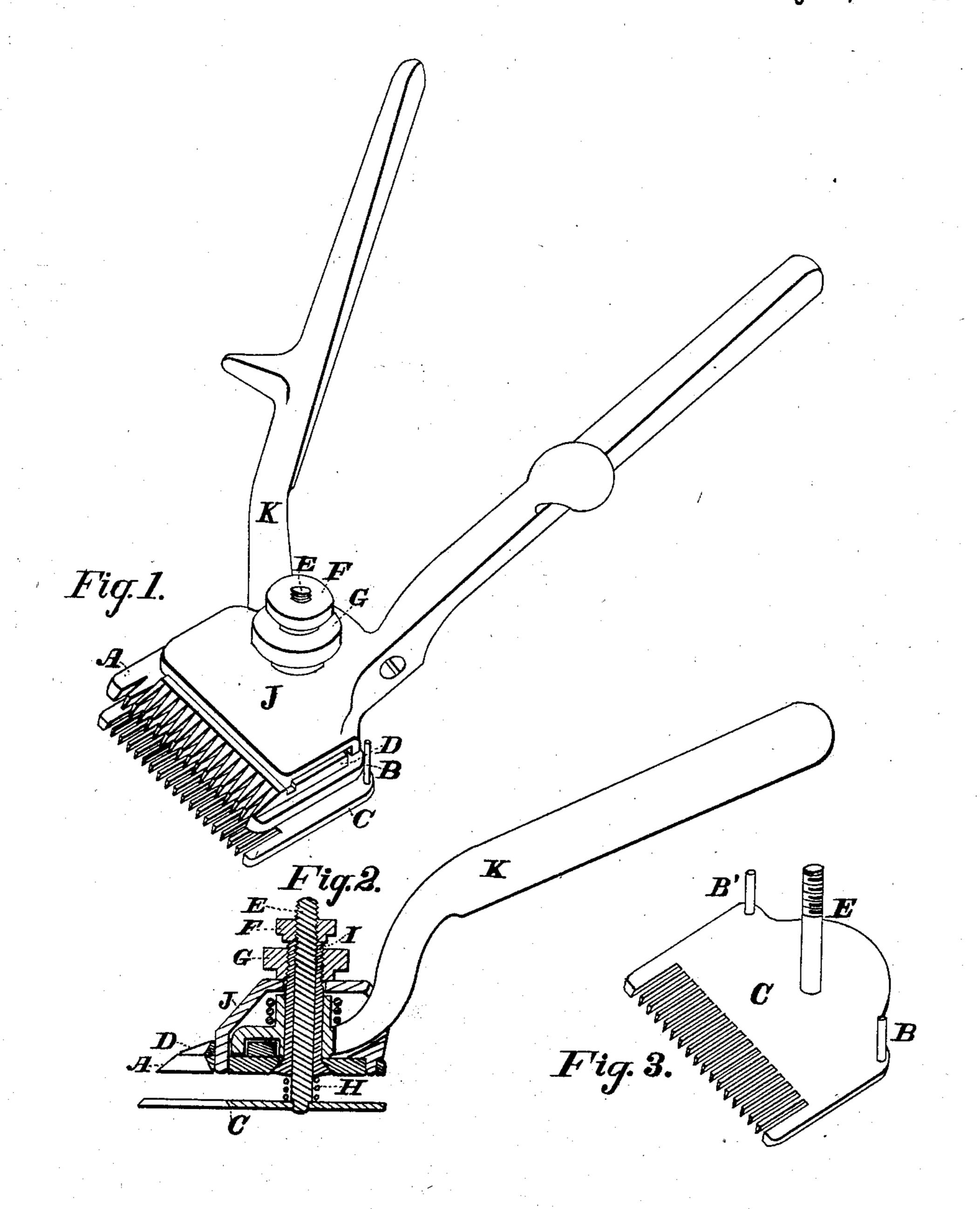
(No Model.)

## W. G. HILDEBRAND.

HAIR CLIPPER.

No. 341,006.

Patented May 4, 1886.



Witnesses:

Brank Palmen

Inventor.

William S. Hildebrand

## United States Patent Office.

WILLIAM G. HILDEBRAND, OF WHITE PLAINS, NEW YORK.

## HAIR-CLIPPER.

SFECIFICATION forming part of Letters Patent No. 341,006, dated May 4, 1886.

Application filed October 8, 1885. Serial No. 179,350. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM G. HILDE-BRAND, a citizen of the United States, residing at White Plains, in the county of Westchester and State of New-York, have invented a new and useful Improvement in Hair-Clippers, of which the following is a specification.

My invention relates to an improvement in hair-clipping machines, in which reciprocating cutting-combs are operated by lever-handles, used by barbers for cutting hair close to the scalp.

The object of my invention is to afford facilities for the easy adjustment of a comb-plate placed underneath the cutting-combs, whereby the clippers can be used to cut hair different lengths, as desired, and also for the easy removal of the comb-plate, which allows of using the clippers without the comb-plate when it is desired to cut hair very short.

My invention consists in providing hairclippers having reciprocating cutting-combs and adjustable comb-plate placed below the stationary cutting-comb, with means whereby 25 said comb-plate can be fastened and adjusted in relation to the cutting-combs of the clippers, as hereinafter fully explained, shown, and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a perspective view of a hair-clipping machine having the comb-plate attached, ready for use. Fig. 2 is a vertical sectional view taken across the center of the combs and between the handles. Fig. 3 is a perspective view of the combplate detached.

Similar letters refer to similar parts throughout the several views.

The clippers are of the usual construction, 40 having stationary cutting-comb A and reciprocating cutting-comb D, held in position by the pressure-plate J, by means of the bolt I and nut G, said pressure-plate being connected to the fixed handle, and the upper cutting-to comb being operated by the movable handle K.

To adapt these clippers for cutting hair different lengths, I use the comb-plate C, of the same width as the cutting comb-plate A, and having the same number of comb-teeth, the teeth being preferably straight and the plate

of the same thickness throughout. Attached to the comb-plate C is a bolt or stud, E, fixed by screwing or riveting, said stud having a screw-thread cut on its free end for the reception of the thumb-nut F. Two guide-pins, B 55 B', are also fixed to the upper side of the comb-plate.

In attaching the comb-plate C to hair-clippers, I drill a hole longitudinally through the center of the bolt I of such size as to allow the 60 stud E, fixed to the comb-plate, to pass freely through it, said stud being long enough to project above the upper end of the bolt I to engage with the thumb-nut F. On the stud E, between the comb-plate C and the cutter-plate 65 A, is placed an open spiral spring, H, pressing against both of said plates, keeping them as far apart as the position of the nut F will allow. The guide-pins B B', passing up each side of the rear part of the cutting comb-plate, keep 70 the comb-plate C in position, so that the teeth of both combs will correspond. The spring H, between the plates A and C, prevent them from coming together too close, always preserving a space between them, which allows any 75 hair that may get between the combs to readily draw out again.

To adjust the clippers to cut different lengths it is merely necessary to turn the thumb-nut. F. It is obvious that if the nut F is screwed 80 down on the stud E it will draw the combplate C closer to the cutting-combs, allowing the clippers to cut the hair short, and if the nut is unscrewed from the stud E the spring H will press the comb-plate away from the 85 cutting-combs, and hold it in that position, causing the clippers to cut the hair longer.

To remove the comb-plate it is only necessary to unscrew the nut F entirely off the stud, when the comb-plate may be readily taken off. 90 What I claim as my invention, and wish to

1. The combination, with hair-clippers, of the adjustably-secured comb-plate C, the single bolt or screw E, passing centrally through 95 the clipper, and the nut F, substantially as shown and described, and for the purpose set forth.

2. The combination, with a hair-clipper, of the adjustable comb-plate C, stud E, nut F, 100

spring H, and guide pins B B', substantially as specified.

3. In combination with the stationary and reciprocating cutting combs and operating mechanism of a hair-clipper, the central bolt, I, having a hole made through it longitudinally for the reception of the stud or screw

attached to the comb-plate C, substantially as shown and described, and for the purpose set forth.

WILLIAM G. HILDEBRAND.

Witnesses:

B. FRANK PALMER, BENONI PLATT.