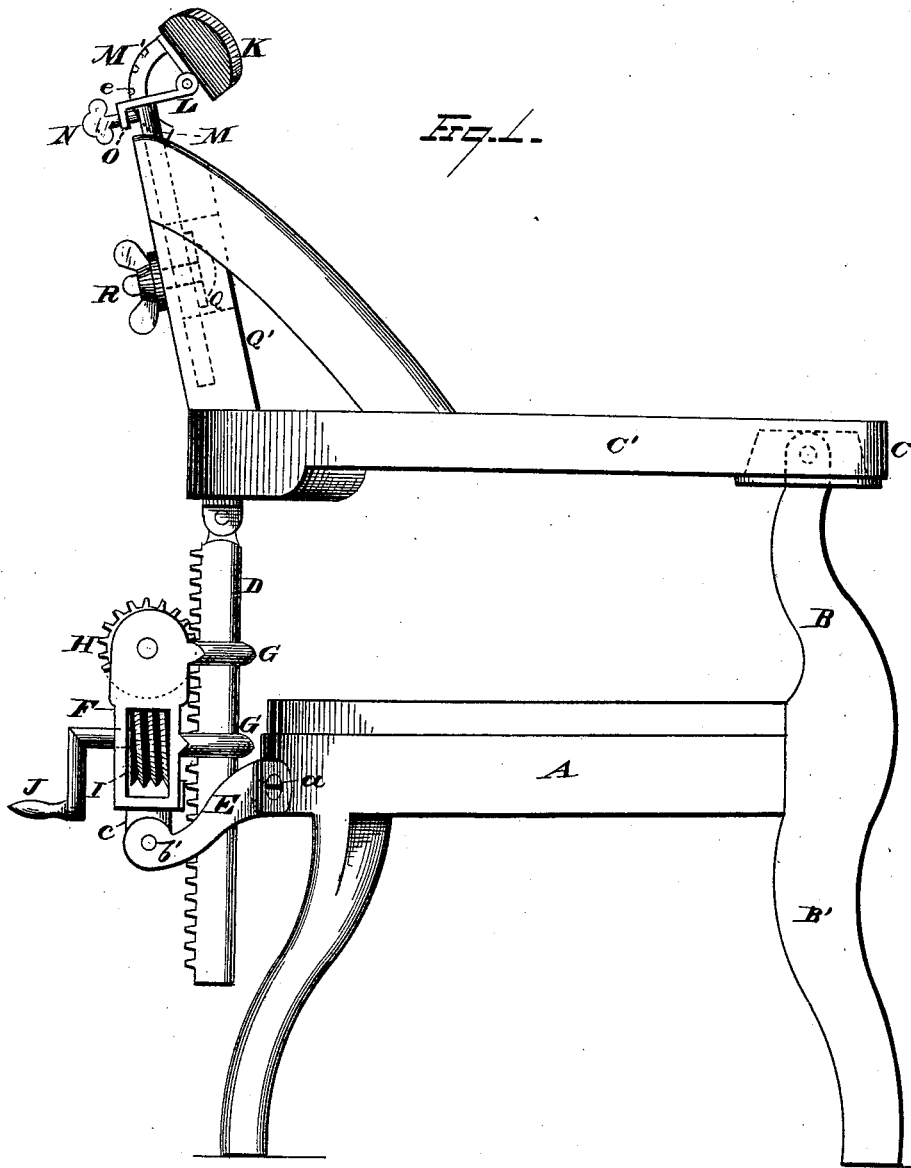


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Barber's Chair.

No. 201,176.

Patented March 12, 1878.



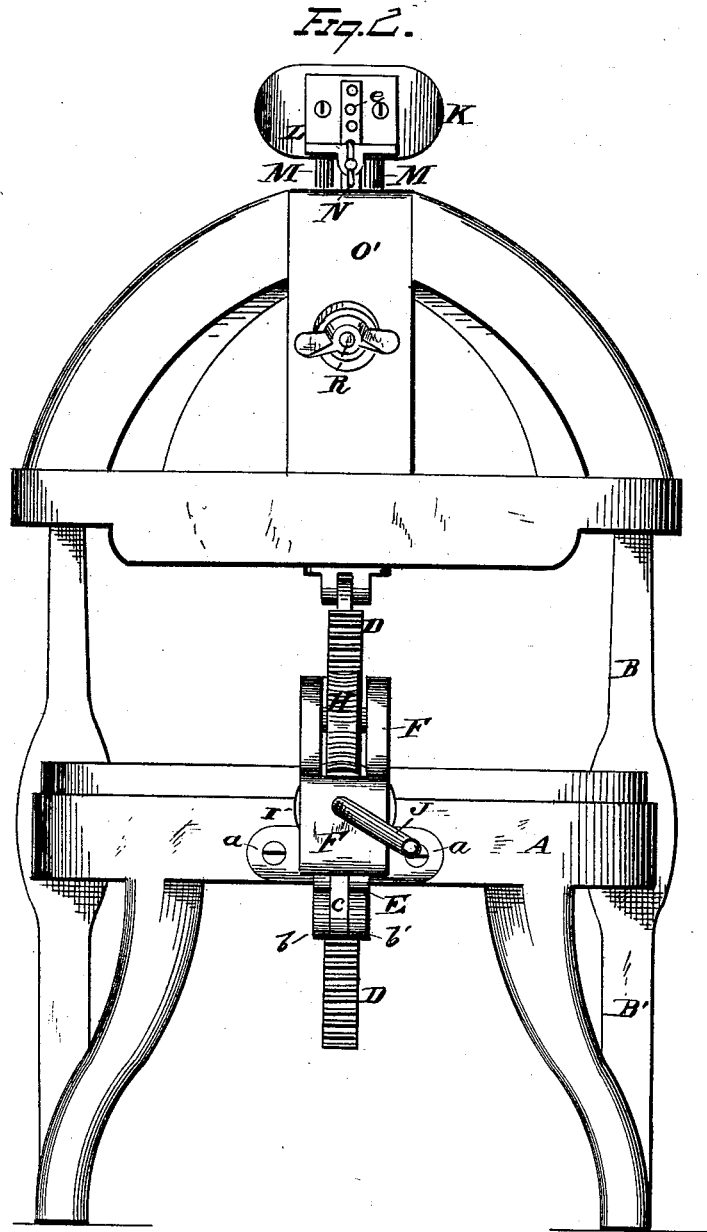
WITNESSES
Ed. J. Nottingham
A. W. Bright

INVENTOR
Henry Geise.
By Dequett & Dequett,
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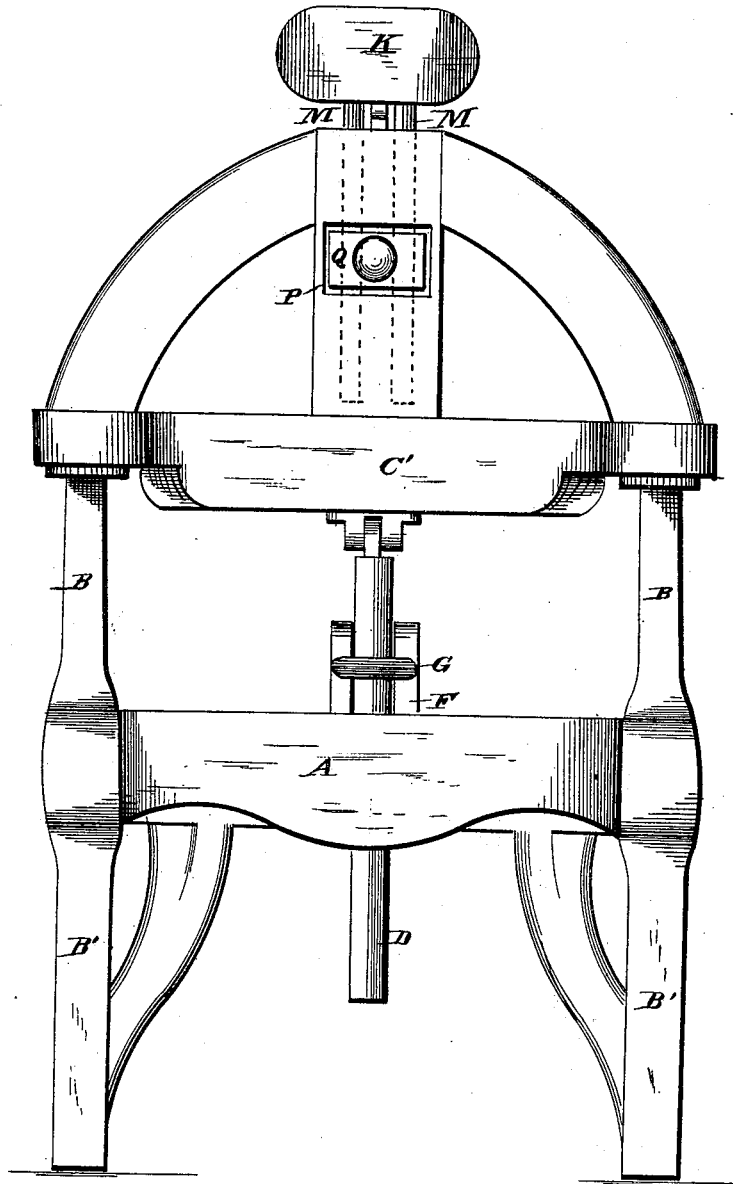
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Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

HENRY GEISE, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN BARBERS' CHAIRS.

Specification forming part of Letters Patent No. **201,176**, dated March 12, 1878; application filed January 10, 1878.

To all whom it may concern:

Be it known that I, HENRY GEISE, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in 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.

My invention relates to an improvement in barber and dentists' chairs, the object of the same being to provide a chair of such construction that its back and head-rest may be durable in construction, and readily adjusted and secured in any desired position.

My invention consists, first, in the combination, with the seat-rail and arm-rail of a chair, of a rack-bar, a spur-gear wheel meshing therewith, and a worm-gear adapted to engage with said spur-gear, the several parts being constructed substantially as hereinafter described, whereby the chair-back can be readily adjusted in any desired position, and is locked by the frictional contact of the parts composing the adjusting mechanism.

My invention further consists in the several combinations of parts, as will more fully appear from the following description of my improvement, and be pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of a barber's chair embodying my invention. Fig. 2 is a rear elevation, and Fig. 3 a front elevation, of the same.

A represents the seat-rail of a chair. B are uprights formed as a part of the front legs B'.

To the upper ends of uprights B are pivoted, in any suitable manner, the ends C of the arm-rail C', whereby the rear portion of said arm-rail may be moved toward or from the seat-rail A. To the rear portion of arm-rail C' is pivoted the rack-bar D, the length of which is equal to the required degree of adjustment between the seat and arm rails of the chair.

E is a bracket, which is firmly secured to the seat-rail A by means of screws *a*, or in any other desired manner. Between the outer ends of the arms *b b'* of bracket E is pivoted

the pendant *c* of the boxing or frame F, which latter carries the gearing for imparting movement to the rack-bar. The frame F is constructed with loops or guides G, within which is located the lower and free end of the rack-bar D.

In the upper portion of frame or boxing F is journaled a spur-gear wheel, H, the teeth of which mesh with the teeth of the rack-bar, and as the latter is retained in place by means of the loops or guides G, the spur-gear and rack-bar will always maintain the same relative position to each other, and the mesh between the teeth of such parts will be preserved under any adjustment of the parts of the chair. Spur-gear H is actuated by means of a worm, I, which latter is journaled in the frame or boxing F, preferably below the spur-gear, and at right angles thereto. To the worm-shaft there is attached a crank, J; or the same may be formed solid with said shaft.

It will be observed that the rack-bar, and also the frame or boxing within the loops of which the bar is guided, are both adapted to have a movement at right angles to the line of movement of the arm-rail, and, as said parts move in unison with each other, there is no serious wear or strain on the adjusting mechanism, the teeth of the spur-gear, rack-bar, and worm always meshing with each other in a perfect manner.

The back of the chair is readily adjusted to any desired angle by imparting a rotary movement to the crank attached to the shaft of the worm-gear. The worm not only serves the purpose of actuating the spur-gear, and through the latter imparts a reciprocating movement to the rack-bar, but it also serves to automatically lock the chair-back in any position to which it may be moved by said parts.

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

1. The combination, with the seat and arm rails of a chair, of a rack-bar pivoted to the arm-rail, and a boxing or frame pivoted or hinged to the seat-rail, said frame provided with a spur-gear wheel, which engages with

said rack-bar and with a worm for actuating the spur-gear wheel, substantially as set forth.

2. The combination, with the rack-bar, of a frame having spur and worm gears journaled therein, said frame constructed with loops or guides for retaining the spur-gear in mesh with said rack-bar, substantially as set forth.

3. The combination, with a swinging rack-bar, of a frame or boxing pivoted to a bracket attached to the seat-rail of a chair, said frame being provided with a gear-wheel arranged to

mesh with the teeth of the rack-bar, and also provided with a worm-gear for actuating the spur-gear, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 7th day of January, 1878.

HENRY GEISE.

Witnesses:

JOHN URIAN,
MAURICE COUGHLAN.