June 26, 1951 J. H. METCALF 2,558,264

TAPERING AND THINNING SHEARS

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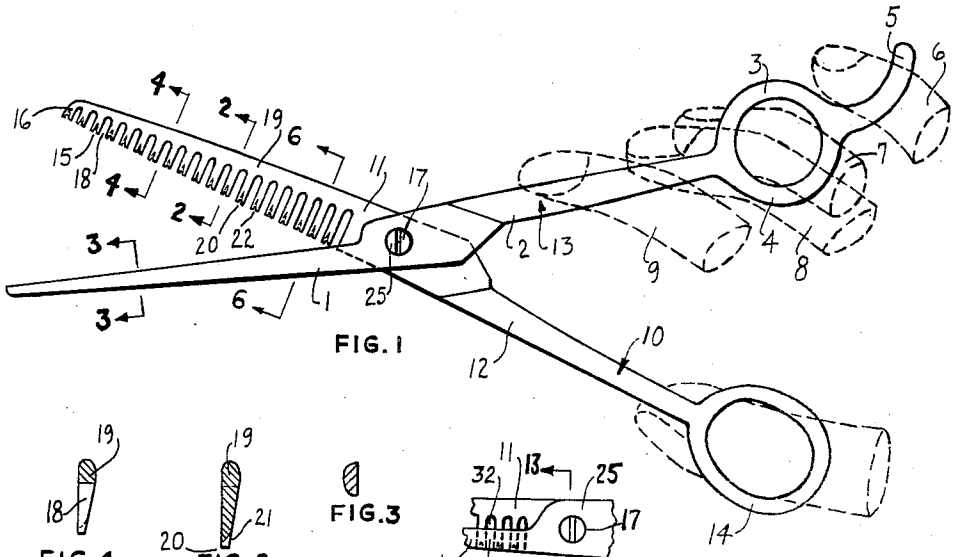


FIG. 1

FIG. 4

FIG. 2

FIG. 3

FIG. 5

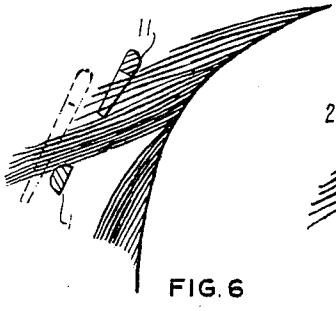


FIG. 6

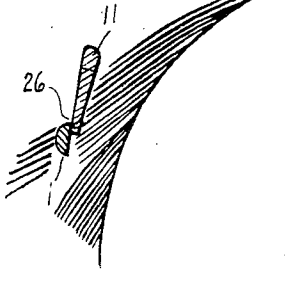


FIG. 7

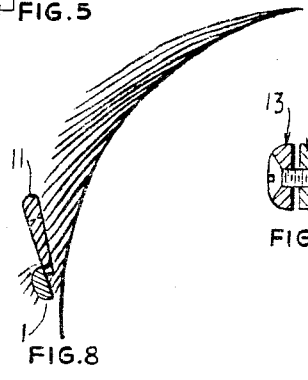


FIG. 8

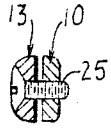


FIG. 13

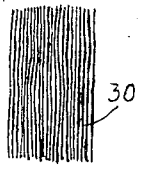


FIG. 9

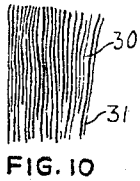


FIG. 10



FIG. 14



FIG. 11

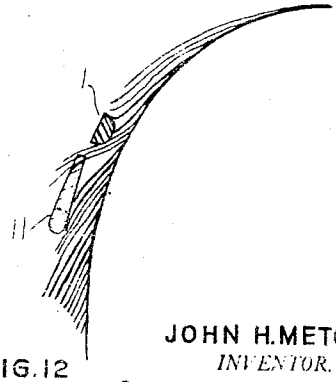


FIG. 12

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TAPERING AND THINNING SHEARS

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2 Claims. (Cl. 30—195)

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This invention relates to a pair of hair cutting and thinning shears which is characterized by the fact that one shear comprises a finger ring handle integral with an uninterrupted straight-extending non-serrated blade while the other shear comprises a thumb ring handle which is integral with a serrated blade.

It is an object of this invention to provide a pair of shears of this class in which the thumb actuates the serrated blade while the fingers actuate the non-serrated blade.

It is a further object of this invention to provide a pair of shears of this class in which a thinner, serrated blade may be operated next to the head in cutting and thinning hair and move downwardly, whereas the thicker non-serrated blade is spaced away from the head and is moved upwardly.

It is yet another object of this invention to provide a pair of shears of this class in which the serrated blade cuts from above the non-serrated blades so as to thin hair downwardly from the upper part of the tress with the result that the extent of cutting may be better observed.

Another object of this invention considers providing a pair of shears of this class in which the thinning and tapering of hair to a feather edge next to the scalp may be observed since the thinner non-serrated blade may be operated next to the scalp and may be brought in close approach thereagainst as a tapered, feather edged trim is approached.

Still another object of this invention is to provide a pair of shears of this class in which the non-serrated blade, spaced away from the scalp, may be used to more easily pick up the hair and place it in position to be combed.

It is also an object of this invention to provide a pair of shears of this class which will have longer life and not be as subject to wear by virtue of an arrangement which permits the blade edges from being brought into dulling contact while cutting hair.

Other and further objects of this invention will be apparent when the specification is considered in connection with the drawings, in which:

Fig. 1 is a view of an assembled pair of shears and which shows the position of the fingers and of the thumb in operation.

Fig. 2 is a section through the serrated blade taken along the line 2—2 of Fig. 1.

Fig. 3 is a section through the non-serrated blade taken along line 3—3 of Fig. 1.

Fig. 4 is a section through the serrated blade taken along line 4—4 of Fig. 1.

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Fig. 5 is a fragmentary view showing the shears in closed position.

Fig. 6 is a sectional view including part of the scalp to demonstrate how the non-serrated blade may be employed to position the hair for combing.

Fig. 7 is a sectional view showing part of the scalp which shows the cutting operation of the shears of this invention.

Fig. 8 is a sectional view showing part of the scalp which shows the tapering operation of the shears of this invention.

Fig. 9 shows a tress of uncut hair.

Fig. 10 shows a tress of hair which has been cut with the shear of this invention.

Fig. 11 is a sectional view showing part of the scalp which shows the cutting operation of conventional shears when it may be endeavored to taper hair to a feather edge.

Fig. 12 is a sectional view showing part of the scalp which shows the defects of the conventional shears in cutting operation.

Fig. 13 is a sectional view taken along line 13—13 of Fig. 5 which shows the method of pivotally connecting the shears of this invention.

Fig. 14 is an enlarged sectional view illustrating the tendency of conventional shears to become dull through the contact of cutting edges during operation.

Hair cutting and thinning shears previously in use, as that of the patent to Veit, No. 1,962,264, have employed serrated and non-serrated blades to form the cutting portions of shears, as shown in Veit's Fig. 6, but these shears have considered having a non-serrated cutting blade which operates downwardly from an upper position against a serrated blade which operates upwardly from a lower position. These conventional shears originally had handles each of which had rings thereon of the same configuration, but it was later found feasible to develop a specific finger ring handle and a thumb ring handle as shown in Patent No. 2,272,580 to Phillips; and in all cases these shears have considered having the finger ring on the serrated blade and the thumb ring on the non-serrated blade.

In this invention the pair of shears considered comprises one shear 13 which has a non-serrated blade 1 which is connected to a handle 2 which terminates in a finger ring 3 comprising a circlet 4 and a hooked portion 5.

In operation, the small finger 6 of the barber rests in the hooked portion 5, the ring finger 7 extends through the circlet 4, and the middle finger 8 and index finger 9 rest upon the handle 2. The other shear 10 comprises a conventional

serrated blade 11, which is rigidly connected to a handle 12 which terminates in a thumb ring 14.

As shown in Figs. 2 and 4, the serrated blade has teeth 15 thereon which increase in length from the point of the blade 16 toward the fulcrum 17. These teeth have open spaces 18 therebetween. In configuration the teeth taper downwardly from the upper edge 19 to a substantial point at the lower edge 20. Each tooth has a substantially triangular groove 21 therein which merges at the bottom into an arcuate open space 22.

This feature of construction enables the shears to entrap a portion of hair of a tress 30 in the triangular shaped groove 21 so that the hair thus trapped extends into the open space 22 and is sheared by the blade 1 as it moves upwardly. In this way the serrated blade, actuated by the thumb, moves downwardly and travels farther than the non-serrated blade which travels upwardly under actuation of the fingers. The hair portions 31 of the tress 30 pass into the upper part 32 of the open spaces 10, and are left uncut until the shears are moved along the scalp for another cutting stroke.

The shears are pivotally connected by any conventional means, which, as shown in Fig. 13, may constitute simply a counter-sunk head screw 25.

When the shears of this invention are employed in cutting hair, the cutting is done from the upper part of the hair downwardly, and in this manner the operation may be observed. Also, the hair is not forced into disheveled position, as when cutting with conventional shears where the cutting progresses upwardly from below with the result that the short, cut hairs below stand up against the longer, uncut hairs above and force them into disarray.

In operation the blade 1 may be employed to space the hair away from the head so that it may be combed as shown in Fig. 6. Since the serrated blade 11 operates from the upper position, it may be brought in toward the scalp to bring the contact point of cutting 26 closer thereto as shown in Fig. 7, than should this arrangement be reversed, as in the conventional manner, in which the thicker, non-serrated blade, is operated from above and closer to the scalp as shown in Fig. 12.

In employing this invention the cutting is done in a manner as shown in Fig. 7 as to permit the barber to observe the results thereof and also the hair falls away outwardly as it is cut and does not tend to accumulate below the long, uncut portions of a tress of hair and in next to the scalp as is the inherent case when cutting with conventional shears.

When an operator sets out to cut hair into a feather edge or smoothly tapered trim, as shown in Fig. 11, the conventional shears, in which the long, serrated blade operates below and in toward the scalp, will not permit a desired fine taper to be approached since the long length of the serrated blade naturally confines thereinbehind a considerable number of hairs which are compressed in toward the scalp but which cannot be cut due to the structural arrangement of the blades.

It is obvious that the structure of this invention accomplishes desired improvements both in the field of cutting hair and in the field of thinning and tapering hair and that it also has other structural advantages as the feature by which the blades do not tend to come together in dulling contact during the cutting operation.

Broadly, this invention considers any type of shears in which a serrated blade and a thumb-ring handle are combined to form one shear and a finger-ring handle and a non-serrated blade are combined to form the other shear.

What is claimed is:

1. A cutting and thinning shears including a pair of blades, a pivot therefor, a handle grip on each blade, one of said blades having a straight beveled edge, the other blade having a serrated co-operating edge, said serrations comprising spaced elongated fingers having flat rear faces in the plane of such serrated blade, the forward faces of such fingers being tapered toward the ends of the fingers, a sloping notch in the end of such forward face providing a hair receiving recess extending from the front to the rear face along a center line of each finger, the width of the finger at its hair contact end comprising a curved cutting or shearing edge having forwardly projecting points to first engage the strands of hair and urge the strands toward the center of said shearing edge to trap the strands for shearing against said straight edge anvil blade.

2. A cutting and thinning shears including a pair of blades, a pivot therefor, a handle grip on each blade, one of said blades having a straight beveled edge, the other blade having a serrated co-operating edge, said serrations comprising spaced elongated fingers having flat rear faces in the plane of such serrated blade, the forward faces of such fingers being tapered toward the ends of the fingers, a sloping notch in the end of such forward face providing a hair receiving recess extending from the front to the rear face along a center line of each finger, the width of the finger at its hair contact and comprising a curved cutting or shearing edge having forwardly projecting points to first engage the strands of hair and urge the strands toward the center of said shearing edge to trap the strands for shearing against said straight edge anvil blade, the handle grip on the serrated blade including a ring adapted to receive the thumb therethrough, the handle grip on the straight blade including a ring adapted to receive a finger therein, and an arcuate portion extending from the finger ring and on the opposite side thereof from the pivot and adapted to support an adjacent finger thereon.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,962,264	Veit	June 12, 1934
2,083,483	Strezoff	June 8, 1937
2,267,949	Reed	Dec. 30, 1941
2,272,580	Phillips	Feb. 10, 1942