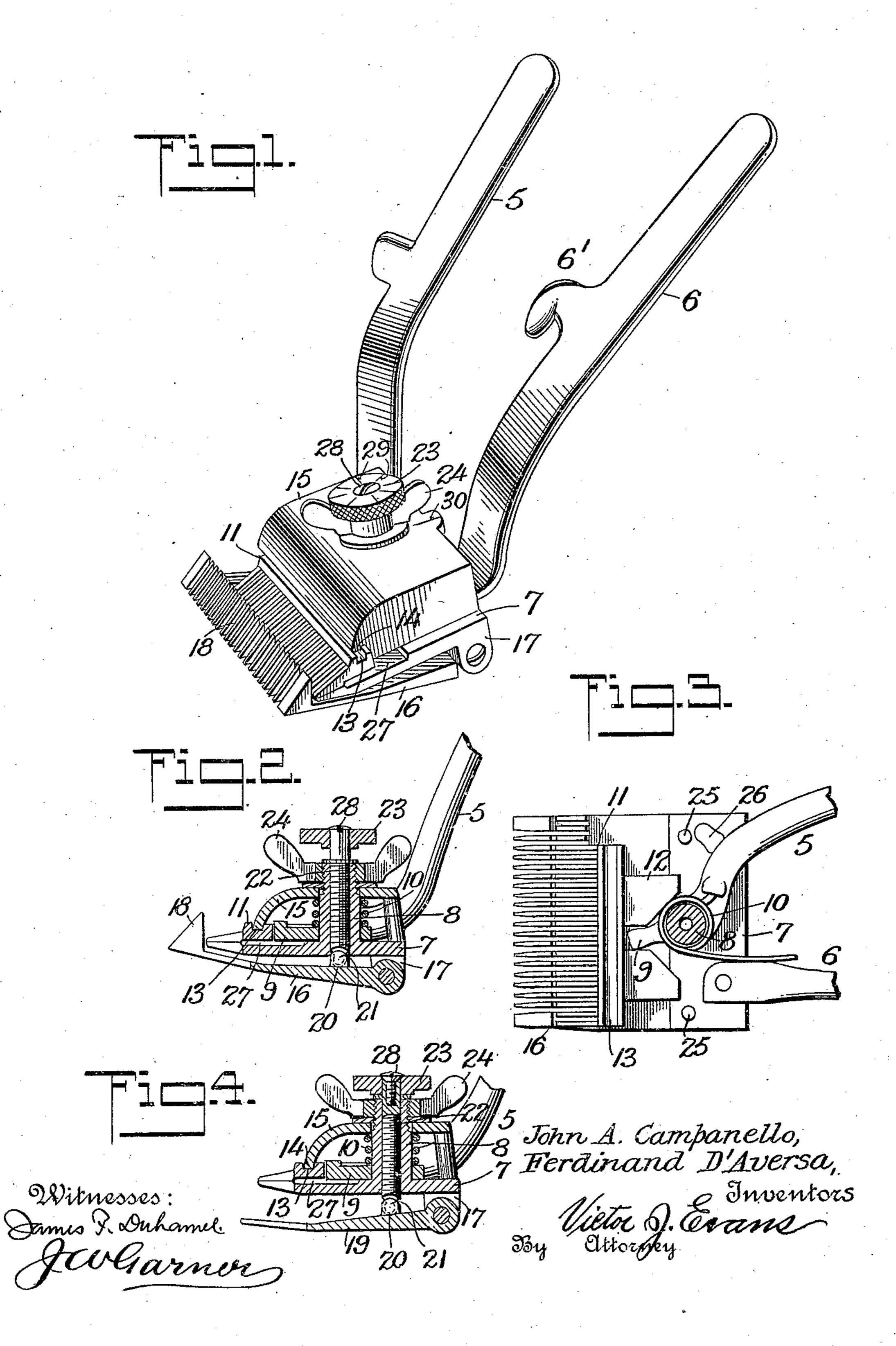
## J. A. CAMPANELLO & F. D'AVERSA.

HAIR CLIPPER.

APPLICATION FILED FEB. 5, 1908.

929,549.

Patented July 27, 1909.



## UNITED STATES PATENT OFFICE.

JOHN A. CAMPANELLO AND FERDINAND D'AVERSA, OF NEW YORK, N. Y.

## HAIR-CLIPPER.

No. 929,549.

Specification of Letters Patent.

Patented July 27, 1909.

Application filed February 5, 1908. Serial No. 414,430.

To all whom it may concern:

Be it known that we, John A. Campa-NELLO and FERDINAND D'AVERSA, citizens. of the United States, residing at New York, 5 in the county of New York and State of New York, have invented new and useful Improvements in Hair-Clippers, of which

the following is a specification.

This invention relates to hair clippers of 10 the hand operated type and has for its object certain means connected with the cutting blades for adjusting the operation of same on the head of the party whose hair is being cut so that the hair may be cut a certain 15 length and this adjustment is conveniently and quickly effected as will be more fully described in the following specification, set forth in the claim and illustrated in the drawings, where:

Figure 1 is a perspective view of the improved hair clipper. Fig. 2 is a transverse sectional view. Fig. 3 is a plan view with the cover removed. Fig. 4 is a transverse sectional view with a modified form of ad-25 justing plate so set as to leave the hair its

maximum length.

The handle of these improved clippers consists of a movable and a stationary arm 5 and 6, the latter being riveted or otherwise 30 secured to the under cutting blade 7 while the arm 5 is pivoted on the hollow stud 8 projecting from the blade 7 and the arm has a forwardly extending finger 9. A spring 10 encircles the stud and its ends bear against 35 the arms to normally separate them.

The blade 7 is provided with cutting teeth and its upper surface is smooth to receive a reciprocating upper cutting blade 11 with the cutting teeth on its front edge and hav-40 ing a fork 12 at its rear and this blade 11 is also provided on its upper face with a groove 13 in which fits the projecting lip 14

of the cover 15.

In operating the clippers the arms 5 and 6 45 are grasped in the hand, the thumb passing beneath the hook 6' and when the pressure is brought to bear the two arms close in on each other and with the repetitions of this pressure the finger 9 is caused to oscillate 50 carrying the upper blade 11 over the lower one and as the edges of the teeth of these two blades are sharp hair caught between the teeth is cut off. The length of hair left on the head of the party being barbered is 55 determined by an adjustable toothed plate

16 pivoted in brackets 17 depending from the lower stationary blade 7. The forward edge of this plate has teeth with triangular upward extensions 18 which serve to hold the hair to be cut in a vertical position as 60 it comes in the path of the cutting blades. These extensions are not absolutely necessary as it will be seen in Fig. 4 that a plate 19 may be provided with plain teeth and no extensions.

The upper face of the plate 16 or 19 carries a socket 20 in which is swiveled a ball 21 on the lower end of a screw 22, the latter being turned by the knob 23 on the squared upper end of the screw. This screw plays 70 on the interior of the stud 8 and the upper exterior of this stud is threaded to receive a thumb nut 24 which serves to keep the cover 15 on the stationary blade. Studs 25 on this blade enter perforations in the cover 75 to keep the cover from turning and a projection 26 on the blade 7 limits the outer movement of the arm 5.

The upper face of the blade 7 is cut away as shown at 27 to limit the friction and 80 confine the bearing surfaces to the teeth and

the rear end of the fork 12.

Hair clippers constructed in accordance with this invention provide for the ready adjustment of the device so that the hair 85 may be cut any desired length. The parts are few and simple and on removing the knob 23, which is released by the extraction of the screw 28, and the nut 24, the cover may be lifted off and the parts removed for 90 cleaning or renewal.

In Fig. 1 it will be seen that the top of the knob 23 is marked with radial lines 29 to register with a mark 30 on the cover 15. These markings are to indicate the location 95 of the plates 16 and 19 with relation to the cutting blades and if necessary the lines 29 may be identified by figures or numerals and the mark 30 denotes the stopping point for the adjustment of the screw 22 to produce 100 a certain cut of the hair.

What we claim as new and desire to secure

by Letters Patent is:

In a hair clipper, a stationary cutting blade, a fixed handle member carried by the 105 blade, a reciprocating blade, a hollow stud extending upwardly from the stationary blade, a pivoted handle member engaged with said stud and having means engaged with said reciprocating blade for actuating 110

the same, a spring encircling said stud engaged at its ends with the fixed handle member and with said pivoted handle member respectively, a cover engaged with said stud, said cover having an indicating mark thereon, a pivoted comb carried by the stationary blade, a set screw engaged with said hollow stud, and a nut engaged with said screw provided with marks for coöperation with the mark upon the cover for determining the

distance between the comb and said stationary blade.

In testimony whereof, we affix our signatures in presence of two witnesses.

JOHN A. CAMPANELLO. FERDINAND D'AVERSA.

Witnesses:

JAMES F. DUHAMEL, MAE W. CLINTON.