My invention relates in general to hair trimming devices, and more particularly to such devices which enable the unskilled operator to trim the edges of hair in a neat gradual taper.

In accordance with my invention a hair trimming device is provided which in its simplest forms consists essentially of a plurality of horizontally disposed rests which are vertically spaced apart and adapted to hold hair thereon for cutting by a vertically descending razor blade or the like. Preferably the rests are provided with edges adapted to cooperate in shear fashion with the blade, and with vertically disposed comb teeth, certain ones of which serve to support the rests in spaced-apart relation and simultaneously to guide the blade from one rest to the next. In some forms of the invention, means are provided to space successively disposed rests at progressively increasing distances from the head, in order that the hair may be neatly tapered as it is cut.

The foregoing and other features of my invention will be better understood from the detailed description of certain embodiments thereof which follows. The description refers to the accompanying drawings, wherein:

Fig. 1 illustrates a hair trimming device constructed in accordance with the invention;

Fig. 2 is a cross-section taken along line 2—2 in Fig. 1;

Fig. 3 illustrates a modification of the device shown in Fig. 1;

Fig. 4 is a cross-section taken along line 4—4 in Fig. 3;

Fig. 5 illustrates another modification of the device shown in Fig. 1;

Fig. 6 is a top sectional view of Fig. 5;

Fig. 7 is a cross-section taken along 7—7 in Fig. 6;

Fig. 8 illustrates another embodiment of the device shown in Fig. 1;

Fig. 9 is an enlarged cross-sectional view taken along line 8—8 in Fig. 8;

Fig. 10 is an enlarged isometric view of a portion of the device shown in Fig. 8;

Fig. 11 is an enlarged isometric view showing a modification of Fig. 8;

Fig. 12 is an enlarged cross-section taken along line 12—12 in Fig. 11;

Fig. 13 illustrates another hair trimming device constructed in accordance with the invention;

Fig. 14 illustrates still another form of the invention embodying features of Figs. 5 and 13;

Fig. 15 illustrates another embodiment of the invention;

Fig. 16 illustrates still another embodiment of the invention;

Fig. 17 is a modification of the device shown in Fig. 16, and

Fig. 18 is another modification of the device shown in Fig. 16.

Referring now to Figs. 1 and 2, a base 10 is provided with two rows of comb teeth 11 and 12. The teeth of each row are arranged in the usual fashion, but each row lies generally in a separate plane, and the two planes intersect at an acute angle A along a line, not shown, which is parallel with the base 10. The end teeth 13 and 14 of each row extend beyond the intermediate teeth approximately twice the length of the intermediate teeth. A shelf or platform 15 is supported by these end teeth 13 and 14, being attached thereto about half-way between their ends. An intermediate tooth 16 of row 11 and an intermediate tooth 17 of row 12 extend to and furnish additional support for the shelf 15. Mounted along each long edge of the shelf 15 are two additional rows of teeth 18 and 19, row 18 lying in the same general plane as row 11 and row 19 lying in the same general plane as row 12. The base 10 is conveniently extended beyond the rows of teeth to form a handle 20.

The comb device of the invention which is illustrated in Fig. 1 is intended to be used by placing one plane of teeth, for example the plane containing rows 12 and 15, against the side of the head where the hair is to be tapered. The combs are moved upward until hair projects through teeth 12 and 15, and the longest hairs resting on base 10 and shelf 15 further project through teeth 11 and 16. These projecting hairs are then easily cut by a vertically descending razor blade or the like. The blade may depend on a bias, and the teeth 11 and 12 will keep the hair from slipping sideways on the base 10 and shelf 15. The extending median tooth 16 serves to prevent descending razor blade from sliding under the bottom edge of the shelf 15 and becoming caught on the tops of the lower row of teeth 11. Extending tooth 17 is, of course, useful for the same purpose when the device is employed with other rows of teeth 11 and 19 resting against the head. As will appear below, additional such extending teeth, supporting the shelf above them and guiding the blade, may be furnished if desired.

Referring now to Figs. 3 and 4, the device there illustrated is a modification of the device shown in Fig. 1, intended primarily for very fine work, and is shown approximately twice normal size. In addition to the base 10 and shelf
There are additional shelves 22 and 23 each with additional rows of teeth 24, 25, 26, and 27 thereon. Rows of teeth 18 and 19 lie in planes including respectively rows 24 and 26 and rows 25 and 27. Rows of teeth 11 and 12 have been omitted, however, and a single row of teeth 20 has been substituted therefor. Due to the small size of the device shown, this is a preferred manner of construction. Teeth 26 conveniently lie in a plane which is generally intermediate the outer planes, which again are spaced at the angle A with respect to each other.

The device shown in Figs. 3 and 4 is intended to be used in the same manner as the device shown in Fig. 1. Again extending teeth 29 are provided intermediate the ends of the rows of teeth to furnish additional support for the shelves and to prevent the descending blade from catching on teeth immediately below any one shelf.

Referring now to Figs. 5, 6, and 7, the device there shown is a further modification of Fig. 1 wherein the base 10 has a first row of teeth 31 which has extended extreme teeth 32 and 33 which support a shelf member 34 between them. Above the intermediate teeth 31. Mounted on the edge of the shelf member 34 immediately above the teeth 31 is a second row of teeth 35 lying generally in the same plane as teeth 34. The base 10 has also a second row of teeth 36, lying in a plane which makes an angle A with the plane containing teeth 31 and 35, similar to the angle A in Fig. 1, but extending from the base 16 as far as the extremities of the teeth 36. The extreme teeth 37 and 38 of the row of teeth 36 also furnish support for the shelf member 34. In between these extreme teeth 37 and 38, however, the shelf member 34 is cut away so that its width is less than that of the shelf 15 in Fig. 1 for example. Two leg portions 39 and 40 are permitted to remain at the ends of the shelf 34 for connection to the long teeth 37 and 38 respectively. There is thus provided a space of substantial extent between the edge of shelf 34 confronting teeth 36 and the teeth 35. This appears most clearly in Fig. 6, which is greatly enlarged. The shelf 34 is conveniently extended to form a handle 41, and it will be appreciated that this construction is alternative to the handle construction shown in Figs. 1 and 3.

The device of Fig. 5 is used like the device of Figs. 1 and 3, but with the teeth 36 always placed next to the head. In this construction, short underhairs, which would normally lie on the shelf in the embodiments of Figs. 1 and 3, are permitted to assume their natural position and only the longest hairs which tend to extend through the teeth 35 rest on the shelf 34. In this manner, the longest hairs are more cleanly cut.

Referring now to Figs. 8, 9, and 10, a further modification of the device of the invention is shown wherein two separable parts 45 and 46 are used to build up a multi-comb device generally similar to that shown in Figs. 3 and 4. Thus portion 45 has a first shelf 47 on the opposite long edges of which are two rows of teeth 49 and 50. The extreme teeth 51 and 52 extend from the teeth 48 of their row and support between them a second shelf 53. Along the opposite edges of the shelf 53 are mounted additional rows of teeth 54 and 55, lying in the same general planes as teeth 49 and 50 respectively. The upper shelf 53 is further supported by long teeth 56 and 57 which are the extreme teeth of row 50. Again intermediate teeth 56 of the rows 49 and 55 extend to and support the shelf 53, and serve the same function as the intermediate tooth 16 in Fig. 1 for example. Here the extending intermediate teeth 56 are plural in number. The planes of teeth 49 and 54 and teeth 50 and 55 again are non-parallel and have an angle A between them.

Depending from the lower shelf 52, at the extremities thereof, are two pins 61 and 62. The lower member 45 has a base 63 at the extremities of which are two sockets 64 and 65 which engage the pins 61 and 62 respectively. A shelf 66 is supported between the socket members 64 and 65 spaced from but parallel to the base 63. A lower row of teeth 51 is mounted upon the base 63 and an upper row of teeth 55 is mounted upon the shelf 65. The upper teeth 56 are generally trapezoidal in shape, with the long parallel edge at the top, to continue the general contour of the taper of the teeth of the upper member 45 of the device. The shape of the lower row of teeth 67 is such that the taper curves sharply at the bottom of the device, near the base 53.

Thus, when the device is used, in the manner of the previously described device, a taper provides in which the hairs at the lowermost portion of the haircut can be trimmed very closely to the head and the hairs further up on the head are gradually made longer, in a most pleasing fashion. This permits an unskilled person to trim the sides of the head near the temple immediately in front of the ears in a very professional manner. It will be appreciated that different members 45 and 46, having variously designed tapers, can be assembled to provide and contours of any desired kind. Conventionally base 43 of portion 45 is extended to form a handle member 70, and a cooperating handle member 71 is mounted on socket member 65.

Referring now to Figs. 11 and 12, the construction shown in Figs. 8, 9, and 10 is modified to provide a pin member 72 at each end of the base 53 and a socket member 73 depending from each end of the shelf 45, thus reversing the construction shown in Figs. 8, 9, and 10. As is shown in Fig. 11, shelf 66 is mounted in the shelf 72 at one end and at the other end on the second corresponding pin, which is not shown. As is shown in Fig. 12 the socket member 73 is apertured at 74 to permit passage over the shelf 66. Handle members 75 and 76 are respectively an extension of base 63 at the pin 72, and an extension from the bottom of socket 73.

Referring now to Fig. 13 two base members 80 and 81 are mounted at the ends of a spring 82 so that they are parallel to each other, but moveable to and from each other. An arcuate member 83 is mounted at one end on base 81 and extends at the other end 84 through a slot 85 in base 80. A plurality of holes 86 are provided in arcuate member 83 near the free end 84. A pin 87 fits snugly into one of these holes 86, and serves to retain the base members 80 and 81 in a predetermined spatial relation. A first row of comb teeth 88 is mounted on the member 80 and a second row of comb teeth 89 is mounted on base member 81, these teeth extending generally in a vertical direction. The two rows of teeth 88 and 89 lie in parallel planes. A shelf 91 is mounted on the base 80 and extends horizontally toward base 91. This shelf is irregular along the edge 92 confronting the base 81. The irregularity is provided by cutting apertures 93 or slots 93 therein. With this construction the
hair can be cut to a predetermined length from the head, and in addition the hair can simultaneously be thinned because a predetermined fraction of the total amount of the hair which would normally rest upon the unslotted shelf is permitted to fall through the slots 53.

Referring now to Fig. 14 the bases 66 and 61 there shown are adjustably supported with respect to each other, for example, like the bases 80 and 81 of Fig. 13. The row of teeth 95 mounted on the base 93 however have extended extreme teeth 95 and 97, which support a horizontal shelf 93 intermediate their ends. A second row of teeth 98 is mounted on the edge of the shelf 90 immediately above the teeth 95 and these teeth lie generally in the same plane as teeth 95. A second shelf 100 extends from the base 99 parallel to the shelf 90, but is somewhat narrower. A third row of teeth 101 is mounted on the other base 101, and these teeth extend as far as the extreme teeth 95 and 97 on base 93. There is thus furnished a device similar to that shown in Figs. 5, 6, and 7, with the additional feature that the space between the long teeth 101 and the shelf 99 is adjustable.

Referring now to Fig. 15 the device there shown is further modified to provide simultaneous tapering and thinning. In this device the base 105 has irregular shelf members 106 and 107 at different heights with respect to the lower edge 108 thereof. Mounted on the shelf members are comb teeth 109, 110, 111, 112, etc. of various lengths. At the ends of the base 105 are mounted four long teeth 113, 114, 115, and 116, of which teeth 116 and 113 lie in a first plane and teeth 114 and 115 lie in a second plane, the two planes being parallel to the base 105 and having an angle between them similar to the angle A in Fig. 1. At points intermediate their ends these long teeth support a second irregular shelf 117, which is transversely divided into portions 118, 119, 120, 121, etc. Alternate portions are displaced with respect to each other in a direction perpendicular to the plane of the shelf 117. The successive portions 118, 119, 120, 121, etc. are supported in this spaced-apart relation by teeth 123 which are mounted at their bases on the lower shelf portions 118, 120, etc. and support the upper portions 119, 121, etc. intermediate their ends. In this arrangement the hairs are cut at different lengths from the head, but the general tapered effect is preserved. The ultimate result is a neatly tapered haircut without the sharp mat-like effect which is commonly found in hair cuts given by the unskilled and non-professional person.

The invention is further illustrated in Fig. 16 where a comb having but one plane is divided into a plurality of vertically spaced-apart rests useful for trimming short hairs such as those found at the back of the neck. Here a base 125 is provided with teeth 126 through which holes 127 are drilled. Rods 128, which may be flexible wires, are supported in the holes 127, and provide rests upon which the short hairs may be disposed for cutting by a scissors or vertically descending razor blade. Fig. 17 illustrates an alternative embodiment in which the rests 129 are molded integrally with the comb teeth 126.

In Fig. 18 the comb is shown with the base 130 curved somewhat and the teeth 131 and 132 alternating in length. The rests 133 and 134 are also provided parallel to the base 130. This device may be employed at the hairline at the back of the neck, cooperating, for example, with a neck guide 135, of which only a portion is shown, to effect a neat neck trim. A suitable neck guide for this purpose is shown, for example, in U. S. Patent No. 1,385,729, dated July 26, 1921.

It will be appreciated by those skilled in the art that many other and further embodiments of the invention are possible, and it is therefore intended that the claims which follow shall not be limited by the particular details of the embodiments herein shown and described but shall be limited only by the true spirit and scope of the invention.

I claim:

1. A hair trimming device comprising in combination a plurality of horizontally disposed rests adapted to hold hair for cutting by a vertically descending blade or the like, a row of generally vertically disposed comb teeth mounted on each rest, certain ones of the teeth of each row extending and being attached to the succeeding rest whereby to support said rests in vertically spaced-apart relation.

2. A hair trimming device according to claim 1 comprising an elongated base, a first row of comb teeth which all but a few are of a first length extending from said base and lying substantially in a first plane, a second substantially parallel row of comb teeth of a second length greater than said first length extending from said base and lying in a second plane making an acute angle with said first plane, at least the extreme teeth of said first row extending substantially as long as the teeth of said second row, a secondary base member mounted on and extending between said extreme teeth across the space from the free ends of the teeth of said first row which have said first length, and a third row of comb teeth extending from said secondary base in generally the same direction as the teeth of said first row.

3. A hair trimming device as in claim 2 wherein in a substantially flat shelf member lying in a third plane substantially parallel to said base and substantially perpendicular to the bisector of said acute angle is mounted on said secondary base member and extends toward said second row of teeth.

4. A hair trimming device according to claim 1 embodying a plurality of flat elongated horizontally disposed shelve each having first and second long edges at opposite sides of a flat surface thereof, said shelves being arranged in a series of longitudinally disposed sections of which adjoining ones are mutually displaced in a direction perpendicular to said flat surface thereof, means supporting said sections in a spaced-apart relation, and a row of generally vertically directed comb teeth mounted on said shelves along said first long edges.

5. A hair trimming device according to claim 1 embodying a plurality of flat elongated horizontally disposed shelves each having first and second long edges at opposite sides of a flat surface thereof, said shelves being arranged in a series of longitudinally disposed sections of which adjoining ones are mutually displaced in a direction perpendicular to said flat surface thereof and first and second rows of generally vertically directed comb teeth mounted on said shelves along first and second edges respectively, the teeth at confronting corners of each two adjoining sections being affixed to both of said adjoining sections whereby to support said two adjoining sections in spaced-apart relation.

6. A hair trimming device according to claim 1 embodying an elongated horizontally disposed
rest adapted to hold hair for cutting by a vertically descending blade or the like, said rest being transversely divided into sections and adjoining ones of said sections being mutually vertically displaced, a row of generally vertically directed comb teeth mounted along said rest, those teeth at confronting ends of adjoining sections being affixed to both sections whereby to support said adjoining sections in spaced-apart relation.

7. A hair trimming device embodying a flat elongated horizontally disposed shelf having first and second substantially parallel long edges at opposite sides of a flat surface thereof, a first row of comb teeth lying in a first generally vertically disposed plane mounted on said shelf at said first long edge, a second row of comb teeth lying in a second generally vertically disposed plane mounted on said shelf at said second long edge, said first and second planes intersecting each other at an acute angle along a line substantially parallel to said long edges, a generally bar-like member disposed substantially parallel to said line, support means joining said shelf and said member, and a third row of comb teeth lying in a third generally vertically disposed plane mounted on said member.

8. A hair trimming device in accordance with claim 7 in which said support means comprises a pin and a socket mounted one on said shelf and one on said member.

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