G. W. ARCHER.

Barber and Dental Chair.

No. 203,983. Patented May 21, 1878.

Fig. 1.

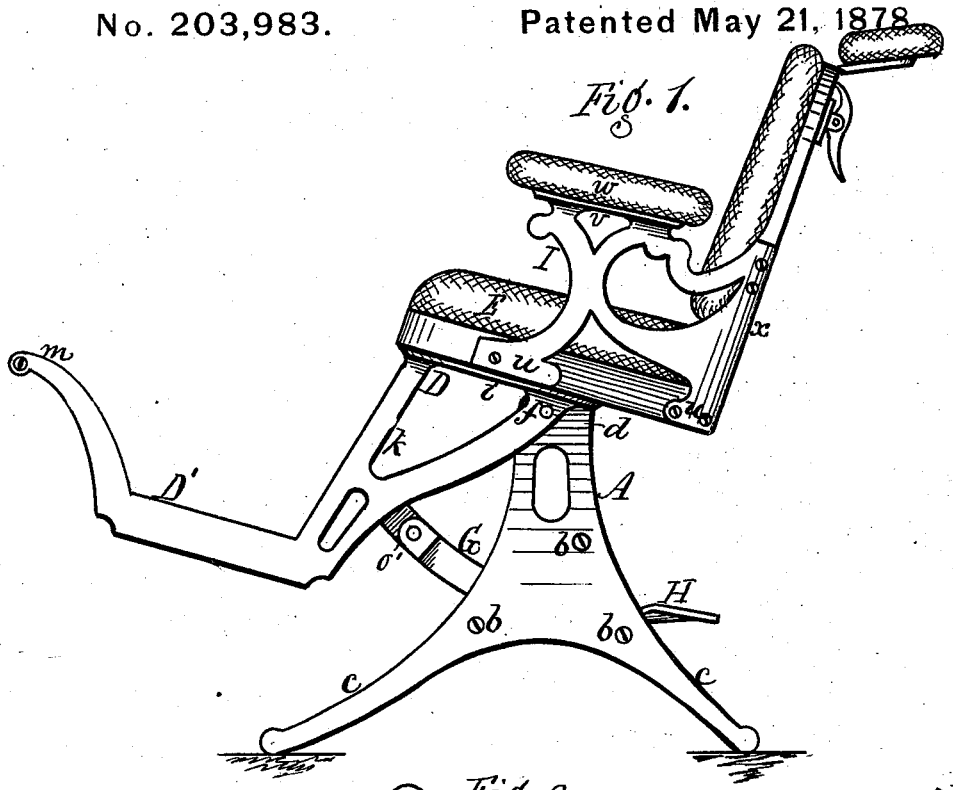


Fig. 2.

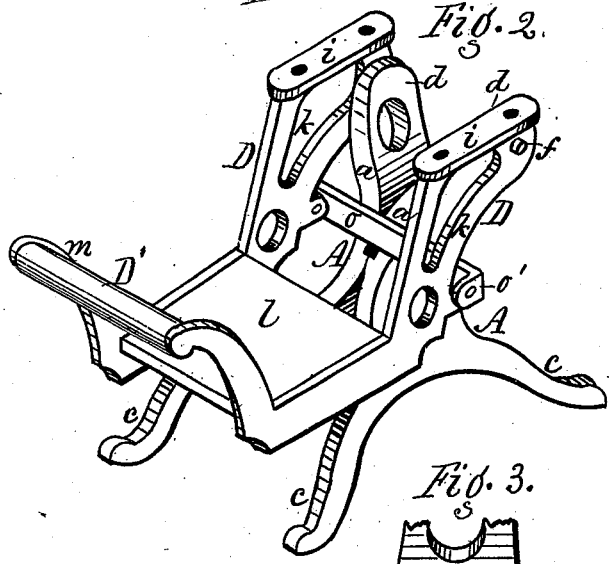


Fig. 4.

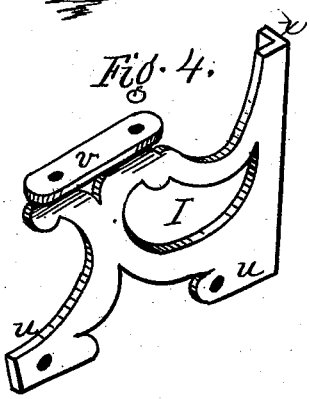
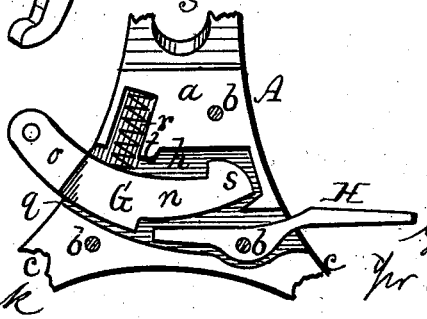


Fig. 3.



Attest.
N. Campbell
Abner Burbank

Inventor.
Geo. W. Archer,
per R. F. Osgood,
Atty.

UNITED STATES PATENT OFFICE.

GEORGE W. ARCHER, OF ROCHESTER, NEW YORK.

IMPROVEMENT IN BARBER AND DENTAL CHAIRS.

Specification forming part of Letters Patent No. **203,983**, dated May 21, 1878; application filed February 22, 1877.

To all whom it may concern:

Be it known that I, GEORGE W. ARCHER, of the city of Rochester, in the county of Monroe and State of New York, have invented a certain new and useful Improvement in Barber and Dental Chairs; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of my improved chair. Fig. 2 is a perspective view of the fixtures, the chair being removed from place. Figs. 3 and 4 are detail views.

My improvement relates to barber and dental chairs.

The invention consists in the construction and arrangement of the parts for supporting and adjusting the chair, as hereinafter more fully described and definitely claimed.

A A represent the base or supporting part of the chair. This is made of cast-iron, in two parts, which are counterparts. The central portions *a a* fit together, forming a solid body in the middle, and are united by screws *b b b*, as shown. The lower ends form the legs *c c c c*, while the upper ends branch outward laterally and form the bearings *d d*, to which the chair-frame is attached by pivots *f f*, cast solid on the parts *d d*.

h h are cavities or slots on the inner faces of the central parts *a a*, in which fit the segment and cam, as will be hereinafter more fully described. When the parts are fitted together these cavities are inclosed, except an opening at the front and rear for the admission of the segment and cam.

D is the supporting-frame for the chair E, and D′ is the foot-rest, which forms a part of said supporting-frame. These parts are also made of cast-iron, and in one solid piece. The frame has two horizontal plates, *i i*, at the top on opposite sides, which are bolted or screwed to the bottom of the chair. From these extend angular arms or brackets *k k*, which are provided with holes which fit upon the pivots *f f*, before described. At the bottom of these arms is the horizontal foot-rest platform *l*, and outside of this the ornamental bracket *m*. The frame and foot-rest being formed in one piece and attached fast to the bottom of the chair, the whole forms one fixture, which is adjusted together, and the foot-rest therefore requires no separate adjustment of its own, as in other chairs.

G is the segment which plays through the slot *h h*. It consists of a curved arm, *n*, and a right-angled cross-head, *o*, which has lugs *o′ o′* pivoted to corresponding lugs of the arms *k k* near their bottom. The jointing or pivoting of the cross-head allows the segment to follow the slot without binding as the chair is adjusted to a different position. The segment has a notch, *p*, which catches over the edge *q* of the center *a* when the chair is thrown back in the position shown in Fig. 1. The segment is pressed down to form this engagement by a coiled spring, *r*, in the part *a*. At the rear end the segment has a hook-head, *s*, which strikes the stop *t*, and prevents the segment from being drawn out of the slot.

H is the lever forming the cam. It is pivoted centrally by one of the screws which unite the halves of the base, or by other means. One arm rests under the segment G, while the other extends out through the slot, and forms the treadle for the foot of the operator. By pressing on this lever he can raise the segment to allow the chair to fall.

The construction before described secures some important advantages. The cast-iron base, made in halves, is cheap and simple, and avoids the necessity of legs attached directly to the body of the chair. Its peculiar construction is such that it answers as legs, as a central support to the segment and cam, and as the bearings for the pivoting of the body. The supporting-frame and footstool, cast in one piece, avoids a complicated arrangement for producing a separate adjustment of the footstool, and makes the footstool an attachment to the chair. The segment differs from others in being pivoted near the bottom of the chair and playing through the base, and adapting itself freely to every adjustment.

I is a cast-iron frame on each side of the chair, which serves as the attachment for the back and arms to the body of the chair. At the bottom it has two lugs or flanges, *u u*, which are screwed to the edge of the square seat. At the top it has a horizontal flange, *v*,

to which the arm *w* is screwed. At the rear it has a right-angled flange, *x*, which embraces the edges of the chair-back, and to which it is firmly screwed. The web, constituting the body of the casting, may be made in any ornamental form. This casting forms a convenient and ornamental side to the chair, and secures the seat, the back, and the arm together, avoiding the expensive construction of ordinary chairs.

One object of this invention is to enable the parts composing the chair to be easily separated and shipped for transportation or for storage. By removing the screws *b b b*, the parts composing the base can be separated and removed; and by removing the screws from the frame D and the side frames I, said parts can also be removed from the chair. The segment and cam are also easily separated.

If desired, more than one of the notches *p* may be used on the segment to give a greater number of adjustments; but in such case the cam must be connected to lock at each adjustment, to prevent disconnection.

I do not claim, broadly, a pivoted segment and catch for adjusting the backward inclination of the chair.

Having thus described my invention, what I claim herein as new is—

1. In a barber or dental chair, the supporting-base or standard, made in two parts, A A, fitting together at the center and united by screws, the lower extremities branching outward to form the legs *c c*, and the upper ends expanding laterally, and provided with solid pivots *f f* to form the bearings *d d* for the chair-body, as shown and described, and for the purpose specified.

2. In a barber or dental chair, the frame D, with footstool D′, formed in one piece, provided with sockets in its upper ends, in combination with the standard A A, formed in two pieces, and provided with corresponding pivots *f f*, the whole arranged as herein described, so that the upper ends of the divided standard may be inserted between the rigid arms *k k* of the frame, and the pivots be inserted in the sockets, as and for the purpose specified.

3. In a barber or dental chair, the combination, with the slotted base A, of the notched and hooked segment G, the spring *r*, and the pivoted lever or cam H, as shown and described, and for the purpose specified.

4. In a barber or dental chair, the side frame I, constructed with the lugs *u u*, the flange *v*, and the right-angled flange *x*, whereby the same is adapted to secure the seat, the back, and the arm of the chair together, and to form the side of the chair, as herein shown and described.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

GEO. W. ARCHER.

Witnesses:
R. F. OSGOOD,
HENRY C. WHITE.