

No. 847,782.

PATENTED MAR. 19, 1907

F. & O. KAMPFE.  
HAIR TRIMMER.

APPLICATION FILED OCT. 2, 1906.

Fig. 1.

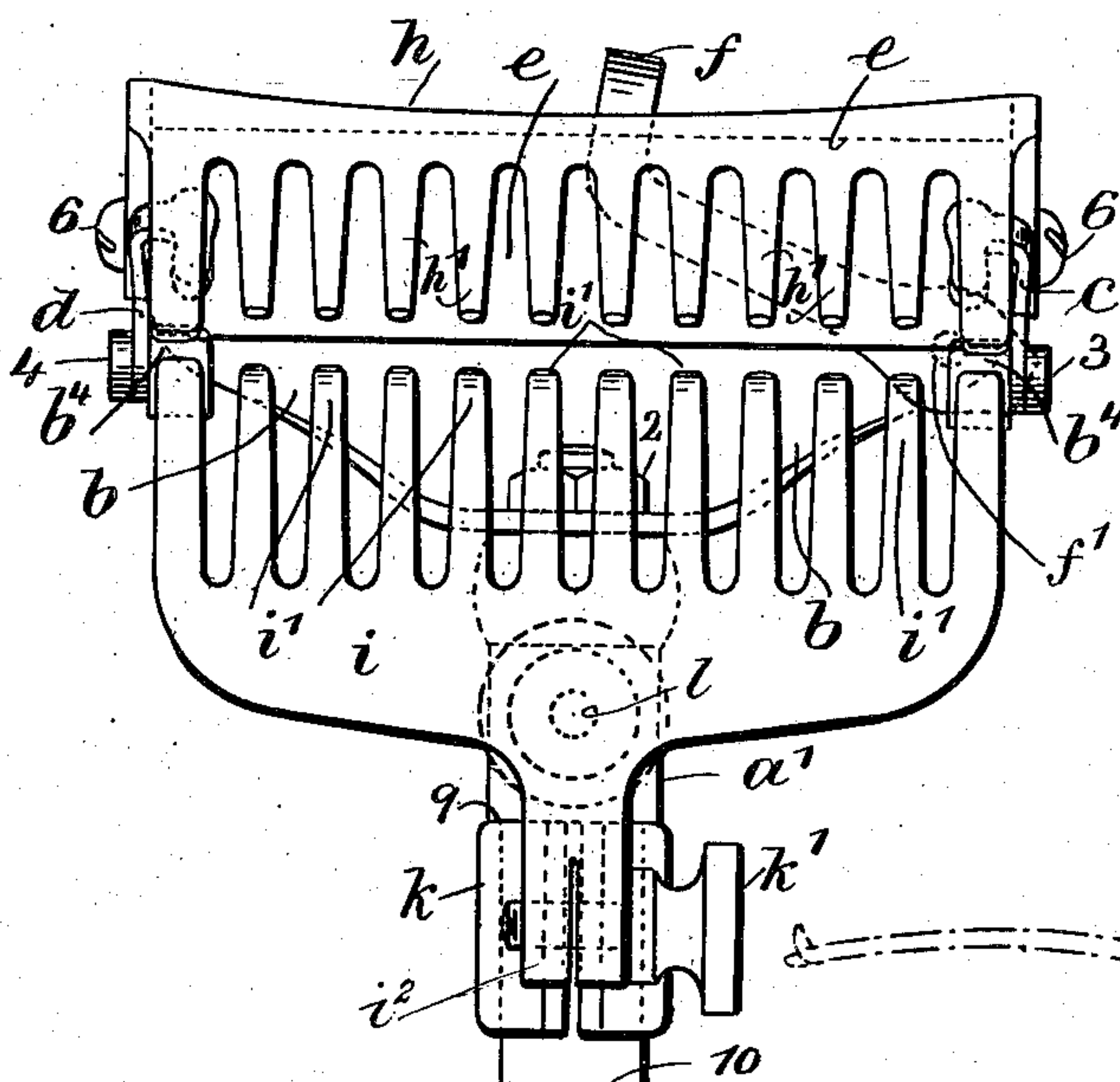


Fig. 2.

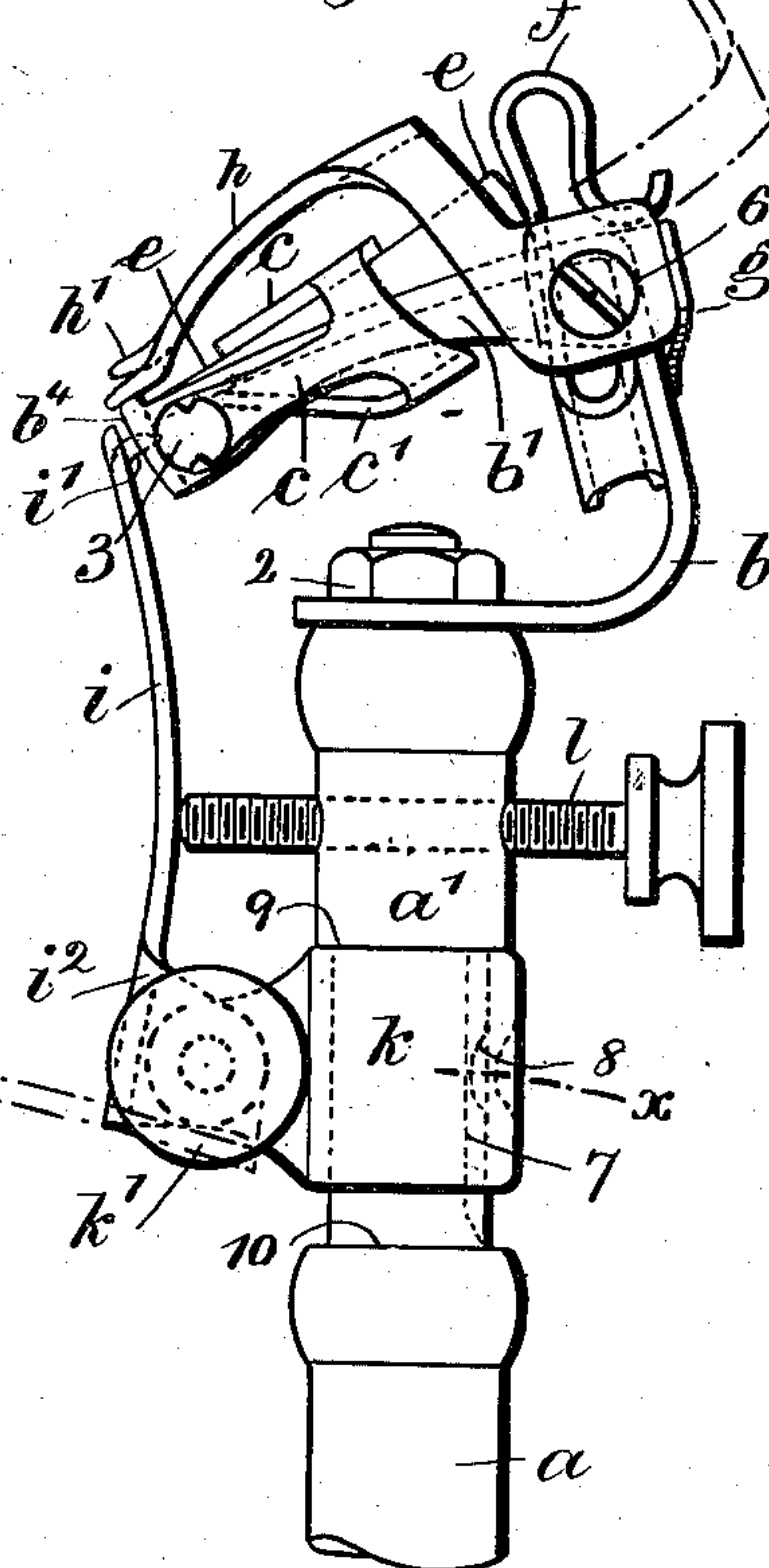


Fig. 3.

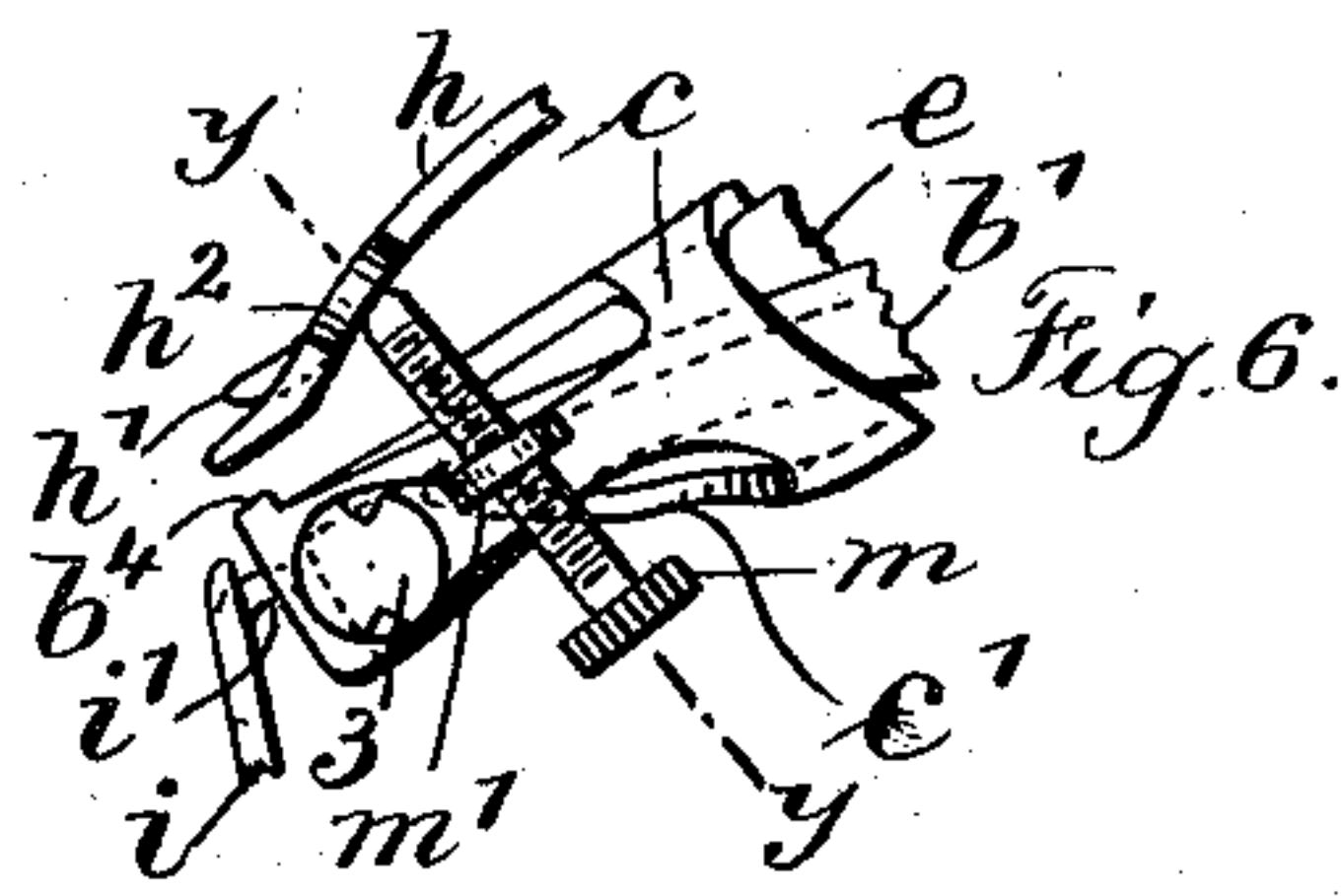
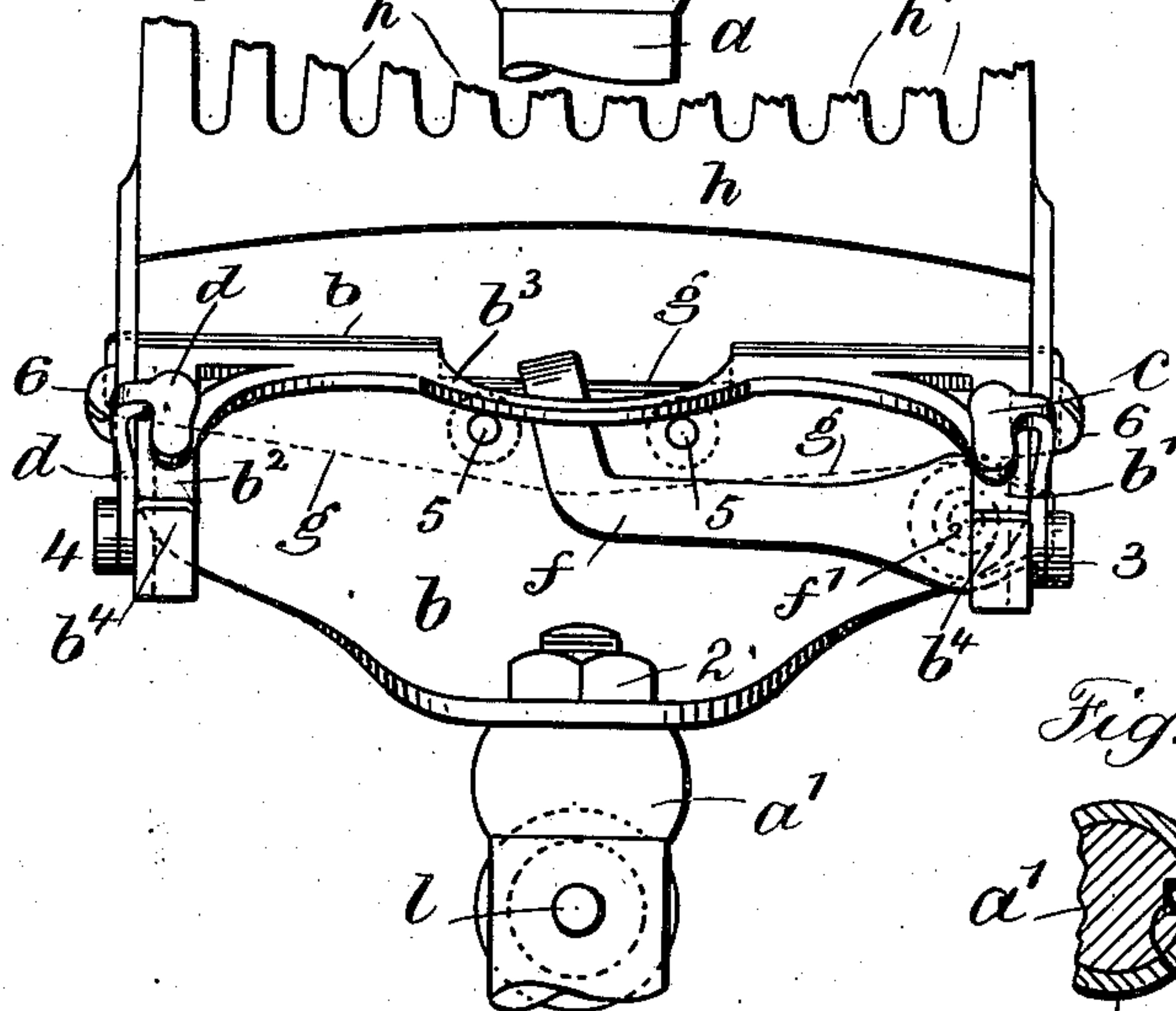


Fig. 5.

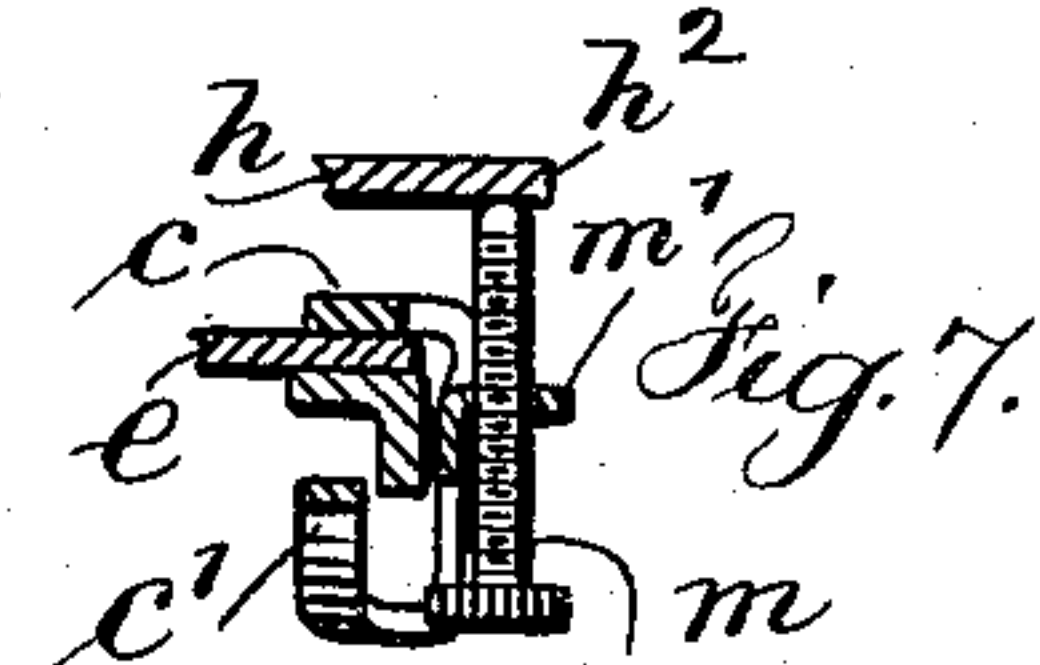
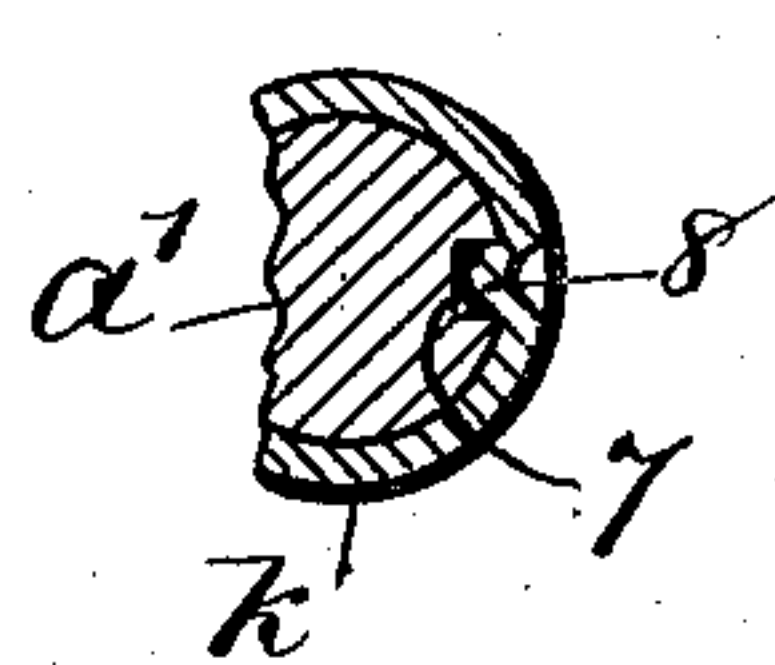
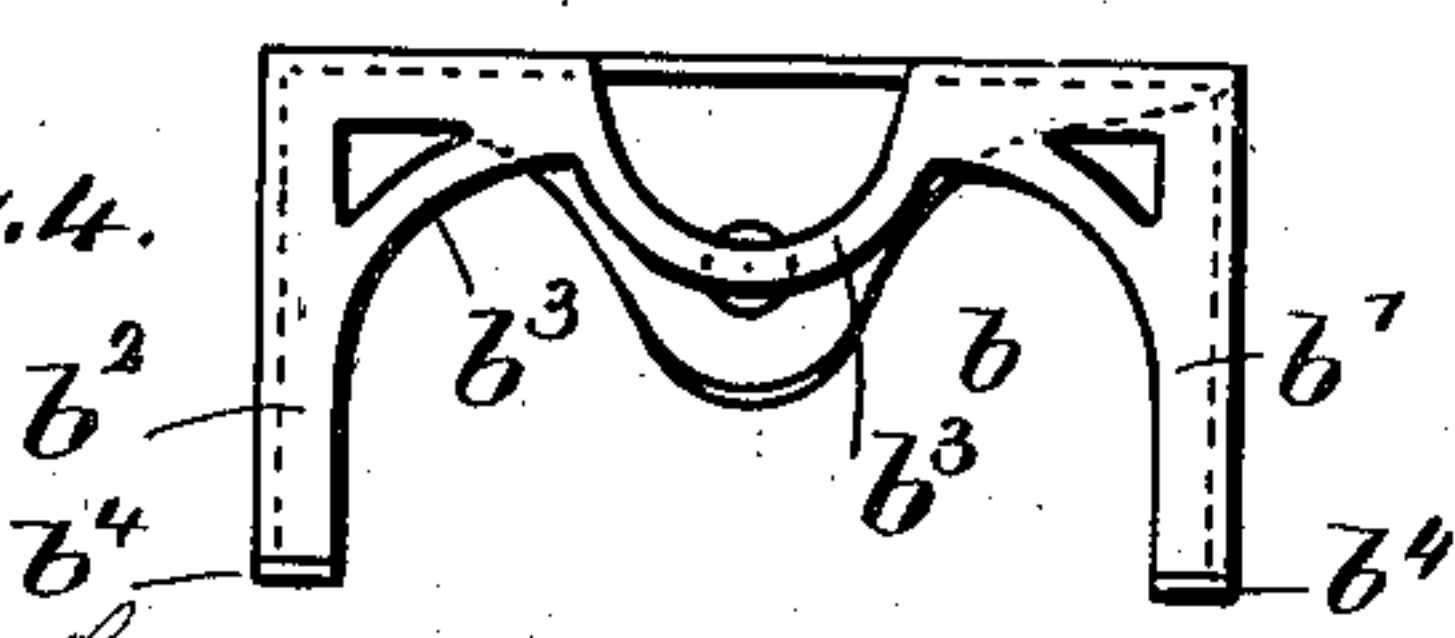


Fig. 4.



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# UNITED STATES PATENT OFFICE.

FREDERICK KAMPFE AND OTTO KAMPFE, OF NEW YORK, N. Y.

## HAIR-TRIMMER.

No. 847,782.

Specification of Letters Patent.

Patented March 19, 1907.

Application filed October 2, 1906. Serial No. 337,143.

*To all whom it may concern:*

Be it known that we, FREDERICK KAMPFE and OTTO KAMPFE, both citizens of the United States, residing in the borough of Brooklyn, in the county of Kings, city and State of New York, have invented an Improvement in Hair-Trimmers, of which the following is a specification.

Our invention relates to a device for trimming hair, although the same partakes of the character of a safety-razor.

The object of our invention is the production of a hair-cutting implement by means of which adults may readily trim or shorten their own hair and parents the hair of their children, performing the function of a self-constituted barber.

In carrying out our invention and in combination with a handle to be grasped by the hand and a body-frame supporting a removable razor-blade and its catch we employ guard-combs at either side of the cutting edge of the blade. Both guard-combs are pivoted and adapted to swing over from and toward said blade, and one or both of these guard-combs may be adjustable, so as to bring the free ends of the comb-teeth into the desired proximity to the cutting edge of the razor-blade. The teeth of the respective combs are advantageously in alinement. Consequently the alined intervening spaces act as ways or channels to receive and confine the hair being trimmed and prevent it sliding off or getting away from the cutting edge of the razor-blade.

The body-frame at its place of support of the razor-blade is advantageously constructed with side bracket-arms for lightness and rigidity and to provide ample room for the hair removed in trimming and at the same time ample strength and bearing-surface for the razor-blade.

In the drawing, Figure 1 is a front elevation representing the device of our invention. Fig. 2 is a side elevation of the parts shown in Fig. 1, and in which figure in dotted lines the said guard-combs are shown in their overturned positions. Fig. 3 is an elevation of the body-frame and the parts connected therewith with one of the guard-combs thrown up and the teeth broken off; and Fig. 4 is a plan in smaller size of this body-frame, so as to show plainly the side bracket-arms there-

of. Fig. 5 is a partial sectional plan at the dotted line *x* of Fig. 2. Fig. 6 is a side elevation representing a modification of our invention and providing means for adjusting one of the guard-combs, and Fig. 7 is a section on the dotted line *y y* of Fig. 6.

The handle *a* is to be grasped by the hand. It is to be made of any suitable material and is terminated with a tubular support member *a'*. The drawing shows the handle broken off near the tubular support member *a'*, and it indicates that the said handle is circular. It is therefore obvious and fully within the scope of our invention to make this handle of any suitable material and of any shape lengthwise or in cross-section.

The body-frame *b* is of bent configuration, as shown in Fig. 2, and is secured to the tubular support member *a'* by a nut 2. Figs. 3 and 4 show the broadened-out shape of the body member and the overturned portion extending at the sides to form the bracket-arms *b'* *b''*, this part at the center being formed as a central curved brace *b'''*, the extreme ends of the bracket-arms being upturned as end supports or stops *b''''*.

From the view Fig. 4, which is of smaller size than the other parts, it will be apparent that there is a space between the bracket-arms *b'* *b''*, and this space is available in the use of the implement for receiving the hair removed from the head by the razor-blade *e*, which rests upon and is supported by the bracket-arms *b'* *b''*, it being a fact that there is nothing below the blade to interfere with the collection of the hair as it is cut, as would be the case if the body-frame extended across between the sides of the frame, and it is also apparent from this construction that the body-frame, with the bracket-arms *b'* *b''* and the central brace *b'''*, is exceedingly strongly made and provided against strain in use and at the same time is made of ample strength for the support of the razor-blade and for holding the same securely thereto.

We provide frames *c d* of the bent form shown especially in Figs. 2 and 3, the same being pivotally connected by the screws 3 4 near the free ends of the said bracket-arms *b'* *b''* and upon their outer faces. Each of these frames *c d* include a portion lying outside of and parallel with the outer edges of the said bracket-arms, with a part at right



angles thereto and overturned against the upper surface of the razor-blade and with a part bent in underneath said razor-blade and terminating in a spring member *c'*, whose free end comes up against the under surface of the bracket-arm, so as to impart to said frames a spring function to hold the razor-blade in position when the said blade is passed down over the surface of the bracket-arms and beneath the upper parts of said frames to a position in which the ends of the blade come against the supports or stops *b<sup>4</sup>* of said bracket-arms, and we employ a catch-plate *f*, pivotally connected at *f'* to the said body-frame and having a crooked portion extending up back of the razor-blade, so as to hold the same in position and prevent accidental displacement.

Along the back of the body-frame we secure a blade-spring *g* by the screws 5, the same outside of said screws forming arms to bear upon the edge shoulders of the guard-comb *h*, which comb is secured by the pivot-screws 6 to the back of the bracket-arms of the body-frame. From Fig. 2 it will be apparent that the ends of the said guard-comb *h* adjacent to the pivot are provided with squared edges or shoulders at right angles to one another and against which edges the said blade-spring *g* bears with sufficient force to hold the guard-comb *h* either in the full-line position or the dotted-line position, Fig. 2, and in which full-line position the free ends of the edge teeth of the comb rest upon the supports or stops *b<sup>4</sup>* of the body-frame, while the intermediate teeth *h* are positioned higher above the razor-blade and are shorter.

We provide a second guard-comb *i*, placed in a reverse position to the guard-comb *h*, and the teeth *i'* of this guard-comb and the teeth *h'* of the guard-comb *h* are preferably alined with one another, so that the alined spaces between the teeth form channels adapted to receive the hair to be cut and to be brought in contact with the cutting edge of the razor-blade as the instrument is drawn by hand over the hair.

The ends of the guard-comb *i* are formed as prongs or edge teeth, and they may rest against the surface of the stops *b<sup>4</sup>*, while the free ends of the parallel teeth *i'* are preferably bent inward, so as to come below the edge of the razor-blade. This guard-comb *i* is provided with a shank *i<sup>2</sup>*, pivotally connected to a sleeve *k* by a clamp-screw *k'*. This sleeve *k* is provided with a projection 8 and the tubular support member *a'* of the handle with a groove 7, receiving said projection, and the sleeve *k* is movable along the said tubular support member *a'* between the shoulders 9 10, said groove 7 also extending between said shoulders, the groove 7 and pro-

jection 8 preventing the sleeve *k* turning on the member *a'*. This adjustment provides for a bearing relation of the teeth of the guard-comb *i* and the cutting edge of the razor-blade according to the amount or depth of hair it is desired to remove with each stroke of the instrument, and in connection with this adjustment we also provide a screw *l*, which passes transversely through the tubular support *a'* and is at its free end adapted to bear against the inner surface of the guard-comb *i*, and while the sleeve *k* and the parts 7 and 8 provide for an adjustment of the guard-comb *i* in one direction the screw *l* provides for its adjustment in the opposite direction on the screw *k'*. It is to be understood that the nearer the free ends of the teeth of the guard-combs *h* and *i* come to the cutting edge of the razor-blade the more said blade is protected from direct contact with the hair to be cut, and consequently less hair will be cut with the free ends of the teeth in this relation, and that the further these teeth are moved away from the cutting edge of the razor and the more said edge is exposed the more hair will be cut.

We have shown in the modified form of our invention, Figs. 6 and 7, an adjusting-screw *m*, passing through a lug *m'*, formed upon the side of the frame *c* and extending out at right angles thereto, together with a projection *h<sup>2</sup>* from the guard-comb *h* to bear upon the pointed end of the said adjusting-screw, and by this means said guard-comb can be raised away from the position shown in Fig. 2 to the position shown in Figs. 6 and 7, in which the free ends of the teeth are more distant from the cutting edge of the razor, thus providing an adjustment for the guard-comb *h* and a corresponding function to that of the guard-comb *i*.

We claim as our invention—

1. The combination with a handle, a body-frame, a removable razor-blade and holding means therefor, of guard-combs at each side of the cutting edge of the razor-blade and means for supporting the same.

2. The combination with a handle, a body-frame, a removable razor-blade and holding means therefor, of guard-combs at each side of the cutting edge of the razor-blade and adjustable means for supporting the same.

3. The combination with a handle, a body-frame, a removable razor-blade and holding means therefor, of guard-combs at each side of the cutting edge of the razor-blade, means for maintaining the teeth of said combs in proximity with the cutting edge of the blade but out of contact therewith and means for supporting the same.

4. The combination with a handle, a body-frame, a removable razor-blade and holding means therefor, of guard-combs at each side



of the cutting edge of the razor-blade, means for maintaining the teeth of said combs in proximity with the cutting edge of the blade but out of contact therewith and adjustable means for supporting the same.

5. The combination with a handle, a body-frame, a removable razor-blade and holding means therefor, of guard-combs at each side of the cutting edge of the razor-blade, means for supporting the same and means for adjusting one of said combs in opposite directions to the cutting edge of the blade.

6. The combination with a handle, a body-frame, a removable razor-blade and holding means therefor, of guard-combs at each side of the cutting edge of the razor-blade, adjustable means for supporting the same and means for adjusting one of said combs in opposite directions to the cutting edge of the blade.

7. The combination with a handle, a body-frame, a removable razor-blade and holding means therefor, of guard-combs at each side of the cutting edge of the razor-blade, means for maintaining the teeth of said combs in proximity with the cutting edge of the blade but out of contact therewith, adjustable means for supporting the same and means for adjusting one of said combs in opposite directions to the cutting edge of the blade.

8. The combination with a handle, a body-frame, a removable razor-blade and holding means therefor, of guard-combs at each side of the cutting edge of the razor-blade, means for pivotally connecting one comb to the body-frame, a spring for holding said comb in either of two positions, means for pivotally connecting the other comb to the handle structure and providing the same with a limited longitudinal adjustment thereon.

9. The combination with a handle, a body-frame, a removable razor-blade and holding means therefor, of guard-combs at each side of the cutting edge of the razor-blade, means for pivotally connecting one comb to the body-frame, a spring for holding said comb in either of two positions, means for pivotally connecting the other comb to the handle structure and providing the same with a limited longitudinal adjustment thereon and means for providing an adjustment on the pivot of the latter comb.

10. In a device of the character described, the combination with a handle, of a body member comprising a bent portion connected with the handle and broadened out from said point of connection to a width agreeing with the length of the razor-blade and so constructed as to form supports along the opposite ends of the razor.

11. In a device of the character described, the combination with a handle, of a body member comprising a bent portion connected

with the handle and broadened out from said point of connection to a width agreeing with the length of the razor-blade and provided with bracket-arms  $b^1$   $b^2$  on opposite ends and with a curved central brace  $b^3$ .

12. In a device of the character described, the combination with a handle, of a body member comprising a bent portion connected with the handle and broadened out from said point of connection to a width agreeing with the length of the razor-blade and provided with bracket-arms  $b^1$   $b^2$  on opposite ends and with a curved central brace  $b^3$  and with end supports or stops  $b^4$  against which the respective end members of the guard-combs contact in use.

13. In a device of the character described, the combination with a handle, of a tubular support member at one end of the handle provided with a groove 7 and with shoulders 9 10, a guard-comb, a sleeve surrounding the said support member  $a'$  and a pivotal connection therefrom to the said guard-comb and a projection 8 formed with said sleeve  $k$  entering the groove 7 whereby the said sleeve  $k$  has a limited movement along said member  $a'$  between said shoulders and is prevented from turning by the said groove and projection, said parts forming adjusting devices for the said guard-comb.

14. In a device of the character described, the combination with a handle, of a tubular support member at one end of the handle provided with a groove 7 and with shoulders 9 10, a guard-comb, a sleeve surrounding the said support member  $a'$  and a pivotal connection therefrom to the said guard-comb and a projection 8 formed with said sleeve  $k$  entering the groove 7 whereby the said sleeve  $k$  has a limited movement along said member  $a'$  between said shoulders and is prevented from turning by the said groove and projection, said parts forming adjusting devices for the said guard-comb, and a screw  $l$  passing transversely through the said member  $a'$  and at its free end bearing against the said guard-comb for providing a second means of adjusting the same.

15. In a device of the character described, the combination with a handle, a body-frame, a removable razor-blade and holding means therefor, of a guard-comb which in its initial position exteriorly overlies the razor-blade and in use comes between the razor-blade and the adjacent flesh and between the teeth of which the hair draws as cut.

16. In a device of the character described, the combination with a handle, a body-frame, a removable razor-blade and holding means therefor, of a guard-comb, a tubular support member at one end of the handle, a sleeve surrounding the support member and movable thereon and a pivotal connection



from the sleeve to the guard-comb whereby a limited longitudinal movement and a swinging movement may be imparted to the guard-comb.

5 17. In a device of the character described, the combination with a handle, a body-frame, a removable razor-blade and holding means therefor, of a guard-comb, a tubular support member at one end of the handle, a  
10 sleeve surrounding the support member and movable thereon, a pivotal connection from

the sleeve to the guard-comb and means for limiting the movement of said sleeve and preventing the same from turning.

Signed by us this 24th day of September, 1906.

FREDERICK KAMPFE.  
OTTO KAMPFE.

Witnesses:

GEO. T. PINCKNEY,  
E. ZACHARIASEN.