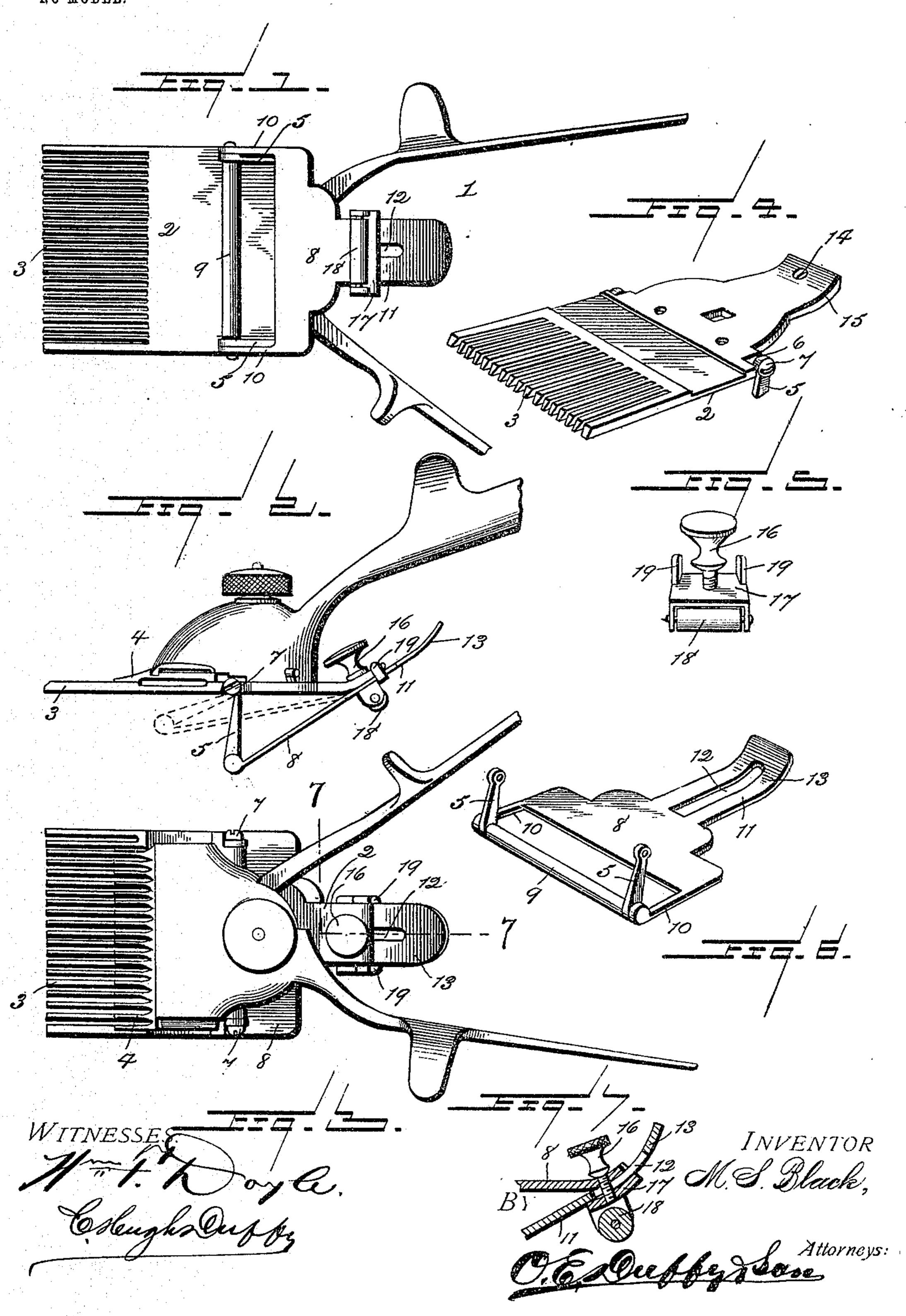
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M. S. BLACK.

HAIR CLIPPER.

APPLICATION FILED MAR. 26, 1903.

NO MODEL



United States Patent Office.

MICHAEL STARRETT BLACK, OF MILTON, PENNSYLVANIA.

HALR-CLIPPER.

SPECIFICATION forming part of Letters Patent No. 736,198, dated August 11, 1903.

Application filed March 26, 1903 Serial No. 149,666: (No model.)

To all whom it may concern:

Be it known that I, MICHAEL STARRETT BLACK, a citizen of the United States, residing at Milton, in the county of Northumberland 5 and State of Pennsylvania, have invented certain new and useful Improvements in Hair-Clippers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the o art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to hair-clippers, but more particularly to an adjusting attachment therefor, and has for its object to provide a simple and efficient means for regulating clippers to cut hair any desired length.

With this object in view my invention consists in the novel construction and arrangement of adjusting means.

My invention also consists in the setting mechanism of the adjusting means.

My invention also consists in certain other novel features of construction and in combination of parts, which will be first fully described, and afterward specifically pointed out in the appended claims.

Referring to the accompanying drawings, Figure 1 is a rear plan view of clippers provided with my invention. Fig. 2 is a side elevation of the same. Fig. 3 is a top plan view of the same. Fig. 4 is a perspective view of 35 the combined bottom cutter-plate and comb.

Fig. 5 is a perspective of the adjustment-setting means. Fig. 6 is a perspective of the swinging plate and roller. Fig. 7 is a vertical section taken on line 77 of Fig. 3.

Like numerals of reference indicate the same parts throughout the several figures, in which—

1 indicates the clippers, which may be of any desired form, size, or construction, and 2 indicates my combined bottom cutter-plate and comb provided with the cutting-teeth 3, which extend quite a distance in front of the sliding cutter-teeth 4, so as to act as a comb when in operation.

I wish it to be understood that my invention can be applied to existing clippers by and substituting my combined cutting-plate and comb.

I provide my bottom cutting-plate with two 5 arms 5, which are pivoted at 6 by screws 7, said arms being also pivoted at their bottom to their swinging plate 8. Said swinging plate is provided at its front edge with a roller 9, between the ends of which and the arms 10 6 the said arms 5 are pivoted on the roller bearing or pin. I provide said swinging plate with a tongue 11, and in said tongue is a longitudinalslot 12. Said tongue, it will be noticed, is curved slightly upwardly at 13. In the 6 rear of my bottom cutting-plate 2 I provide an opening 14, and the rear of said plate has a slight upward curve at 15. Entering said opening 14 is a set-screw 16, which passes through the slot 12 in the swinging plate 8 7 and threads into a small plate 17, which carries a roller 18, said plate having two portions thereof bent up to form guides 19.

Having thus described the several parts of my invention, its operation is as follows: 7 When it is desired to clip hair as short as possible, the swinging plate is swung up under the bottom cutting-plate and the set-screw 16 is turned and threaded into the small plate 17. This clamps the swinging plate 8 rigidly 8 between the bottom cutting-plate 2 and the small roller-plate 17 and securely holds the swinging plate 8 set in this position. When clipping hair in this instance, the clippers will run on the rollers 9 and 18, which form a good 8 wide bearing for the clippers while in operation. When it is desired to cut hair longer, the swinging plate is swung down to the desired position, which may be any intermediate position, as shown in dotted lines in Fig. 2, 90 and the swinging plate is set. In this in stance the clippers travel on the two rollers; which furnishes a wide bearing and always holds the cutting-teeth at the same height, thereby cutting the hair regularly and of the '9!

The advantages of forming the bottom cutting-plate with comb-teeth is of course apparent, as they hold the hair in position and arrange it properly for the cutters. This fea- 10 ture is not essential, however, to my adjusting means, as said means could be used with good results on a bottom cutting-plate prosimply removing the ordinary cutting-plate | vided with teeth of the usual length.

same length.

While the rear small roller 18 in conjunction with the forward roller produces better results and is preferable, it is by no means absolutely essential, as the front roller alone will be found an excellent adjusting means.

Having thus described my invention, I do not wish to be understood as limiting myself to the exact construction herein set forth, as various slight changes may be made in form and construction which would fall within the limit and scope of my invention, and I consider myself clearly entitled to all such changes and modifications.

What I claim as my invention, and desire to secure by Letters Patent of the United

States, is—

1. The combination with the sliding cutting-plate, of a bottom cutting-plate forming a comb, a swinging plate connected to said bottom cutting-plate and a roller carried thereon, means for setting said swinging plate at any desired adjustment and a roller carried by said setting means.

2. The combination with the upper cutting-

plate and a lower cutting-plate, a swinging 25 plate connected to said lower plate, and a roller carried thereon, means for setting said swinging plate at any desired adjustment and a roller carried by said setting means.

3. The combination with the upper cutting- 30 plate, of a lower cutting-plate, a swinging plate, arms pivoted to said swinging plate, and said arms pivoted to the clippers, a roller secured between said arms on said swinging plate and means for setting said swinging 35 plate and roller at any desired adjustment.

4. The combination with the upper cuttingplate, of a lower cutting-plate, a swinging plate, arms pivoted to said swinging plate, and said arms pivoted to the clippers, means 40 at the rear of said swinging plate for setting the same at any desired adjustment.

In testimony whereof I affix my signature

in presence of two witnesses.

M. S. BLACK.

Witnesses:

EDWIN PAUL, JOHN E. KRAUSER.