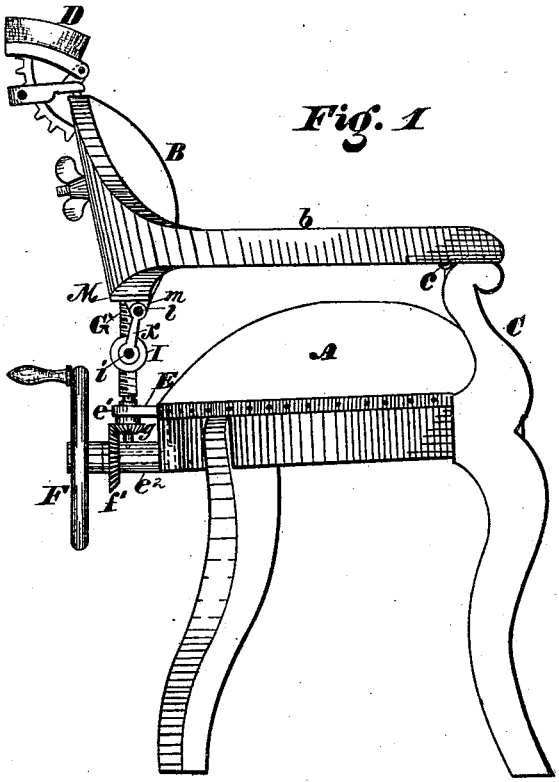
J. GRIENDLING, Sr.

BARBERS' CHAIR.

No. 190,317. Patented May 1, 1877.

Fig. 1



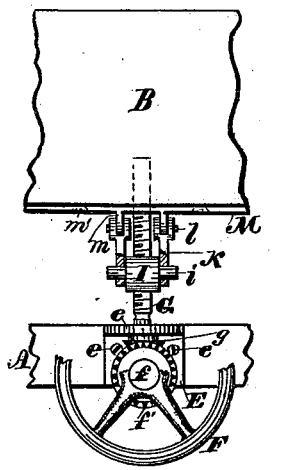
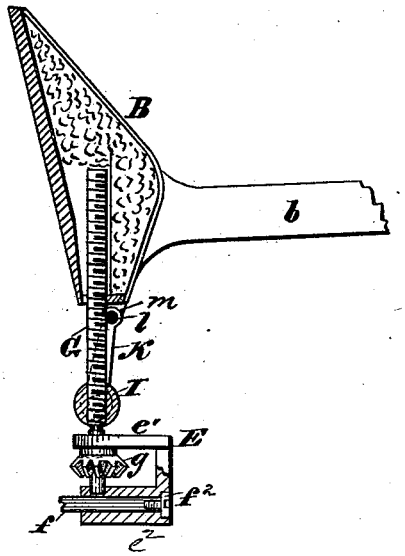


Fig. 2

Fig. 3



Witnesses

Saml. J. Van Stavoren.

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UNITED STATES PATENT OFFICE.

JOHN GRIENDLING, SR., OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN BARBERS' CHAIRS.

Specification forming part of Letters Patent No. **190,317**, dated May 1, 1877; application filed December 22, 1876.

To all whom it may concern:

Be it known that I, JOHN GRIENDLING, Sr., of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Barber-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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification, in which—

Figure 1 is a side elevation of a chair with my improvements attached thereto. Figs. 2 and 3 are detail sectional elevations.

My invention has relation to that class of barbers' chairs in which a hinged adjustable back is raised and lowered by means of a hand-wheel and screw; and my improvements have reference to the special construction and combination hereinafter described, the object of said improvements being to simplify and cheapen the cost of manufacture, and at the same time increase the efficiency of the parts by means of which the back is adjusted.

Referring to the accompanying drawings, which illustrate my improvements applied, A is a chair, and B the back thereof, having arms *b b*, pivoted or hinged at *c* to the standards or supports C. D is an adjustable head-rest.

E is a bracket, attached to back part of the seat or chair frame, being fastened thereto by screws *e e*. Said bracket has a projecting flange or ear, e^1, and stud or boss e^2, the latter forming a bearing or socket for a horizontal shaft, *f*, and step for a vertical screw shaft or spindle, G. The shaft *f* has a bevel-gear, f^1, and hand-wheel F; and the screw-spindle G has a bevel-gear, *g*, which meshes with that on the shaft *f*. Said shaft is held to its place in the bracket E by a screw, f^2, having an enlarged head, which fits in a countersunk recess in the back of said bracket.

The bracket E has a smooth opening, through which the spindle G passes, said spindle being also smooth at its lower extremity, or where it passes through the bracket. The upper extremity of said spindle passes into a threaded nut, I, said nut being formed with trunnions *i i*, on which are pivoted or swiveled arms K K. The upper extremities of said arms are bifurcated, as shown, and attached by pins *l l* to the ears *m m* of plates M M, which are secured by screws *m'* to the chair-back B.

To secure the necessary adjustment of the chair-back, the hand-wheel G is turned, the number of turns required to elevate or lower said back to its full extent being governed by the relative proportions of the gear-wheels and the pitch of the thread on the spindle G.

What I claim as my invention is—

1. The bracket E, having flange e^1 and stud or boss e^2, the latter forming a socket or bearing for the shaft *f* and step for the screw-spindle G, substantially as shown and described.

2. The combination, with the shaft *f*, having its bearing in the stud e^2, of the screw-spindle G, having bevel-gear *g*, located below the flange *e* of the bracket E, and meshing with the wheel f^1 on said shaft *f*, substantially as shown and described.

3. The combination of the screw-spindle G, nut I, having trunnions *i i*, swiveled arms K K, and plates M M, secured to the chair-back B, substantially as shown and described.

4. The chair A, having back B, hinged to standards C, in combination with bracket E, formed with flange e^1 and boss e^2, shaft *f*, having gear f^1 and hand-wheel F, screw-spindle G, secured to gear-wheel *g*, and nut I, having trunnions *i i*, swiveled arms K K, and plates M M, constructed and arranged for joint operation, substantially as shown and set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 19th day of December, 1876.

JOHN GRIENDLING, SR.

Witnesses:

HERMANN DOYENHARDT,

GEORG BEUTLER.