June 8, 1926. 1,587,656

E. M. KOJIMA

HAIR CUTTING DEVICE

Original Filed May 9, 1925 2 Sheets-Sheet 1

Fig. 1.

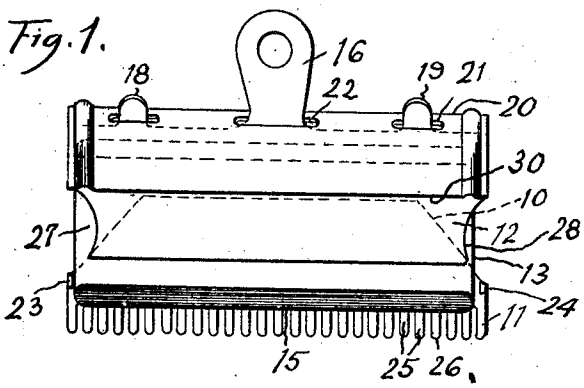


Fig. 2.

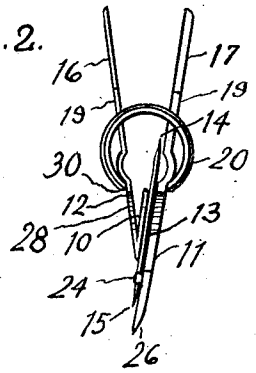


Fig. 5

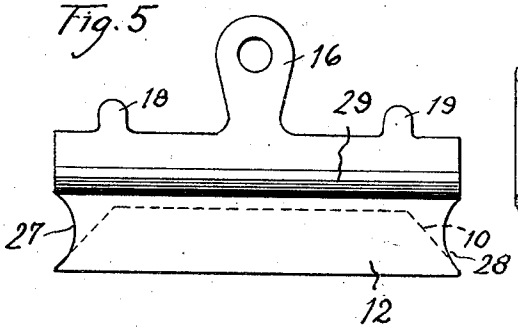


Fig. 4

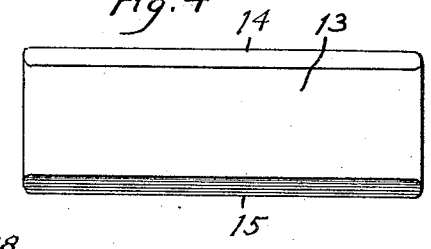


Fig. 6.

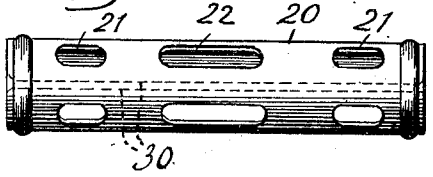
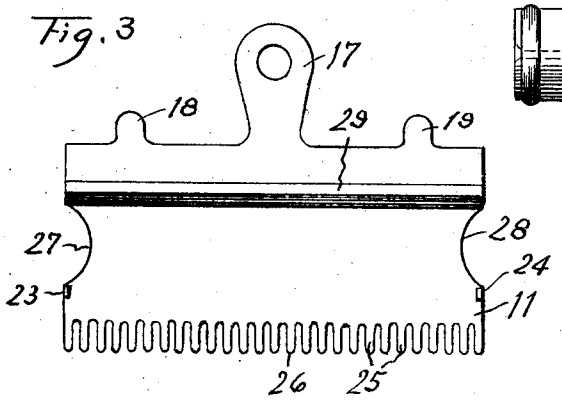


Fig. 3



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Fig. 7.

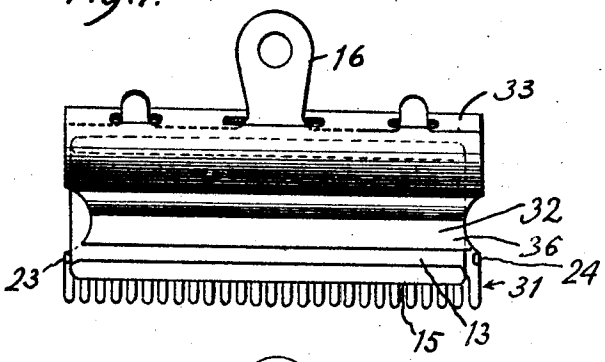


Fig. 8.

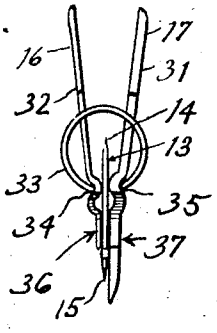


Fig. 9.

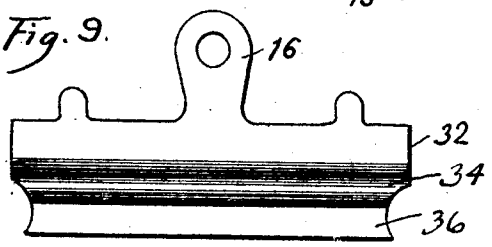
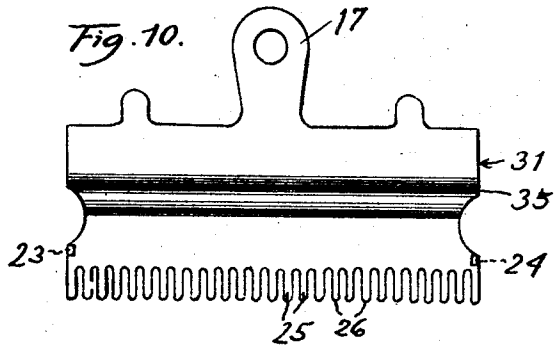


Fig. 10.



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Patented June 8, 1926. 1,587,656

UNITED STATES PATENT OFFICE.

EDWARD M. KOJIMA, OF LOS ANGELES, CALIFORNIA.

HAIR-CUTTING DEVICE.

Application filed May 9, 1925, Serial No. 29,150. Renewed April 27, 1926.

This invention relates to certain new and useful improvements in hair cutting devices, and its objects are to provide a hair cutter which embodies a safety razor blade, or similar blade, a comb member and a holding member associated therewith and adapted to grip the blade in its working position, and a spring element associated with the comb member and holding member, and arranged to hold the blade through friction.

A further object of this invention is to provide a device of this character in which the blade may be adjusted to different positions both laterally and longitudinally whereby the complete cutting edge of the blade may be utilized, and to provide a device of this character in which the adjustable elements and the blade are held by friction.

A further object is to provide a device of this character in which the several parts are made from sheet metal and thereby to poduce a hair cutter that is both simple and economical.

A further object of this invention is to provide a device of this character having the parts constructed and arranged to prevent slipping of the fingers of the user; and to devise an implement with which an unskilled person may cut his own hair or the hair of others.

Another object is to provide a device in which the parts may be readily detached from one another for the purpose of cleaning, or of replacing the parts.

To attain these objects, I provide an implement embodying a holder including opposed jaw members, a spring to hold the jaw members in operative engagement with the cutting blade, and a detachable and reversible double-edged blade supported and moved by the holder; the device being of small compass and adapted for use with the hand, and adapted, in use, to be drawn from the top of the head downwardly, as in the use of a razor.

In the accompanying drawings, there is shown a preferred form of the invention, it being understood that the drawings do not define the limits of my invention, and that minor changes may be made in the construction and operation without departing from the spirit of the invention or scope of the claims.

In the drawings: Figure 1 is a side elevation of my improved hair cutting device. Fig. 2 is an end view of the implement. Fig. 3 is a side and detail view of the comb member. Fig. 4 is a side and detail view of the cutting blade. Fig. 5 is a side and detail view of the holding member which cooperates with the comb member. Fig. 6 is a top plan view of the spring member which holds the comb and holding members in operative position. Fig. 7 is a side elevation of a modified form of the hair cutter. Fig. 8 is an end view of the modified form. Fig. 9 is a side and detail view of the holding member detached. Fig. 10 is a side and detail view of the modified form of comb member detached.

More specifically, the comb member 11 and holding members 12 are made of sheet metal or other suitable material, and are of suitable length and breadth to engage with a metal blade 13, having the knife edges 14 and 15. The holding member 12 has a flange portion bent inwardly and arranged in parallelism with the comb member in the assembled position to more completely engage with the sides of the blade member. The blade and holder members comprise opposed jaws, and are provided with integral handles 16 and 17, which, in their assembled position, diverge from their points of contact with the blade, and therefore may be pressed together to release the blade. The holding member 12 and comb member 11 are provided with projections 18 and 19, which project through the spring member 20, which is pierced with suitable apertures 21, for the said projections, and with apertures 22, through which the handles project. These projections 18 and 19, afford a means for a secure grip of the operator's fingers, and therefore the device may be operated the more uniformly and with greater accuracy. The blade 13 may be adjusted laterally and longitudinally relative to the holder. The lateral adjustment may be for setting the blade for shaving, or for sharpening the blade, or it may be for obtaining a longer cut for the hair. The space between the projections 23 and 24 on the comb member, is greater than the length of the blade, and therefore, the blade may be positioned with one end abutting against a projection on one end, and will present certain portions of the cutting edge between the teeth 25. On shifting the blade to abut against the opposite projection, the remaining portions of the blade are presented between the teeth of the

comb. Therefore, all portions of each cutting edge of the blade may be utilized. The teeth 25 have their extremities 26 rounded. The holder members are provided with notches 27 and 28, which allow the operator to grasp the blade for adjustment. Both holding members are provided with corrugations 29, engaging with the spring edges 30, and serving to retain the holding members in their assembled position.

In the modified form, the comb member 31 and holding member 32, are retained in position by the spring member 33. The comb and holding members are provided with longitudinal grooves 34 and 35 adapted to engage with the edges of the spring. In the assembled position, the holding members have their flange portions 36 and 37 extending in parallelism to hold the blade. The remaining features of the modified form are similar to the preferred form.

In use, to adjust the blade to give any desired exposure of the comb teeth for cutting the hair a longer or a shorter length, it is only necessary to press the handles together sufficiently to release the blade, whereupon the blade may be grasped by the fingers and adjusted, either laterally or longitudinally as desired. The projections at each end of the spring member, and the handles both serve as a means whereby the user may hold the device firmly. The inclination of the blade effects a shearing cut whereby the hair may be cut smoothly and easily.

In either form of the device, the jaws comprising the comb member and holding member are arranged to be in intimate contact with the blade throughout an extensive area; thereby maintaining the blade in the correct position for use, and holding the same firmly for use. In use, the device is grasped between the thumb and second finger, the operator placing the index finger between the projections at the end of the spring member, and by this method of holding, the user may vary the angular position of the comb member and blade as desired.

It may be seen from the foregoing that the device is small and compact, economical to make, useful and capable of quick adjustment in accordance with the work to be done and readily manipulated for inserting and removing the blade, and that the blade may be adjusted without removing the same from the holding members.

What is claimed is:—

1. In a hair cutting device, a tubular spring member having opposed longitudinal edges, a pair of jaw members consisting of a comb member and a holding member having longitudinal corrugations adapted to engage with said longitudinal edges, said jaw members being mounted between the longitudinal edges of the spring member and extending outwardly from the edges of the spring member, a flange integral with the holding jaw member and extending inwardly and in parallelism with the remaining jaw member, and a blade removably mounted between the flange and a corresponding opposed portion of the opposite jaw member.

2. In a hair cutting device, the combination with a tubular spring member having opposed longitudinal edges, of a pair of jaw members consisting of a comb member and a holding member having body portions adapted to fit between the edges of the spring tubular member and urged together thereby, a flange projecting inwardly and integral with the holding jaw member, said flange being substantially in parallelism with the remaining jaw member, said jaw members extending from the edges of the spring member, and a blade frictionally supported between the jaw member and the flange.

3. In a hair cutting device, the combination with a tubular spring member having opposed longitudinal edges, of a comb member and a holding member having body portions adapted to fit between the opposed edges of the spring member, and urged together thereby, a flange on the holding member extending parallel with the comb member, diverging handles, one extending from each body portion, and a blade frictionally held between the body portions of the comb member and flange of the holding member.

4. In a hair cutting device, the combination with a spring member having opposed longitudinal edges, of a pair of jaw members, one of which comprises a comb, and both adapted to fit between the longitudinal edges of the spring member, corrugated portions on the jaw members engaging with said longitudinal edges of the spring member whereby the jaws are held in parallel alignment, a flange on one jaw member extending in parallelism with the body portion of the remaining jaw member, and a blade frictionally held between the flange and the remaining jaw member.

5. In a hair cutting device, the combination with a spring member, of opposed jaw members consisting of a holding member and a comb member, having body portions adapted to fit said spring member, and urged together by said spring member, a flange forming the clamping portion of the holding member, diverging handles, one extending from each body portion, and a cutting blade frictionally held between the body portions of the comb member and the holding member.

6. In a hair cutting device, the combination with a spring member bent into a substantially tubular form and with opposed edges, of a pair of jaw members including a comb member and a holding member having body portions fitting between the longi-

tudinal opposed edges of the spring member, and having substantially parallel and opposed surfaces, projections on each end of the comb member and extending from the face thereof, and a blade fitting between the opposed faces of the comb member and holding member and having its length less than the distance between said projections equivalent to the thickness of one tooth of the comb, for adjustment of the blade to expose all portions of the cutting edges thereof between the teeth of the comb.

7. In a hair cutting device, the combination with a spring member bent into a substantially tubular form and with opposed longitudinal edges, of a comb member and a holding member forming opposed jaws and mounted between the opposed edges of the spring member and urged together thereby, body portions on the comb member and holding member arranged to be substantially in parallelism, handles integral with the comb member and with the holding member for manually releasing the opposed jaws, a blade frictionally held between the opposed jaw members and maintained in position by friction, and notches on each end of the comb member and the holding member whereby the ends of the blade are exposed for adjustment.

8. In a hair cutting device, the combination with a comb, a holding member in opposed relation to the comb, and a blade positioned between the comb and the holding member, of a tubular spring clamp substantially embracing the body portions of the comb and holding member and having apertures at each end and intermediate longitudinal slots, projecting members on the comb and holding member and extending through the end apertures, and handles integral with the comb and holding member, and extending through the longitudinal slots.

9. In a hair cutting device, the combination with a comb, of a blade adapted to lie against the comb, a holding member having a flange portion adapted to abut against the blade and extend in parallelism with the comb, and a spring clamp embracing a portion of the comb and holding member and urging them together to hold the blade in position.

10. In a hair cutting device, a spring member bent into a tubular form and having opposed longitudinal edges, apertures adjacent to each end, and longitudinal slots between the apertures, a comb member and a holding member having body portions adapted to fit between the opposed edges of the spring member, and normally urged together thereby into parallelism, handles, one on each of the opposed members and projecting through the longitudinal slots, other projections integral with the comb member and with the holding member and projecting through the apertures in the spring member, corrugated portions in the body of the comb and body of the holding member engaging with said opposed edges to maintain the comb and holding members in alignment, projections at each end of the comb member, a blade fitting between the comb and holding member and adjustable laterally and longitudinally therebetween, said projections on the comb member limiting the longitudinal adjustment of the blade, and notches in each end of the comb and of the holding member for adjustment of the blade.

In testimony whereof, I hereunto affix my signature.

EDWARD M. KOJIMA.