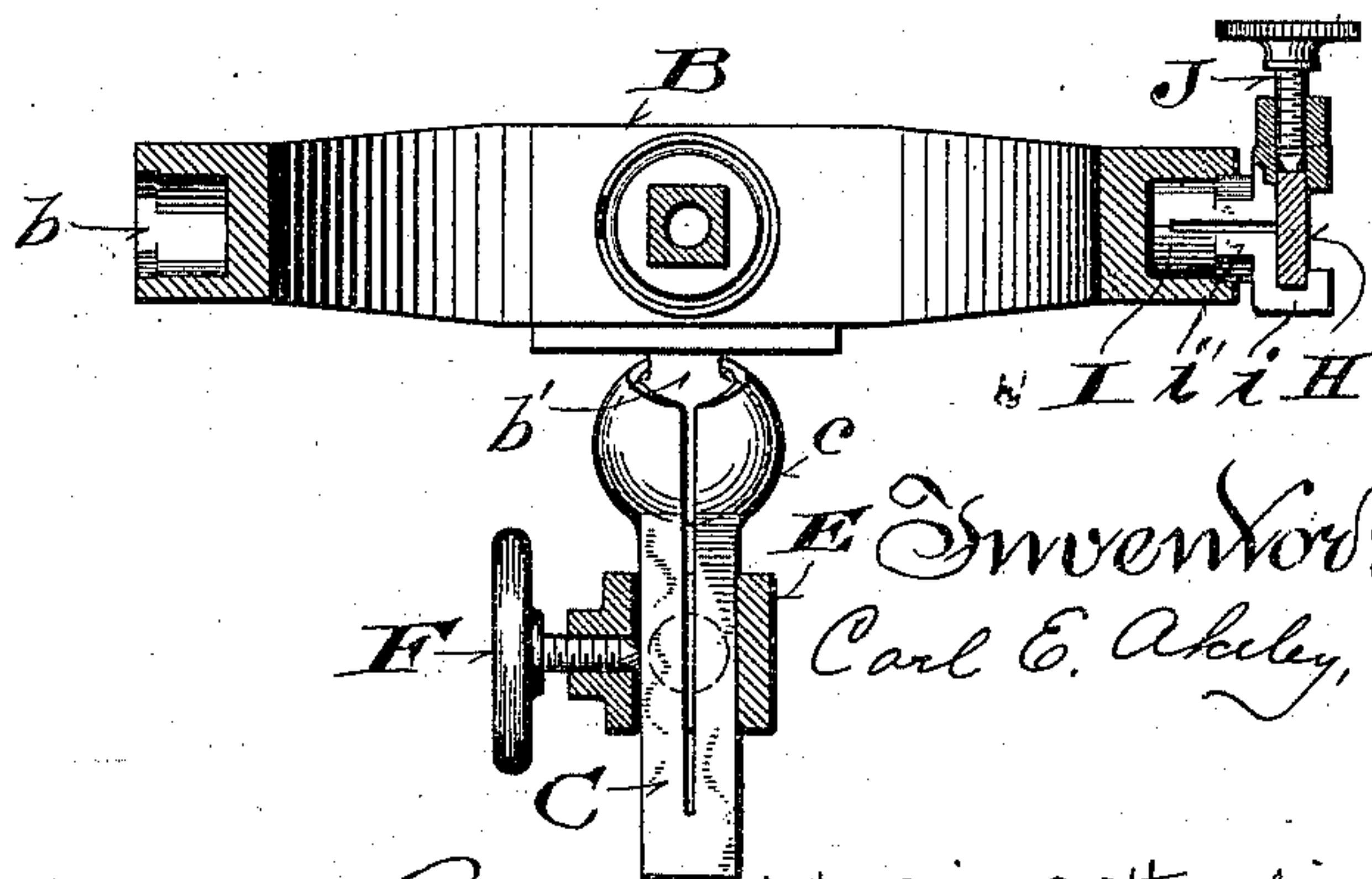


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

CARL E. AKELEY, OF MILWAUKEE, WISCONSIN, ASSIGNOR OF ONE-HALF TO
EDWIN H. VAN OSTRAND, OF SAME PLACE.

HEAD-REST.

SPECIFICATION forming part of Letters Patent No. 547,890, dated October 1, 1895.

Application filed March 8, 1895. Serial No. 540,974. (No model.)

To all whom it may concern:

Be it known that I, CARL E. AKELEY, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Head-Rests for Surgical Chairs; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates particularly to the supporting connections of the head-rest and of the arm-rest with which it is provided. Its main objects are to facilitate the adjustment of the head and arm rests and generally to simplify and improve the construction of this class of devices.

It consists in certain novel features in the construction and arrangement of the attachments of the head-rests, as hereinafter particularly described, and pointed out in the claims.

In the accompanying drawings like letters designate the same parts in the several figures.

Figure 1 is a vertical cross-section of a head-rest embodying my improvements in a plane indicated by the line 1 1, Fig. 2. Fig. 2 is a side elevation of the same, certain parts being shown in section. Fig. 3 is a horizontal cross-section in a plane indicated by the line 3 3, Fig. 1; and Fig. 4 is a detail view, on an enlarged scale, of one of the sockets in the sides of the head-rest frame for the attachment of the arm-rest.

A designates the head-rest, which comprises a frame B, consisting, essentially, of two diverging arms having in the outer sides near their ends sockets *b b*, a portion of which may be made octagonal or angular, as shown in Fig. 4, for a purpose to be hereinafter explained, and provided at or near the center with a ball *b'*.

C designates a split stem formed at its expansible end with a socket *c*, which is divided by the cleft in said stem and adapted to embrace and hold the ball *b'*.

D is a cylindrical spindle split through one end and fitted in a vertical socket or hole provided for its reception in the bracket E or

other adjunctive part of the chair with which the head-rest is to be used. It is formed at its split or expansible end with a head *d*, which has a transverse opening through it, intersected lengthwise by the cleft in said spindle, so as to be expanded and contracted. In this opening the stem C, preferably made square or angular to prevent its turning, is fitted and adjusted lengthwise. The spindle D is adjustable lengthwise and adapted to turn in the bracket E.

F is a screw, preferably provided with a large hand-wheel or handle to facilitate its manipulation, threaded in one side of the head *d* and adapted to engage at the tip with one side of the stem C, passing through said head. When the screw F is loosened, the several supporting parts of the head-rest above described are free to be adjusted one in another, and the head-rest may be turned on its ball-bearing C into any position with reference thereto. It may be moved forward or backward by sliding the stem C in the head *d* of spindle D. It may be raised or lowered by moving the spindle D vertically in the bracket E and may be swung to either side of the chair by turning said spindle in said bracket.

When the head-rest is placed and adjusted as desired, it is secured in position by locking the component parts of its supporting connections together. This is effected by tightening the single screw F, which clamps the split socket *c* on the ball *b'* and simultaneously locks the stem C in the head of spindle D and spreads and locks spindle D in the bracket E.

I provide the head-rest with a detachable and reversible arm-rest G, which is swiveled at one end to a flattened stem H at right angles thereto, or approximately so. This stem is fitted and adjustable endwise in the corresponding opening formed transversely through the head *i* of a spindle I. The spindle I has an octagonal or angular portion *i'* next to its head *i* and is fitted to the sockets *b* in the head-rest frame. It is also split through the head *i* lengthwise of the opening therein, as shown in Fig. 3, and a screw J is threaded in one side of said head for locking the stem H therein and spreading and locking the spindle I in place in either of the sockets

b. By loosening the screw J the stem H may be adjusted endwise in the head i, and the spindle I may be partially withdrawn from the socket b and turned therein, so as to bring the arm-rest G into any desired position with reference to the head-rest. By tightening the screw J on the stem H the latter is secured in place in the head i and the spindle I is spread and locked in the head-rest frame, thereby securing the arm-rest G in place.

The purpose of the octagonal or angular portion of the spindle I is to prevent it from turning in the sockets b; but by making the parts of sufficient size and strength said spindle may be made of cylindrical form and held in place by spreading it in the socket b by means of the screw J. I prefer, however, the construction shown, inasmuch as the supporting connections of the arm-rest above mentioned may be made lighter and it is not necessary to set up the screw J so tightly. It will be observed that the principal and main essential features of the adjustable supporting connections of the arm-rest are essentially like those of the head-rest first described, and that a single fastening suffices to lock and hold all the parts in place.

Various changes and modifications in the minor details of the device may be made within the spirit and intended scope of my invention.

I claim—

1. The combination with a rest for surgical chairs, of an adjustable supporting attachment or connection comprising a stem attached to the rest, a split spindle adjustably held in a corresponding opening in a supporting part, and formed transversely to its axis with an opening in which the stem of the rest is adjustable lengthwise, and means for spreading and locking said spindle in its support and of securing said stem in said spindle, substantially as and for the purposes set forth.

2. The combination with a rest for surgical chairs, of an adjustable supporting connection or attachment comprising a stem to which the rest is secured, a split spindle adapted to be held and to be turned in a corresponding opening in the supporting part and formed through one end with a transverse opening in which said stem is adjustable

lengthwise, and a screw for spreading and locking said spindle in its support and securing said stem in said spindle, substantially as and for the purposes set forth.

3. The combination with a head-rest for surgical chairs, of an adjustable supporting attachment comprising a stem connected with the head-rest by a universal joint, a split spindle adjustable lengthwise in a vertical socket or hole in a part of the chair and provided in its split end with a transverse opening in which the stem of the head-rest is adjustably held, and a screw threaded in said spindle and adapted to engage the stem passing through it so as to simultaneously lock both spindle and stem in place, substantially as and for the purposes set forth.

4. The combination with a head-rest provided with a ball, of a split stem having a socket in its expansible end adapted to hold said ball bearing, a split spindle adapted to be turned and adjusted lengthwise in a supporting part and formed through its split end with a transverse opening in which said stem is adjustable lengthwise, and a screw adapted to simultaneously compress said socket on said ball, to secure said stem in said spindle, and to spread the spindle in its support, whereby the rest is locked in any desired position by a single fastening, substantially as and for the purposes set forth.

5. The combination with a head-rest for surgical chairs, provided on opposite sides with outwardly opening sockets or holes, of a detachable and reversible arm-rest provided with a stem, a split spindle adapted to the sockets or holes in opposite sides of the head-rest and formed through its expansible end with an opening in which the stem of the arm-rest is adjustable lengthwise, and a screw adapted to spread and secure said spindle in either socket or hole and to lock said stem in said spindle, substantially as and for the purposes set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

CARL E. AKELEY.

Witnesses:

A. W. HARD,
CHAS. L. GOSS.