

M. PETRELLA.
HAIR CUTTING MACHINE.
APPLICATION FILED NOV. 26, 1915.

1,255,461.

Patented Feb. 5, 1918.

FIG. 1

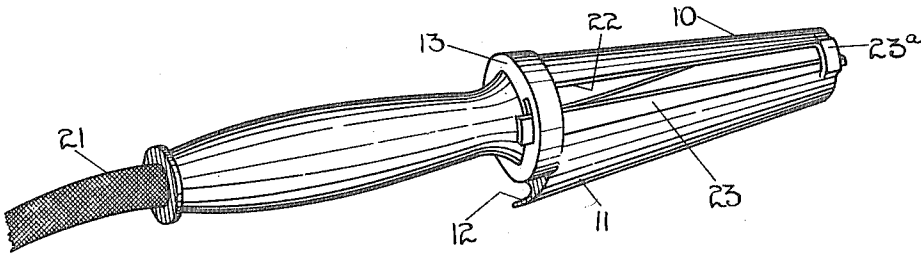


FIG. 2

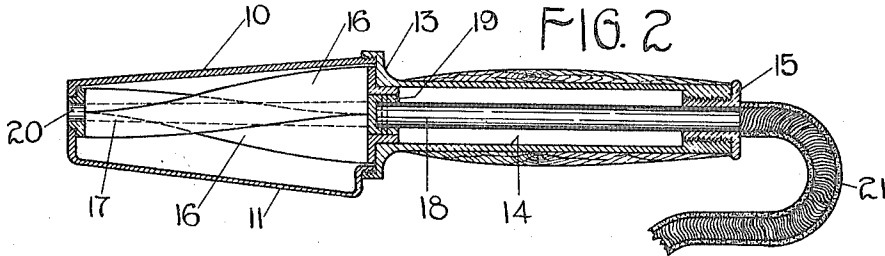


FIG. 3

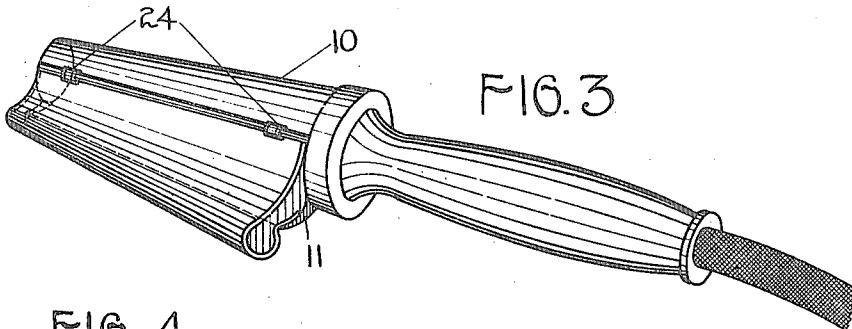


FIG. 4

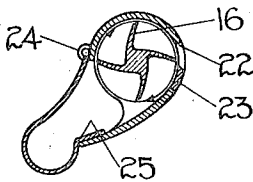
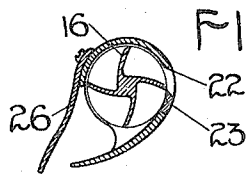


FIG. 5



WITNESSES:

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HAIR-CUTTING MACHINE.

1,255,461.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, MANFRED PETRELLA, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Hair-Cutting Machines, of which the following is a specification.

My invention relates to hair-cutting devices and contemplates, as its principal object, the provision of a rotary cutter element comprising multiple blades integrally formed and mounted within an operating casing. While it is known to me that previous inventors have proposed to employ rotary and spiral-bladed cutting elements for tonsorial purposes, I do not find that their improvements are such as to lend the inventions readily to commercial exploitation and practical use.

Accordingly I have devised a cutter of tapering formation as being best adapted for actual service, as it may be then handled to the best advantage when clipping hair behind a customer's ears or upon his neck, exposing a cutting path of a width changeable to suit the condition in a manner not to be approached by a cutter of constant width, that is, untapered throughout in length.

A second betterment of importance resides in the guard means for the blade which makes a tapered sliding fit with its supports over the slot in the casing through which the blades operate, allowing the user of my device to adjust the depth of cut by merely tapping the guard into the desired position.

A third improvement is evidenced in the disposal of clipped hair. Previously, the cut hair would be dispersed through the cutter blades in an indiscriminate shower. I disclose means, however, for directing a stream of the severed hair away from the operator or customer as fast as it is removed from the head, as well as a construction of equivalent application but even greater advantage, a receptacle which may be readily emptied of its accumulated contents.

The object of the invention being to attain the advantages set forth in the foregoing, accomplishment of such object is made possible by the constructions illustrated in the drawings accompanying, described in the following specification and then more clearly pointed out in the claims,

which are appended hereto as a part of this application.

With reference to the drawings, wherein like characters of reference designate corresponding part throughout the several views,

Figure 1 is a perspective of that embodiment of my hair cutting device now best known to me;

Fig. 2 is a longitudinal sectional view through the casing;

Fig. 3 is a perspective view, similar to Fig. 1 but taken at a different angle and disclosing a cut hair receptacle secured to the casing;

Fig. 4 is a transverse sectional view through the casing and receptacle, and

Fig. 5 is a similar view, but showing the receptacle replaced by a chute-guard.

Referring primarily to Fig. 2, the tapered housing I employ is designated by the numeral 10, and is shown as of a conical formation longitudinally slotted and laterally increased in a centripetally tangential manner denoted by the numeral 11, to form the discharging chute mouth 12. The larger end of the casing is threaded into the socket cap 13 formed integrally at the extremity of a handle shank 14. Similarly engaged with the opposite end of the shank 14 is a bearing cap 15, preferably of some anti-friction metal.

The cutter element is well illustrated in Figs. 2, 4 and 5, and includes helically arranged blades 16, formed integrally with a central hub portion 17 from a single piece of stock which is turned from a suitable tool steel. The hub is in alinement with a rigid drive shaft 18 to which is secured in some desirable manner, or it may even be integrally prolonged to provide this shaft portion. At the large extremity of the cutter element, the blade edges are shouldered down to form a bearing cap 19 to be seated within the cap 13 of the handle. A similar treatment at the opposite cutter end provides for the journaling thereof in a suitable bearing aperture 20 in the closed small end of the casing 10. The rigid shaft portion 18 is mounted in the handle cap 15 and is connected to the flexible drive means denoted by the numeral 21, which leads to a small electric motor or similar source of power.

The slot 22 provided longitudinally of the casing 10 permits the hair to project there

through and into contact with the blades of the cutter. The amount of each cut may be gaged and regulated by means of a tap-fit guide bar 23 which is provided with one cutting edge and is mounted through the socket cap 13 and a suitable bracket 23^a at the small end of the casing. This bar is tapering and will obviously control the effective opening of the slot 22 as it is adjusted by the operator to do so.

Fig. 4 illustrates a receptacle for sheared hair which is laterally extended from the cutter housing and to cover the chute mouth 12. Hinges 24 mount this receptacle upon the casing and in conjunction with a spring lip 25 permit the ready emptying thereof. In Fig. 5 there is shown a supplementary guard 26 which overhangs the chute 12 and prevents hair from scattering, due to its acquired centrifugal force after being sheared.

It is believed that the foregoing detailed description of my invention as at present embodied will be ample to convey its mode of use and inherent advantages. The conical housing permits a skilful manipulation hitherto impossible with devices of this character. The tapered guide readily controls the amount of the cut and the severed hair is neatly disposed of by employment of either guard 26 or receptacle 25. Finally, the mechanical simplicity of the integral cutter-blades, the journaling of the cutting element and the construction in general are indicative of advantageous refinements offered throughout by the hair cutting device of this invention.

While in the foregoing, however, I have thus illustrated in the drawings and described in this specification the form of the invention, as a whole and with its detailed embodiments, as at present constituted, I desire to emphasize the fact that later adaptation of the device may be made to meet concurrent changes in conditions of use without departing from the spirit of the invention as defined in the appended claims.

What is claimed is:

1. In a hair cutting device, a tapered casing formed with a longitudinal opening, a bracket projecting from the casing adjacent the opening and a tapered guide blade slidable through said bracket and having an oblique edge adapted to extend variably over said opening.

2. In a hair cutting machine, a tapered open-ended casing having an entrance opening and an exit opening formed therein, end caps for the casing, a discharge spout leading substantially tangentially from said casing in proximity to said exit opening, cutting means moving between the openings, a regulating guide adjustable over the entrance opening, a means to rotate said cutting element, and a receptacle supported by the spout over said exit opening.

In testimony whereof I affix my signature in presence of two witnesses.

MANFRED PETRELLA.

Witnesses:

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