

No. 781,103.

PATENTED JAN. 31, 1905.

J. SJASTRAM.
HAIR CLIPPER.

APPLICATION FILED OCT. 17, 1904.

FIG. 1.

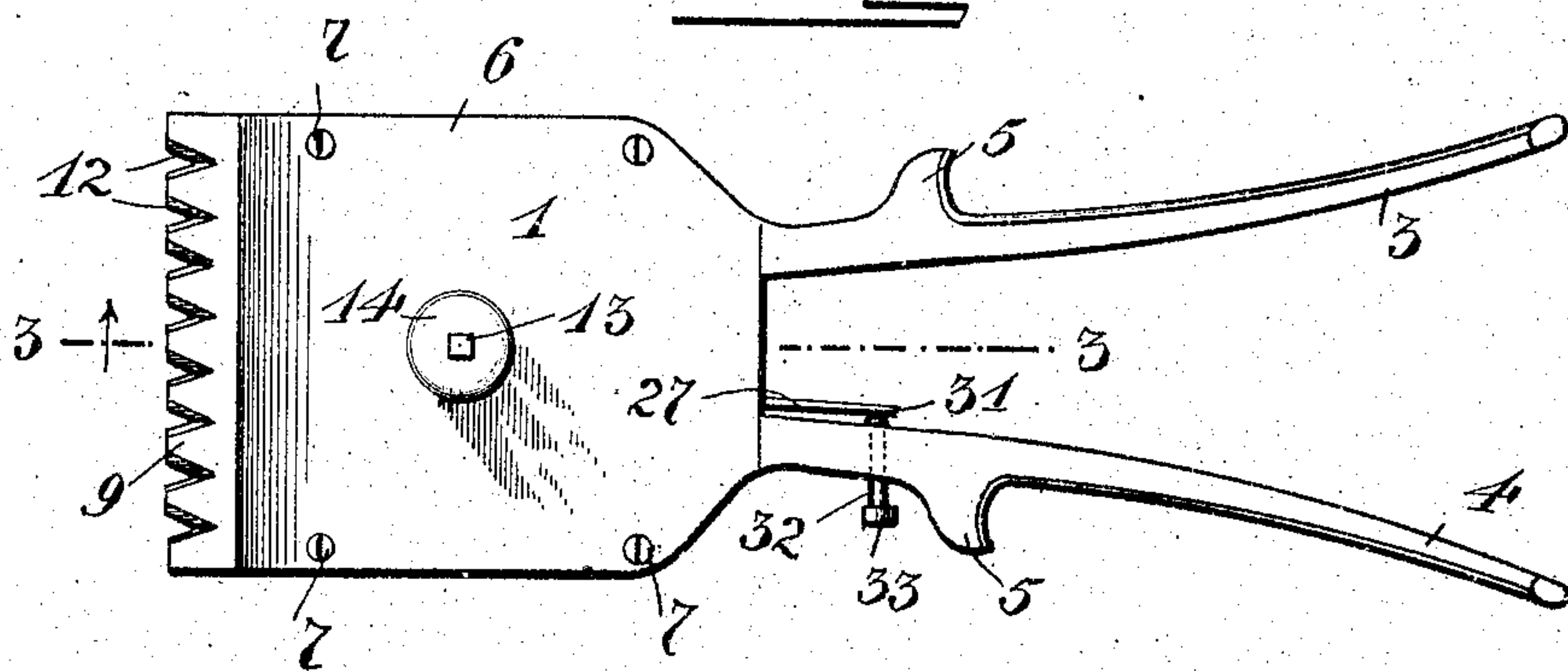


FIG. 2.

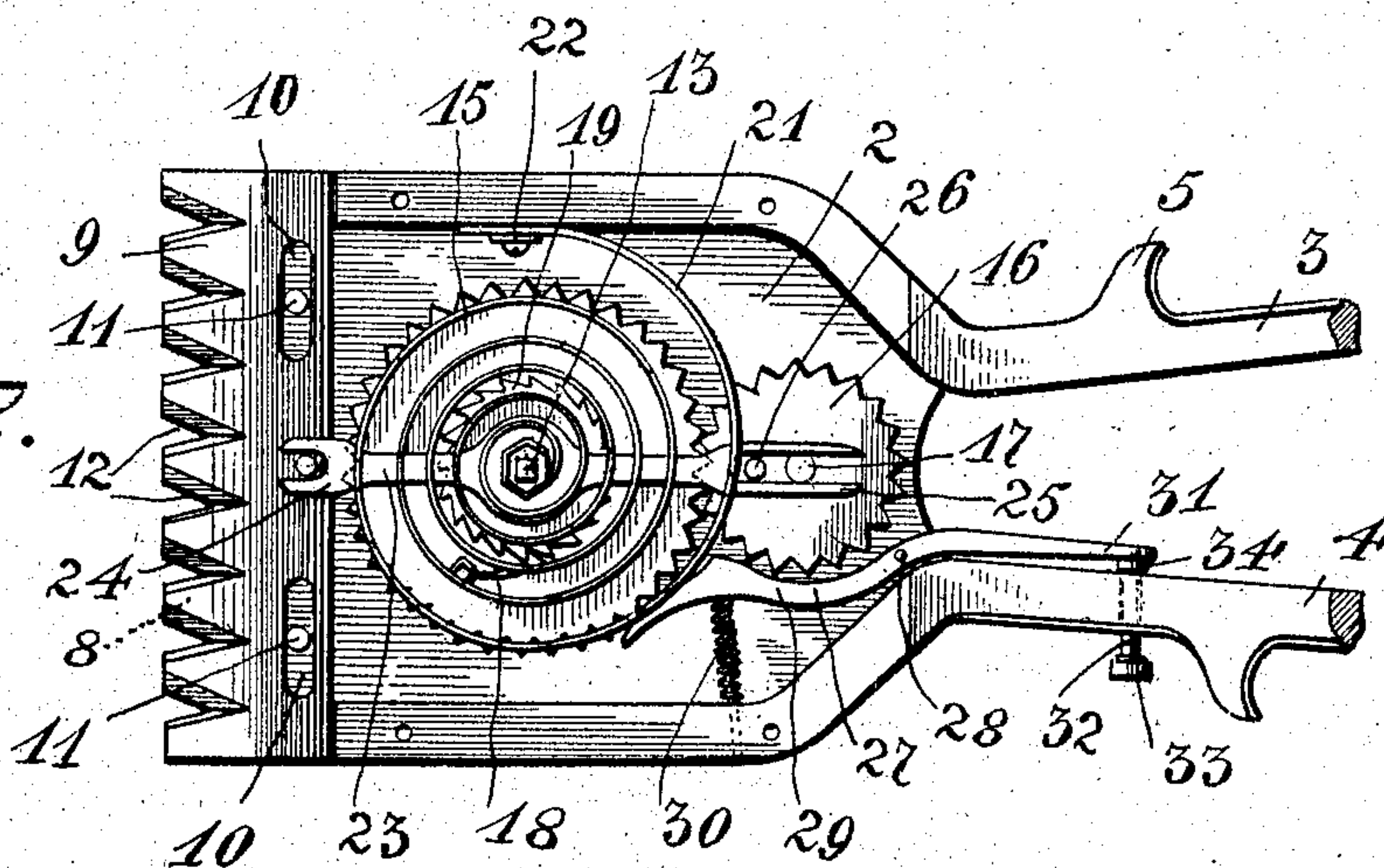


FIG. 4.

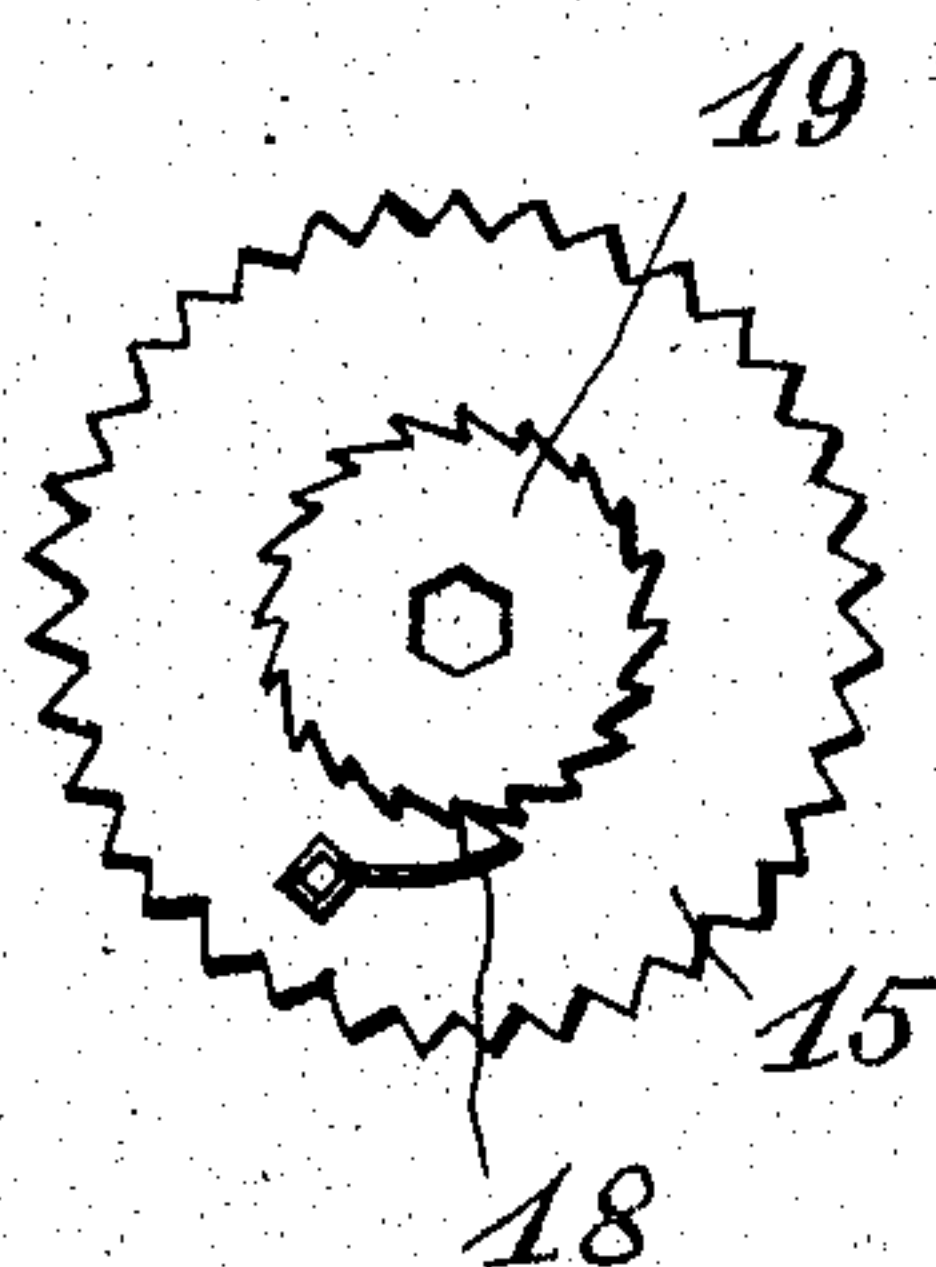
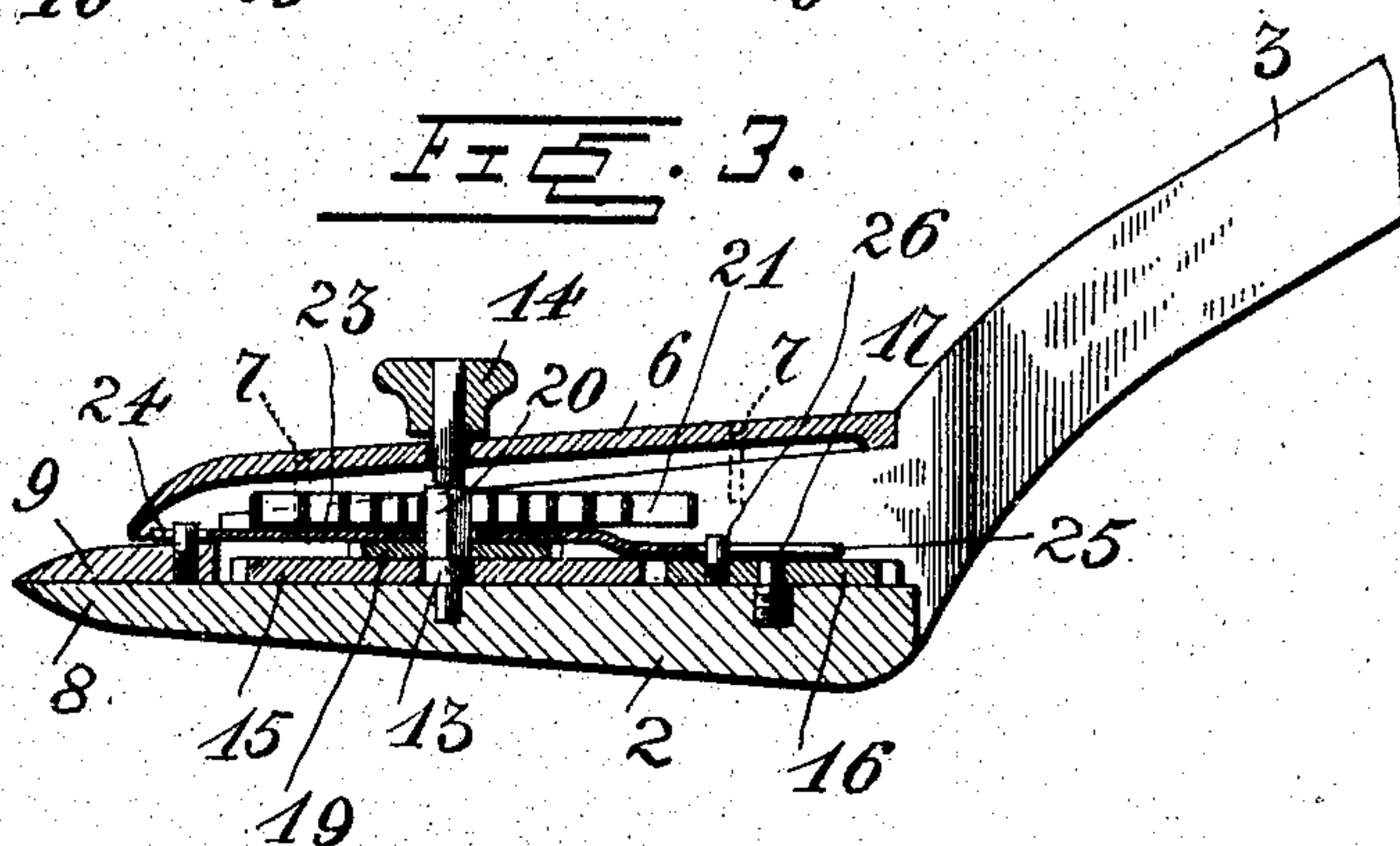


FIG. 3.



Witnesses
C. H. Griesbauer
P. H. Griesbauer.

Inventor
Johan Sjastrom
by A. B. Wilson
Attorney

UNITED STATES PATENT OFFICE.

JOHAN SJASTRAM, OF CRIPPLECREEK, COLORADO.

HAIR-CLIPPER.

SPECIFICATION forming part of Letters Patent No. 781,103, dated January 31, 1905.

Application filed October 17, 1904. Serial No. 228,898.

To all whom it may concern:

Be it known that I, JOHAN SJASTRAM, a citizen of the United States, residing at Cripple-creek, in the county of El Paso and State of Colorado, 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 art to which it ap-
 10 pertains to make and use the same.

My invention relates to improvement in hair-clippers; and it consists in certain novel features of construction, combination, and arrangement of parts hereinafter described and
 15 claimed.

The object of the invention is to provide a simple and efficient device of this character composed of few parts compactly arranged to permit it to be easily handled.

20 The above and other objects, which will appear as the nature of my invention is better understood, are accomplished by the construction illustrated in the accompanying drawings, in which—

25 Figure 1 is a top plan view of a hair-clipper embodying my improvements. Fig. 2 is a similar view with the cover-plate removed and parts broken away. Fig. 3 is a vertical longitudinal sectional view taken on the line
 30 3 3 in Fig. 1, and Fig. 4 is a detail view showing the pawl-and-ratchet device for the driving-gear.

The body portion of my improved hair-clipper comprises a web 2, which forms the
 35 bottom thereof and is constructed with side walls 45, which terminate at their rear ends in upwardly and rearwardly projecting handles 3 4, which are formed with outwardly-projecting finger-stops 5 to facilitate the handling of the clipper. In the hollow face
 40 formed by the side walls above the web 2 is located the gearing hereinafter described and which is covered by a removable plate or cover 6, which bears on the side walls 4 5 and is
 45 secured thereto by screws 7. The outer end of the said cover 6 is downturned, so that the same somewhat closely approaches the web or body 2. The outer end of the web or body
 50 2 is formed with cutter-fingers, which are integral therewith and which constitute the

stationary member of the clipper. Coacting with said stationary cutter member 8 is the movable member 9 of the cutter, which consists of a plate mounted to reciprocate upon the member 8, as clearly shown in Fig. 2 of
 55 the drawings. Said plate is formed with longitudinally-disposed slots 10, which engage upwardly-projecting studs or pins 11 upon the member 8 in order to guide the movable or reciprocatory plate 9. Said cutter plates
 60 or members 8 and 9 may be of any desired construction; but as here shown they are formed with beveled cutting-teeth 12. Upon the upper side of the cutter-plate 9 is a centrally-disposed pivot-stud, the purpose of
 65 which will presently appear. The downturned front end of the cover-plate 6 bears on the reciprocating cutter member 9. By tightening the screws 7 the wear may be taken up
 70 between the stationary and reciprocating cutter members and between the last-named member and the said cover-plate.

Mounted centrally in the body or casing 2 and the cover 6 is a vertically-disposed revoluble shaft 13, the upper end of which projects
 75 above said cover-plate and is formed with a polygonal-shaped reduced portion upon which is secured a winding knob or key 14. Loosely mounted upon said shaft within the body or casing 2 in rear of the movable cover-plate 9
 80 is a gear 15, which meshes with a pinion 16, disposed directly in rear of said gear and revolvably mounted upon a stud-shaft 17, projecting upwardly from the bottom of the body or casing 2. Secured upon said gear 15 is a
 85 spring-pawl 18, which is engaged with and coacts with a ratchet-wheel 19, which is secured upon a polygonal-shaped portion 20 of said shaft 13. Secured upon said shaft 13 directly beneath the cover-plate 16 is one end
 90 of a coil-spring 21, which is coiled about said shaft and has its opposite end secured, as at 22, upon the inside of the body or casing 2. Loosely mounted upon said shaft 13 between the ratchet-wheel 19 and the spring 21 is an
 95 oscillating lever 23, which extends longitudinally and has its forked forward end 24 loosely engaged with said pivot-stud upon the movable cutter-plate 9 and its opposite forked or bifurcated end 25 loosely engaged with a pin
 100

or stud 26, eccentrically disposed upon said pinion 16. By means of this construction it will be seen that when the winding-key 14 is turned in one direction the spring will be wound upon the shaft 13, so that the energy which it exerts in unwinding will rotate the gear 15 and the pinion 16, which latter will oscillate the lever 23 to reciprocate the movable cutter member 9 upon the stationary member 8, the pawl 18 and ratchet-wheel 19 preventing retrograde movement of the gear 15 when the shaft 13 is turned to wind up the spring.

In order to quickly stop and start the cutter-blade 9 after the spring 21 has been wound up, I provide a brake-lever 27, which is pivotally mounted, as at 28, within the body or casing 2. Said lever has its inner end 29 shaped, as shown in Fig. 2 of the drawings, so as to engage the teeth of the gear 15 and form a friction-brake, said end being held normally in engagement with said gear by means of a spring 30, disposed between said end 29 and the side of the casing or body 2. The outer end 31 of the lever 27 extends upwardly and rearwardly between the handles 4 and 5 and has its outer portion engaged by a pin 32, slidably mounted in a transverse opening formed in the handle 4. Said pin is provided at its outer end with a head or button 33, and its inner end is provided with a stop 34, which limits the outward sliding movement of said pin. Said button or knob 33 is within convenient reach of the operator's thumb, which is engaged with the finger-stop or projection 5 upon the handle 4.

The construction, operation, and advantages of my invention will be readily understood from the foregoing description, taken in connection with the accompanying drawings. By arranging the gears 15 and 16 within the body portion of the casing 2 and pivotally mounting the lever 23 upon the shaft 13 between said gears and the spring 21 it will be seen that said parts are compactly arranged to occupy but little space.

Various changes in the form, proportion,

and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A hair-clipper having a body portion formed with an integral stationary cutter member at its front end, side walls at its sides, and fixed rearwardly and upwardly projecting handles which form integral extensions of the rear end of said side walls, in combination with a reciprocating cutter member on said front portion of said body, a cover secured on the side walls and having a downturned front end bearing on the said reciprocating cutter member, a pinion mounted for rotation in the casing and having an eccentric stud, a gear-wheel in said casing between the pinion and the reciprocating cutter member and engaging said pinion, a shaft mounted for rotation in the casing and cover and on which the said gear is independently revolvably mounted, a ratchet-wheel fixed to said shaft, a spring-pawl carried by said gear and engaging said ratchet-wheel, a spring having one end attached to the said shaft and the other end attached to the casing, means to revolve said shaft to wind said spring, a lever fulcrumed to said shaft, connected to the reciprocating cutter member and having a slot engaged by the eccentric stud of the pinion, a brake-lever pivotally mounted in the casing on the inner side of one of the handles and adapted to engage the said gear, a spring to normally engage the brake-lever with said gear, and an operating-pin mounted in an opening in one of said handles and adapted to operate said brake-lever, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHAN SJASTRAM.

Witnesses:

GUST MILLER,
CHES. ERICKSON.