

(No Model.)

C. P. VOLLAND.
HAIR CUTTING MACHINE.

No. 586,526.

Patented July 13, 1897.

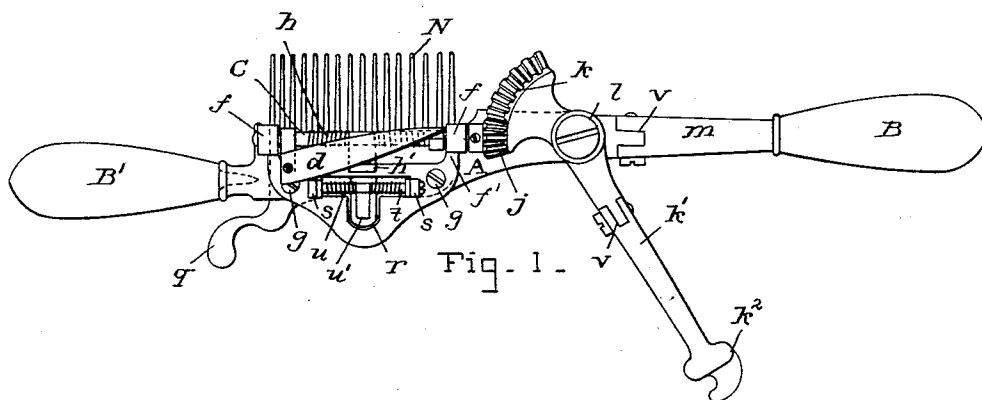


Fig. 2.

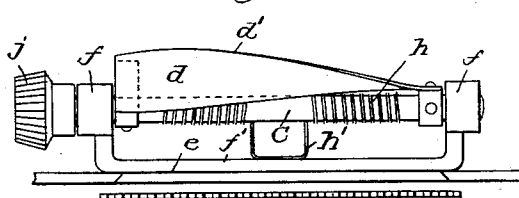
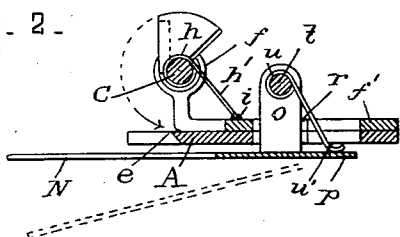


Fig. 3.

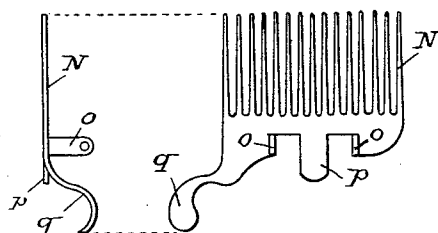


Fig. 4.

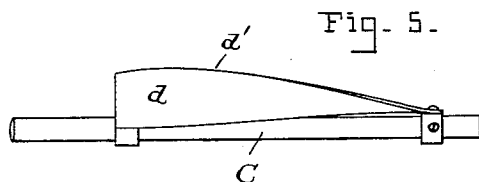


Fig. 5.

WITNESSES :-

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UNITED STATES PATENT OFFICE.

CONRAD PAUL VOLLAND, OF BALTIMORE, MARYLAND, ASSIGNOR, BY
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HAIR-CUTTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 586,526, dated July 13, 1897.

Application filed September 25, 1896. Serial No. 606,972. (No model.)

To all whom it may concern:

Be it known that I, CONRAD PAUL VOLLAND, a citizen of the United States, residing at Baltimore, in the State of Maryland, have
5 invented certain new and useful Improvements in Hair-Cutting Machines, of which the following is a specification.

This invention relates to an improved hair-cutter for trimming hair on the human head.

10 The object of the invention is to combine in a hair-cutter an improved construction embracing an oscillatory spiral cutter, a pivoted comb, and improved mechanism for connecting and operating said parts.

15 The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a top or plan view of the hair-cutter. Fig. 2 is a central cross-sectional view of same on larger scale. Fig. 3 is a front side
20 elevation showing certain parts on same scale. Fig. 4 shows two views of the comb-plate and parts integral therewith. Fig. 5 is a view of the oscillatory spiral cutter.

The stationary blade-plate A has at each
25 end a handle B B'. An oscillatory shaft C carries a spiral cutter *d*, whose edge *d'* shears on the edge *e* of the blade-plate. The said shaft C is mounted in two bearings *f*, which project up from a plate *f'*, that is secured by
30 screws *g* upon the blade-plate A. The oscillatory shaft C has a spiral spring *h* wound around it and with the end of the spring rigidly secured to it. The center part of this spiral spring forms a loop *h'*, which projects
35 downward and is secured by solder *i* or otherwise to the plate *f'*. This spring thus acts as a torsion-spring and serves to retract or throw the shaft C over and place the spiral blade *d* in the backward position. (Shown in Figs.
40 2 and 3.)

I employ means to turn the oscillatory shaft C and spiral blade forward against the tension of the spring to make a shear cut in connection with the straight shear edge *e*. This
45 means comprises a pinion *j*, fixed on the shaft C, and a segment-gear *k*, pivoted at *l* on the shank *m* of the blade-plate A. This segment-gear has a lever *k'*, by which it is thrown one way—toward the handle B. The end of the
50 lever has a thumb-piece *k''*. It will be under-

stood that with the fingers of one hand grasping the said handle B the thumb of the same hand may compress the lever *k'* toward the handle and thereby cause the spiral blade to turn forward and thus coact with the station-
55 ary shear edge *e* and cut the hair. The moment the thumb of the hand relaxes its pressure on the said lever *k'* the torsion-spring *h* retracts and throws the spiral blade backward.

60 A comb N is combined with the oscillatory spiral blade and stationary shear-blade. This comb has at its back two lateral pivot-arms *o*, a central rear projecting arm *p*, and a curved thumb-piece *q*. Both the plate *f'* and
65 the blade-plate A have an open slot *r*. The plate *f'* has at opposite ends of the slot an upward-projecting bearing *s*. The comb N is on the under side of the blade-plate, and the two lateral pivot-arms *o* on the comb project up through the said open slot *r*. A
70 pivot-rod *t* unites the pivot-arms of the comb and the two bearings *s* on the plate *f'*. A spiral spring *u* is wound around the pivot-rod *t* and fixed to it, and a central projecting
75 loop *u'* of this spring bears against the central rear projecting arm *p* on the comb and serves to tilt said comb up toward the blades. The thumb-piece *q* on the comb serves to tilt
80 the comb down.

The hair-cutter as shown has two handles B B', and in this form is to be operated by both hands. One handle B', however, may be dispensed with, and the device may be
85 operated by one hand alone. The shank of the handle B and also the lever *k'* are each jointed, as at *v*, to enable said parts to be bent at an angle with respect to the shear-blade.

Having thus described my invention, what
I claim is—

1. In a hair-cutter the combination of a stationary shear-plate having two handles, B, B', one at each end and projecting in opposite directions and said plate provided with
95 an open slot, *r*; an oscillatory shaft mounted in bearings projecting above said shear-plate; a spiral cutter secured on said shaft and co-acting with the shear-blade; a comb below
100 the shear-plate and having two upwardly-

turned pivot-arms, *o*, which project through the said open slot; said comb having a rear projecting arm, *p*, and a curved thumb-piece, *q*; a pivot-rod, *t*, uniting the said pivot-arms 5 of the comb to bearings above the plate; and a spiral spring, *u*, wound around and secured to the pivot-rod and having a loop which bears on the said rear projecting arm of the comb, whereby the spring tilts the comb upward toward the shear-plate, and pressure on 10 the curved thumb-piece tilts the comb downward, as set forth.

2. In a hair-cutter the combination of a stationary shear-plate having two handles, 15 B, B', one in each end and projecting in opposite directions; an oscillatory shaft mounted in bearings projecting above said shear-plate; a spiral cutter secured on said shaft and coacting with the shear-blade; a spiral 20 spring having its ends wound around and

secured to the said shaft and the center of the spring forming a projecting loop which is held fast above the shear-plate; a pinion on the said shaft; a lever pivoted on the blade-plate adjacent one handle and having at one 25 end a segment-gear meshing with the pinion and at the other end a thumb-piece to be operated by the thumb of the same hand which grasps one of the handles, whereby the tension of the spring turns the oscillatory shaft 30 in one direction and pressure on the thumb-piece turns it in the reverse direction, as set forth.

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

CONRAD PAUL VOLLAND.

Witnesses:

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