

(No Model.)

2 Sheets—Sheet 1.

F. C. PRICE.
ADJUSTABLE CHAIR.

No. 541,249.

Patented June 18, 1895.

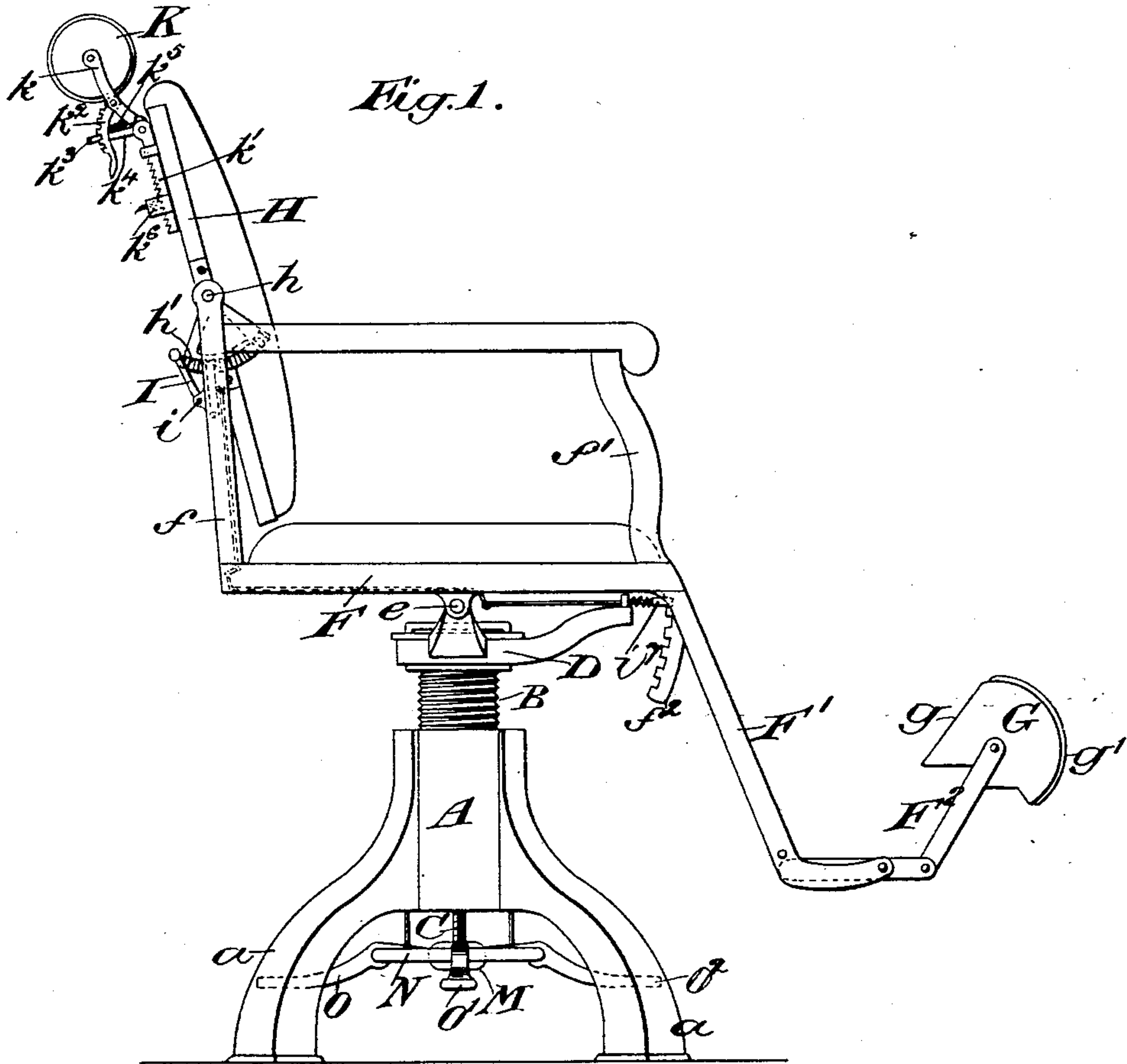
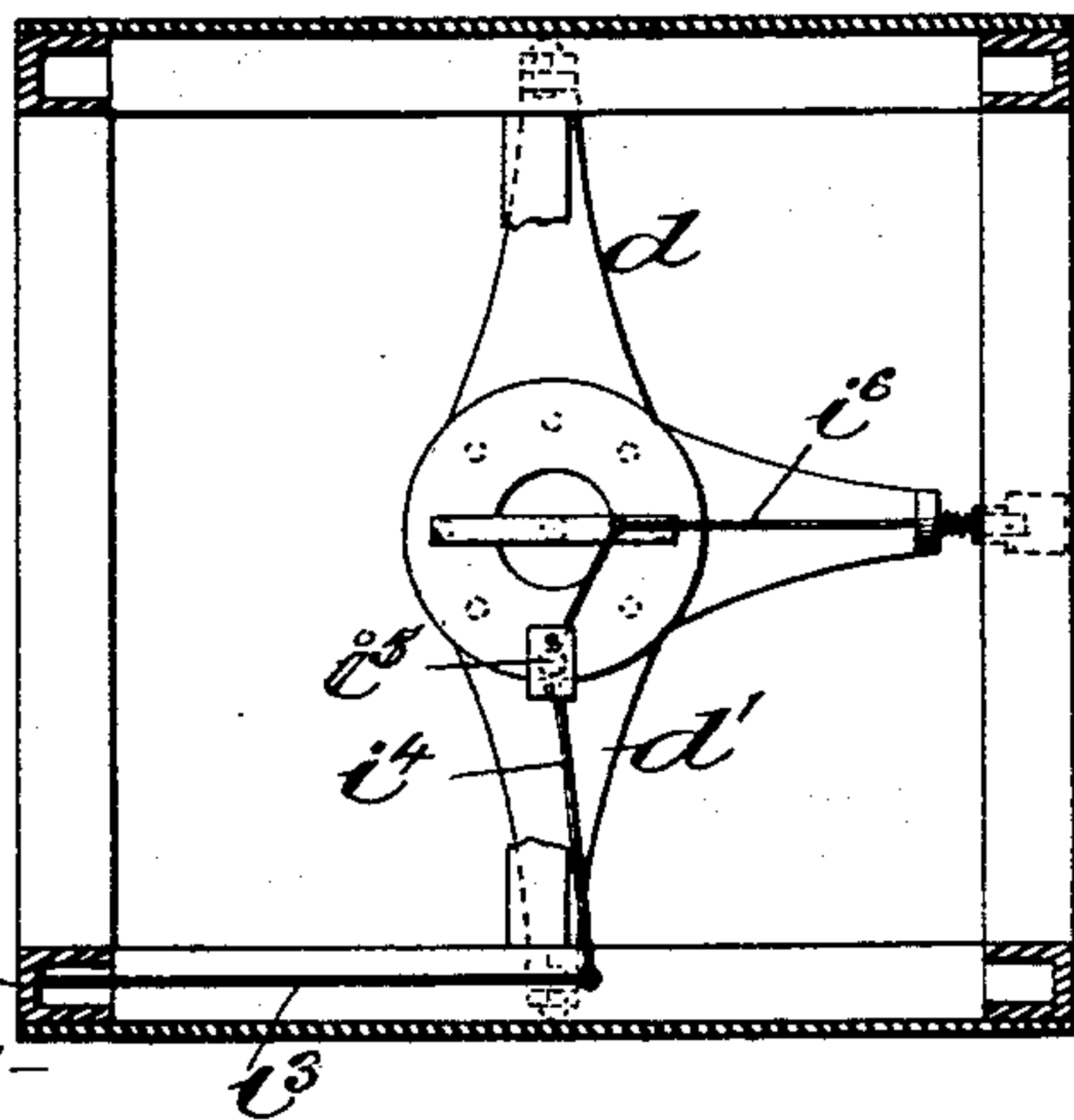


Fig. 3.



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O. Sundgren

Inventor:
Frederick C. Price
by attorneys
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Fig. 2.

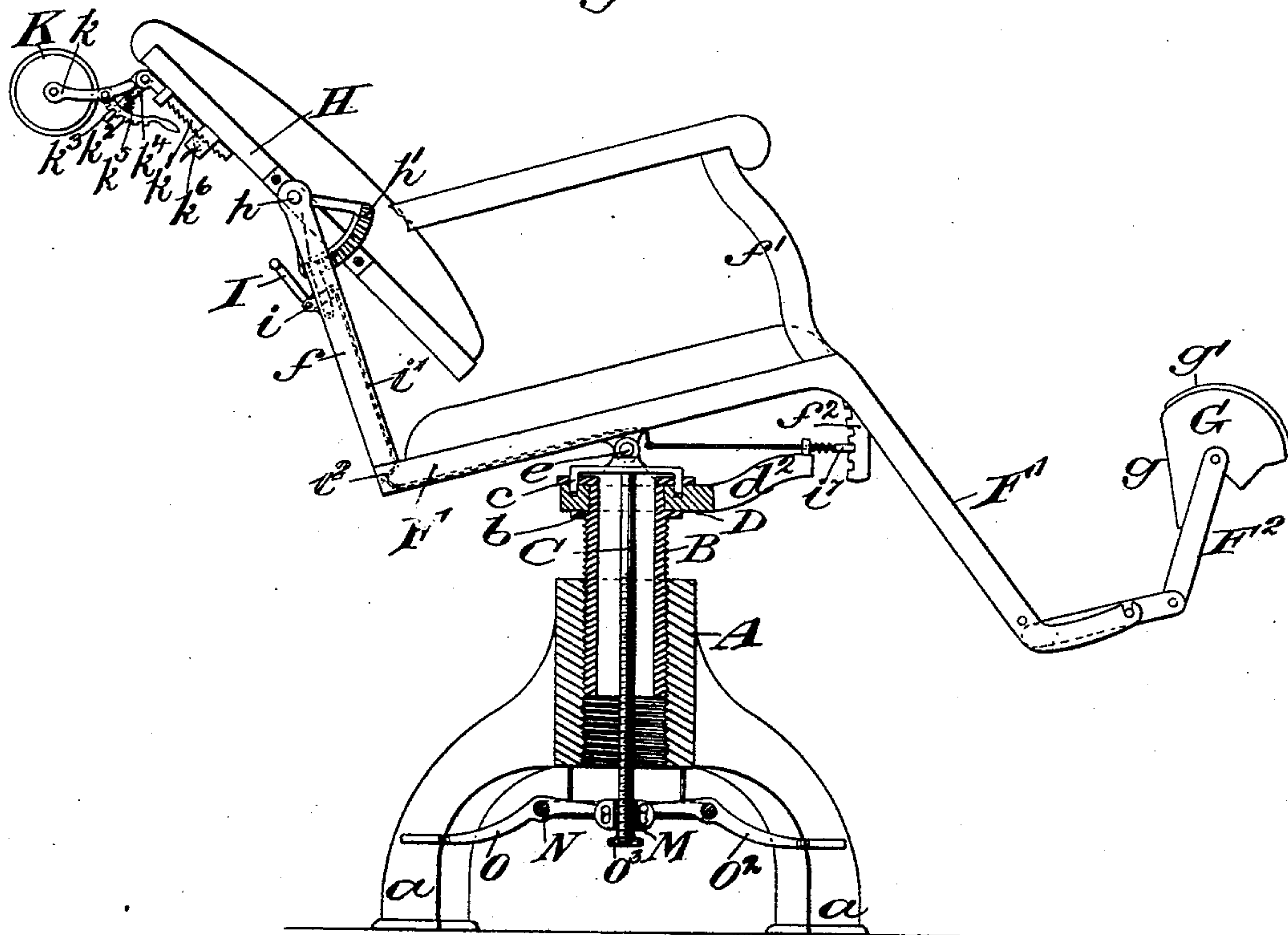


Fig. 4.

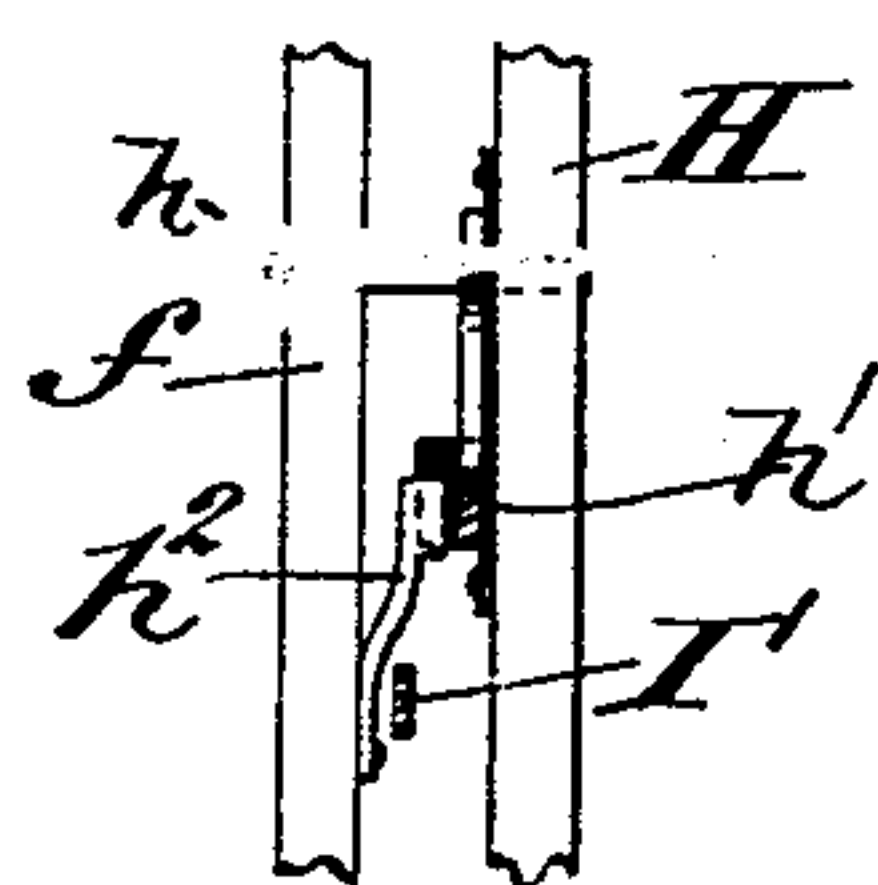


Fig. 5.

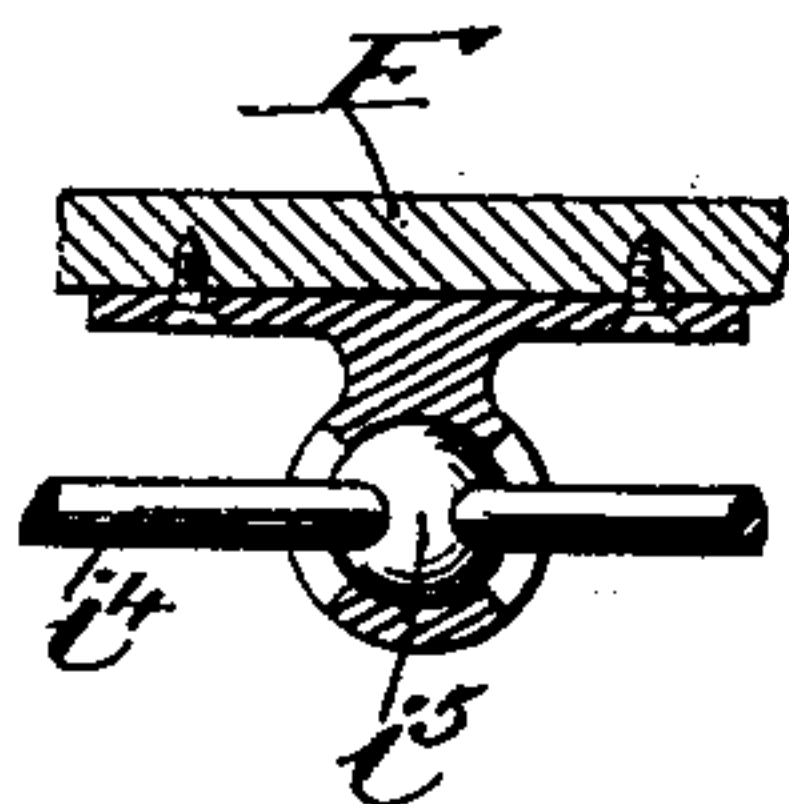
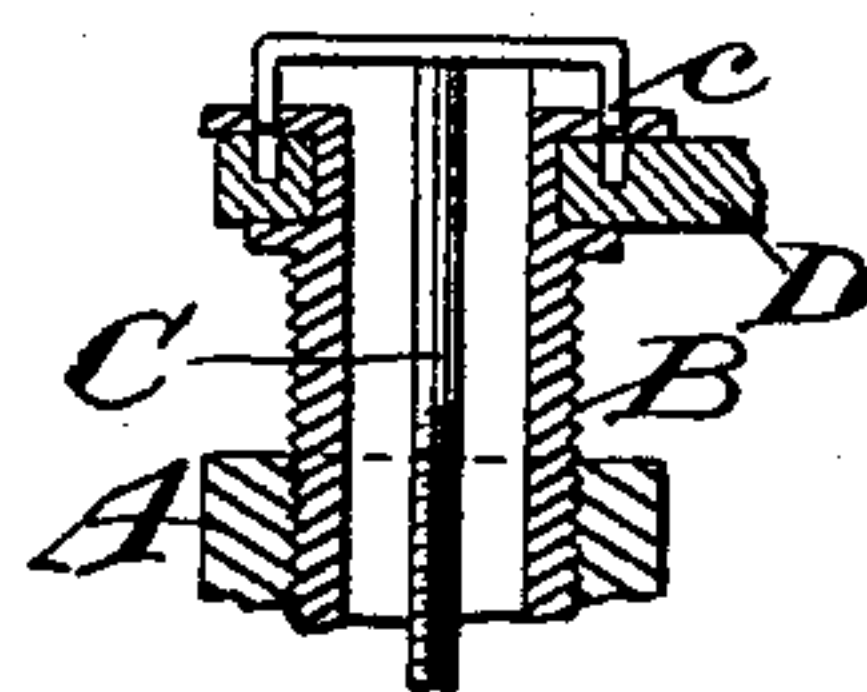


Fig. 6.



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UNITED STATES PATENT OFFICE.

FREDERICK C. PRICE, OF NEW YORK, N. Y.

ADJUSTABLE CHAIR.

SPECIFICATION forming part of Letters Patent No. 541,249, dated June 18, 1895.

Application filed November 28, 1894. Serial No. 530,214. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK C. PRICE, of the city and county of New York, in the State of New York, have invented a new and useful Improvement in Adjustable Chairs, of which the following is a specification.

My invention relates to an improvement in adjustable chairs, with the object in view of simplifying their construction and rendering the movements easily controlled by the operator.

The particular form of chair which I have chosen to embody my invention is one adapted for use as a barber's chair, although the several features which I shall hereinafter call particular attention to may be utilized in connection with dental or surgical chairs, if so desired.

In the accompanying drawings, Figure 1 is a view of the chair in side elevation with the parts in the position which they assume when the occupant is sitting upright or in position for hair-dressing. Fig. 2 is a view in side elevation, showing the pedestal in vertical section, the parts being in the position which they assume when the occupant is tilted back into a position for shaving. Fig. 3 is a top plan view of the seat-frame and the chair-supporting yoke, the upper part of the chair being removed; and Figs. 4, 5, and 6 are enlarged views of parts in detail.

The pedestal is denoted by A and is here shown as terminating in supporting legs *a*. The pedestal is internally screw threaded and the chair supporting spindle B is externally screw threaded to register with the screw threaded interior of the pedestal.

The spindle B is made hollow for the reception of the stem C of a set of stops *c* secured to the upper end of the stem C for locking and releasing the chair relative to the supporting spindle B. The upper end of the spindle B is provided with an annular recess *b*, for the reception of the hub D of the yoke to which the body of the chair is pivoted. The opposite arms *d* and *d'* of the yoke are fitted at their outer ends to receive pivotal bolts *e* which engage lugs on the arms *d* *d'* and on the base of the chair to pivotally secure the chair to the yoke.

The base frame of the chair is denoted by

F and consists of side bars and cross bars, as is common, and from the base frame F there are uprising posts *f*, *f'* at the rear and front for supporting the back and arms of the chair, as is common. I have chosen to form the posts *f*, *f'* and the side bars of the base frame of L or U-shaped iron, more particularly for the reception of certain operating rods, which I shall hereinafter more particularly refer to.

From the base frame F there depends a supporting frame F' for the reception of the foot rest frame F². In the foot rest frame F² I provide a foot rest G, so balanced upon its pivotal supports that when the chair is in the position shown in Fig. 1 or its upright position, the foot rest G will present a flat surface *g* to the foot of the occupant, and when the chair is tilted back into the position shown in Fig. 2, the foot rest G will, under the influence of gravity, roll over into the position shown in Fig. 2, presenting an upholstered or cushioned surface *g'* for the reception of the leg of the occupant.

The tilting back section H is pivotally secured to the posts *f* at *h* and has secured to it a sector bar *h'* in position to engage a spring dog *h*² (see Fig. 4) which latter is fastened to the inner face of the post *f*. The view taken in Fig. 4 is an enlarged view in detail, looking from the front to the rear, of the parts in the immediate neighborhood of the sector bar *h'*.

An operating lever I is pivoted to the post *f* at *i* and its short arm is connected by a rod *i'* extending along down within the U-shaped post *f*, connecting with one arm of the angle lever *i*², pivoted at the corner of the base frame F, the other arm of the angle lever *i*² being connected by a rod *i*³ (see Fig. 3) with one arm of a lever *i*⁴, pivoted at *i*⁵ to a suitable support on the base frame F, the opposite arm of the lever *i*⁴ being connected by a rod *i*⁶ with a spring actuated dog *i*⁷ in position to engage a rack bar *f*² depending from the base frame F. The rod *i*⁶ and dog *i*⁷ are supported by an arm *d*² extending forwardly from the hub D of the yoke. The lever *i*⁴ has its pivot *i*⁵ located as near as may be in axial alignment with the pivots *e* which connect the chair with the yoke, so that the lever *i*⁴ will not be materially disturbed during the rocking move-

ment of the chair and its pivotal connection i^5 preferably consists of a ball and socket connection shown in detail and enlarged in Fig. 5.

The operating lever I is so arranged that its short arm, denoted by I' (see Fig. 4), when the lever I is pulled backwardly, will engage the stock of the spring dog h^2 and press the dog toward the post f out of engagement with the teeth of the sector bar h' , thereby leaving the chair back H free to be tilted. This same backward pull on the lever I will, through the connections i', i^2, i^3, i^4 and i^6 withdraw the dog i^7 on the rack bar f^2 , thereby permitting the chair as a whole to be tilted upon its yoke. It therefore follows that when the lever I is pulled back, it simultaneously releases the back so that it may be adjusted to any desired angle with respect to the body of the chair; releases the body of the chair as a whole, so that it may be tilted in any desired angle with respect to the pedestal and the foot rests automatically assumes its own position. As soon as the lever I is released, the back and the chair body are simultaneously locked in their tilted adjustments.

The stem C which extends down within the hollow chair supporting spindle B has a screw threaded engagement at its lower end with the nut M to which are connected the inner arms of four pedals, denoted by O, O', O² and O³, extending radially away from the nut M at angles with each other of about ninety degrees and pivotally secured to the pedestal A, preferably by an annular ring N suspended from the center of the pedestal. When any one of these pedals O, O', &c., are pressed, upon by the foot of the operator, it will lift the stem C and with it the stops c out of engagement with the hub D of the chair supporting yoke, so that the chair may be swung horizontally without moving the threaded spindle B and hence without raising and lowering the chair as a whole. When, however, it is desired to lower the chair as a whole, it may be screwed up or down by turning it while locked to the spindle B, the stem C in the mean time traveling up and down within the nut M.

The swinging back H is provided with a head rest, consisting of a pad K here shown in the shape of a cylinder and supported in a pair of swinging arms k , the latter being pivoted to a vertical adjustable rack bar k' secured to the back section H. A toothed dog k^2 is pivotally secured to one of the arms K or to the stem from which the arms k diverge and extends down into position to engage an abutment k^3 on an arm k^4 , projecting rearwardly from the rack bar k' . A spring k^5 tends to hold the toothed dog k^2 in contact with the abutment k^3 to hold the pad K at any desired angle with respect to the back and a spring actuated dog k^6 is located in position to hold the rack bar k' at any desired height with respect to the back section itself.

The mechanism by which the back section is swung relatively to the seat section is such that the back may be tilted to a position forward of the vertical and there locked to accommodate occupants who are unusually round shouldered or whose heads are, from any cause, pitched forward from the back of their shoulders. This feature is one of great importance, particularly in the use of the chair as a barber's chair, as it permits the barber to come into close quarters with the head of the occupant at the back of the chair and enables him to do his work better and more expeditiously.

What I claim is—

1. The combination with the rearwardly tilting chair body and its support, of a tilting back section pivoted to the chair body locking and releasing devices for independently adjusting the back section relative to the body portion and independently adjusting the body portion relative to its support and a single operating device for controlling said locking and releasing devices, substantially as set forth.
2. In combination, a chair body support, a rearwardly tilting chair body, a spring actuated locking dog mounted on the body support in position to lock the chair body in its several tilted adjustments, a tilting back section pivoted to the chair body, a spring dog on the chair body in position to lock the back section in its several tilted adjustments, and an operating lever mounted on the chair body for simultaneously releasing both the above named locking dogs, whereby the chair body may be adjusted relatively to its support and the back section adjusted relatively to the chair body, substantially as set forth.
3. The combination with the tilting chair body and its support, of a spring actuated dog mounted on said support in position to engage recesses on the body of the chair, a vibrating lever mounted by a ball and socket pivoted in substantial alignment with the axis on which the chair tilts, an operating lever attached to the chair frame within convenient reach of the operator and a connection between said operating lever and said vibrating lever for operating the spring actuated dog, substantially as set forth.
4. In combination, a foot rest frame, a suitable support therefor, a foot rest consisting of a single piece pivoted to swing in the foot rest frame, the said foot rest being provided with a flattened side and with a rounded side and being so hinged in the foot rest frame that when the chair is in its upright position the foot rest will be drawn under the influence of gravity to present its flat side toward the occupant, and when the chair is tilted backwardly the said foot rest will turn under the influence of gravity to present its rounded side uppermost for the reception of the leg of the occupant, substantially as set forth.

5. The combination with the tilting body portion, of the back section pivotally secured at points intermediate of its ends between up-
rising portions of the body portion and free
5 to swing in an inclined position forward and backward of a plane vertical to the seat of said body portion, interlocking fastening devices comprising a sector bar secured to the
back section and a spring dog secured to the
10 uprising part of the body portion which normally engages the sector bar for locking the back section in its tilted adjustments, and an operating lever upon the body portion in position to engage the spring dog for releasing it
from the sector bar, substantially as set forth. 15

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