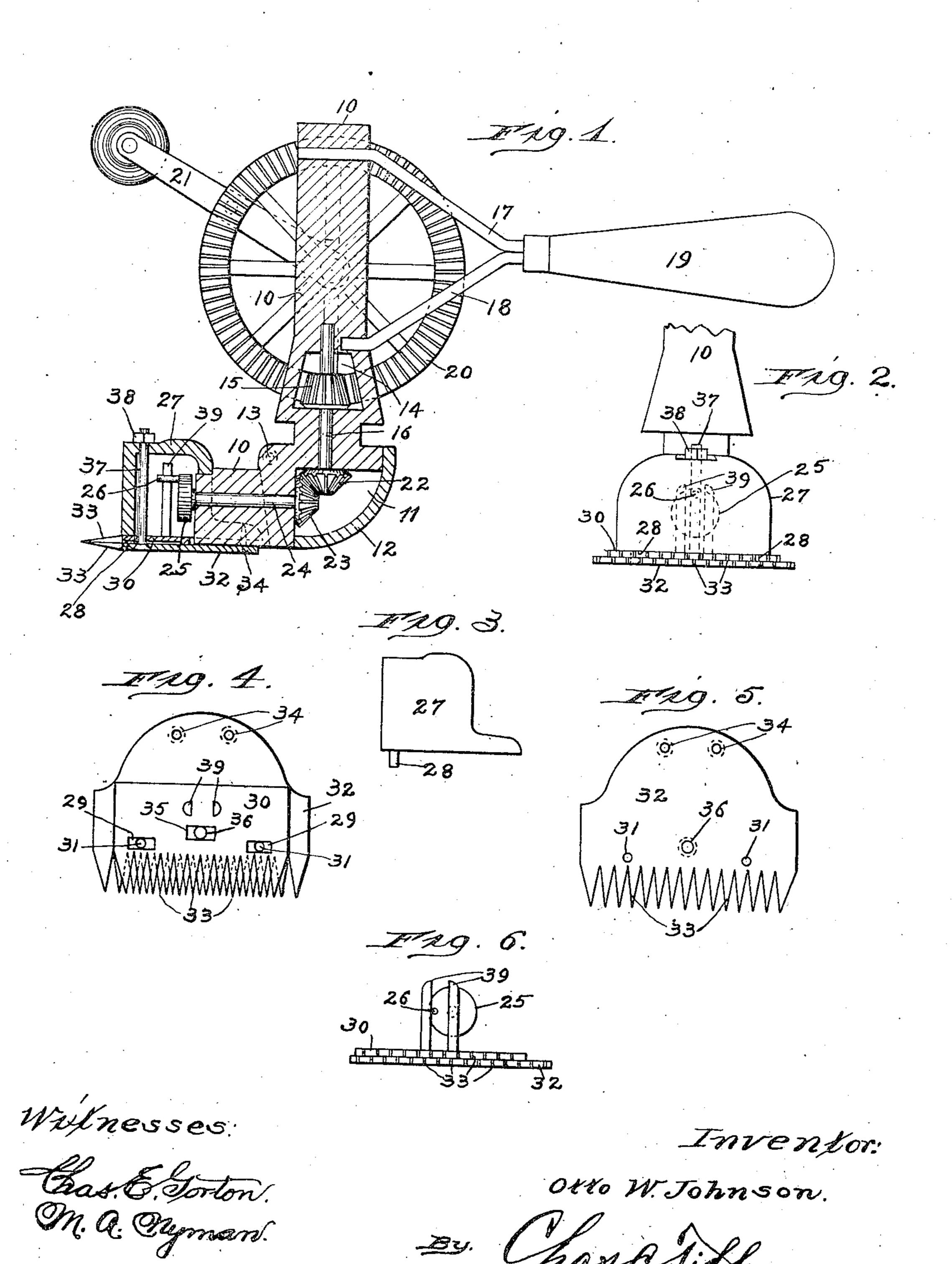
O. W. JOHNSON.

HAIR CLIPPER.

APPLICATION FILED OUT, 9, 1905.



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UNITED STATES PATENT OFFICE.

OTTO W. JOHNSON, OF CHICAGO, ILLINOIS.

HAIR-CLIPPER:

No. 816,235.

Specification of Letters Patent.

Patented March 27, 190t

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To all whom it may concern:

Be it known that I, Otto W. Johnson, a subject of the King of Sweden and Norway, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in a Hair-Clipper, of which the following is a specification.

This invention relates to improvements in a device for cutting or clipping hair, and while it is more especially intended for shearing purposes and for use by barbers, as in trimming or cutting the hair on the human head or face, yet it is applicable for use in horse-clipping purposes; and it consists in certain peculiarities of the construction, novel arrangement, and operation of the various parts thereof, as will be hereinafter more fully set forth and specifically claimed.

The principal object of the invention is to provide a hair-clipping device which shall be simple and inexpensive in construction, strong, durable, and easily operated, and so made that its parts may be readly assembled or separated for repairs or for sharpening the teeth of the shearing blades or plates. Other objects and advantages of the invention will be disclosed in the subjoined description and explanation.

In order to enable others skilled in the art to which my invention pertains to make and use the same, I will now proceed to describe it, referring to the accompanying drawings, in which—

Figure 1 is a central vertical sectional view through the body of the clipper, showing the handles for holding and operating the same in elevation. Fig. 2 is a view in front elevation of the lower portion of the body. Fig. 3 is a detached side view of the housing for the operative parts of the reciprocating toothed plate. Fig. 4 is a detached plan view of the toothed blades or plates. Fig. 5 is a similar view of the bottom or stationary toothed plate; and Fig. 6 is a view in front elevation of the toothed plates, showing the means for reciprocating the upper one.

Like numerals of reference refer to corre sponding parts throughout the different views of the drawings.

The reference-numeral 10 designates the body or supporting portion of the clipper, which is elbow-shaped and has in its rear portion a recess or cut-out part 11 for the reception and operation of certain gears used for reciprocating the upper toothed plate. This recess is closed by a cap 12, which is se-

cured to the body 10 by means of screws 13, which pass through its sides into suitable openings in the sides of the body. Above the recess 11 the upright portion of the body 60 10 is provided with a cut-out portion 14, in which is located a beveled gear 15, which is mounted on a shaft 16, vertically journaled in the body and extending into the recess 11, as is clearly shown in Fig. 1 of the drawings. 65 Secured to the upright portion of the body 10 are prongs 17 and 18 of a handle 19, used for holding the device. Journaled on one side of the upright portion of the body is a beveled gear 20, which is provided with a 70 crank-handle 21, used for turning the same. Mounted on the lower end of the shaft 16 is a beveled gear 22, which meshes with a like gear 23 on the inner end of the driving-shaft 24, which extends longitudinally through the 75 lower portion of the body and has on its front end a disk or wheel 25, which carries a wrist-pin or projection 26, which is eccentrically located on the front face of said disk. Secured to the front portion of the lower part 80 of the body 10 and extending forwardly therefrom is a casing or housing 27, the bottom of which is open. The front wall of the housing 27 is provided with two downwardlyprojecting pins 28, which extend through 85 transverse slots 29 in the reciprocating plate 30 and into openings 31 in the fixed plate 32 near their toothed edges. Both of the plates 30 and 32 are provided at their front edges with a series of cutting-teeth 33, and the 90 lower or fixed plate 32 has in its rear portion openings 34 for screws used to secure it to the bottom of the front portion of the body. When thus secured, it is apparent that the teeth 33 of said plate will project beyond the 95 front wall of the casing or housing 27 and that a slight space will be left between the lower edge of said wall and the upper surface of the plate for the reception and operation of the movable plate 30, the teeth 33 of which 100 will project forwardly from the front wall of the casing or housing. The movable plate 30 has near its middle a longitudinal slot 35, through which is passed, as well as through an opening 36 in the lower plate, a bolt 37, 105 the upper end of which passes through an opening in the front portion of the casing 27 and is securely held in place by means of a nut 38 thereon. Inwardly from the slot 35 the plate 30 is provided with two uprights 110 39, which are spaced apart in parallelism and receive between them the wrist-pin 26 on the

disk or wheel 25, which, as before stated, is mounted on the front end of the horizontal shaft 24, as is clearly shown in Fig. 1 of the

drawings.

From the foregoing and by reference to the drawings it will be seen and clearly understood that by holding the device with one hand by means of the handle 19 and by turning the crank 21 the plate 30 through its connections with the gear 20 will be caused to move back and forth with great rapidity on the upper surface of the lower plate, and as said plates are pushed forward into the hair the same will be readily clipped or cut.

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is-

1. In a hair-clipper, the combination with a supporting-body, of a handle secured thereto, a crank-handled gear journaled on the upper portion of the body, a driving-shaft journaled on the lower portion of the body, gearing connecting the inner end of said shaft to said gear, a guard or lower plate fixed to the lower portion of the body and projecting forwardly beyond the same, an upper or cutting plate movable transversely on the lower plate and having a pair of parallel uprights, and a disk on the front end of the drivingshaft having a wrist-pin to coact with said

uprights to reciprocate the upper plate, sub-

stantially as described.

2. In a hair-clipper, the combination with an elbow-shaped body having in its rear lower portion a recess, of a supporting-han- 35 dle secured to the upper portion of the body, a crank-handled gear journaled on the upper portion of the body, a driving-shaft journaled on the lower portion of the body and having its rear end extending into said re- 40 cess, a shaft vertically journaled near the rear end of the driving-shaft, a beveled gear on the driving-shaft and a similar gear on the adjacent end of the vertical shaft, another gear on the vertical shaft to mesh with the 45 crank-handled gear, a guard or lower plate fixed to the lower portion of the body and projecting forwardly beyond the same, an upper plate movable transversely on the lower plate and having a pair of parallel up- 50 rights, a disk on the front end of the drivingshaft provided with a wrist-pin to coact with said uprights to reciprocate the upper plate, and a casing inclosing the disk and uprights and secured to the front portion of the body, 55 substantially as described. OTTO W. JOHNSON.

Witnesses:

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