

(No Model.)

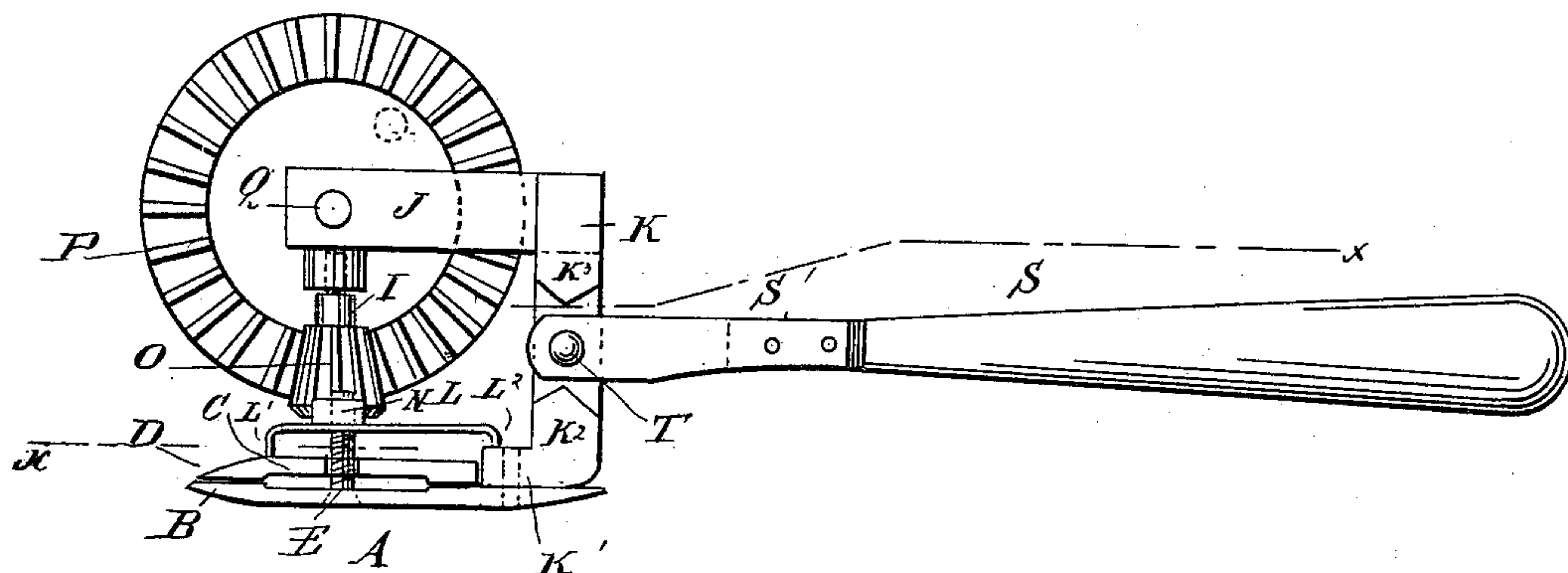
J. BESTGEN.

HAIR CLIPPER.

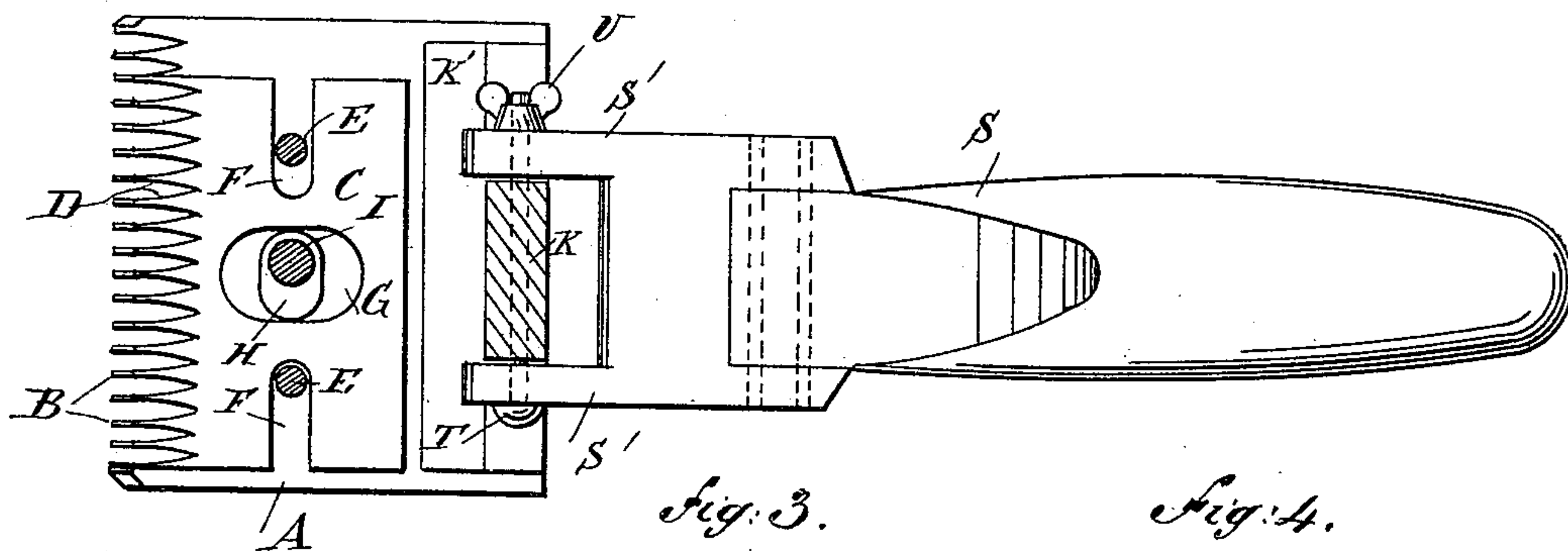
No. 377,138.

Patented Jan. 31, 1888.

*Fig: 1.*



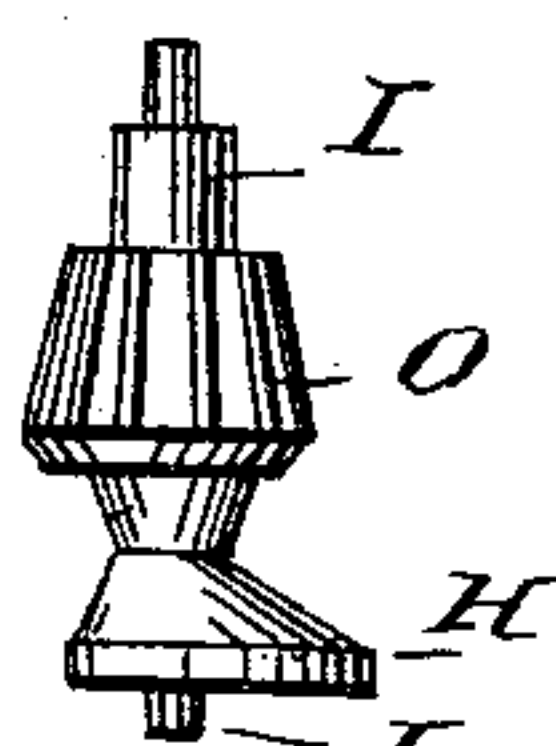
*Fig: 2.*



*Fig: 3.*

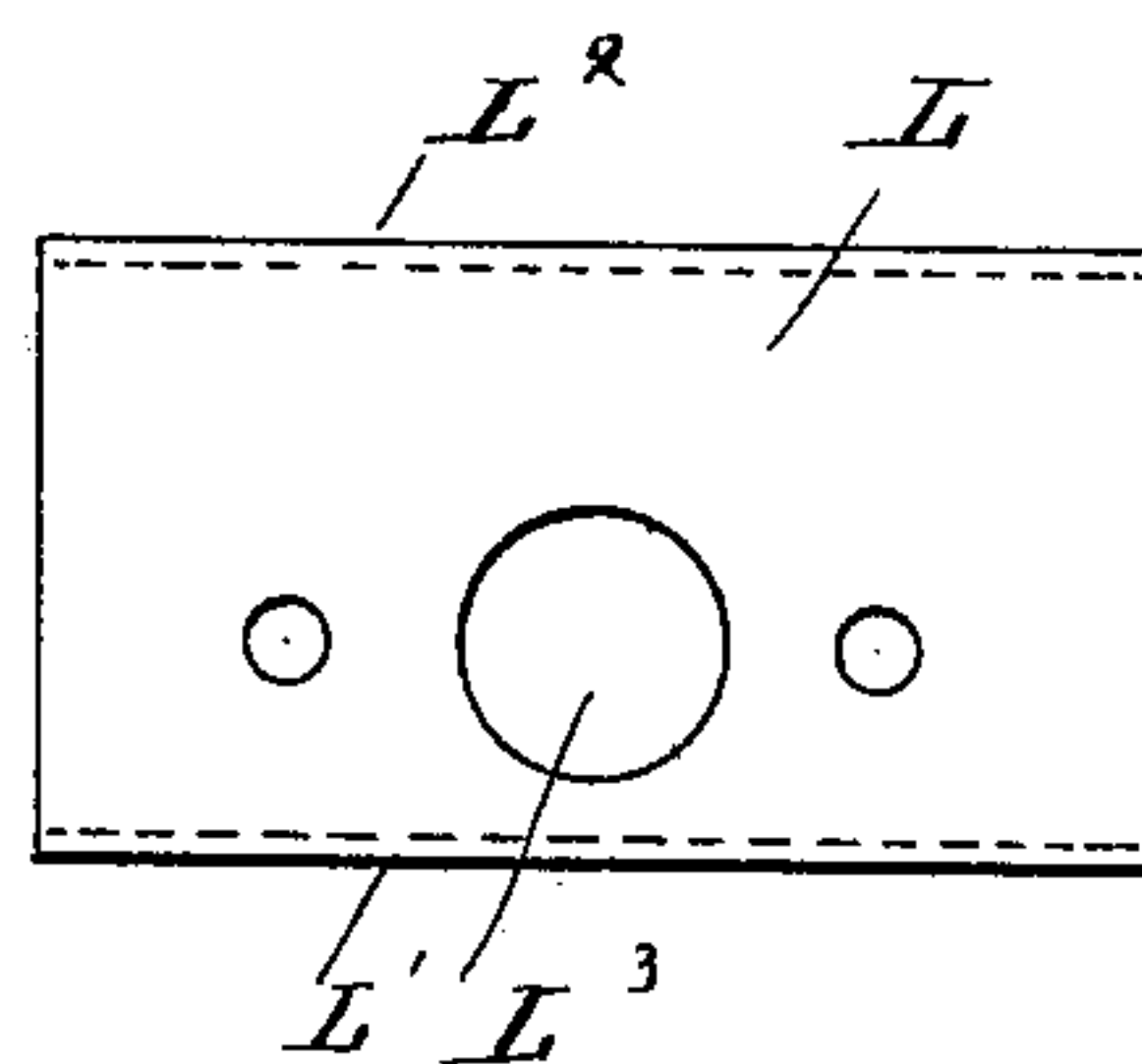
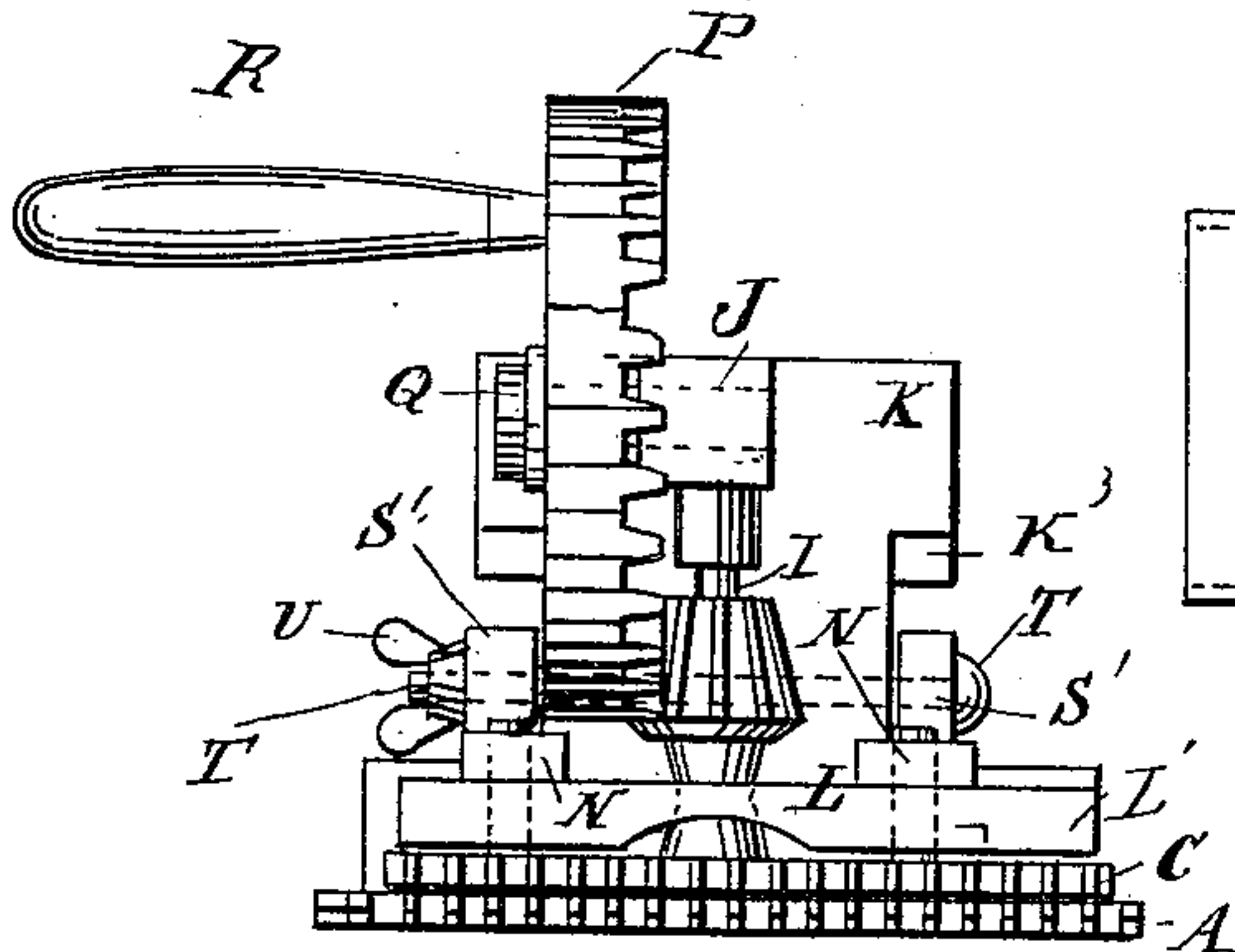
*Fig: 4.*

*Fig: 5.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOHN BESTGEN, OF BOSTON, MASSACHUSETTS.

## HAIR-CLIPPER.

SPECIFICATION forming part of Letters Patent No. 377,138, dated January 31, 1888.

Application filed November 14, 1887. Serial No. 255,097. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN BESTGEN, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and Improved Hair-Clipper, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved hair-clipper which is simple and durable in construction, very easy of operation, so as not to tire the operator, and very quick and accurate, thereby saving considerable time and labor.

The invention consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of my improvement. Fig. 2 is a sectional plan view of the same on the line *xx* of Fig. 1. Fig. 3 is a front end elevation of the same. Fig. 4 is a plan view of the top plate, and Fig. 5 is a side elevation of the cam.

My improved hair-clipper is provided with a fixed comb-plate, A, provided on its front with the usual teeth or cutting-knives, B, and on top of said comb-plate A is held to slide crosswise the cutter-plate C, provided with the teeth D, operating and cutting over the teeth B. The cutter-plate C is guided in its transverse motion by pins or bolts E, secured to the fixed comb-plate A, and passing through transverse slots F, formed on the cutter-plate C.

In the middle of the cutter-plate C is formed an oblong aperture, G, in which operates an eccentric or cam, H, secured to a vertical shaft, I, having its lower bearing in the comb-plate A and its upper bearing in an arm, J, extending from the back plate, K, secured to the rear of the comb-plate A in any suitable manner. The cam H, on being turned with its shaft I, operates against the longer sides of the aperture G, so that the cutter-plate C is moved transversely on the comb-plate A.

The cutter-plate C is held on top of the comb-plate A by a plate, L, provided on its front with a downwardly-turned edge, L', engaging the top of the cutter-plate C. The rear end of

said plate L is provided with a similar downwardly-turned edge, L<sup>2</sup>, resting on a shoulder or projection, K', formed on the back plate, K. The bolts E pass through apertures in the top plate, L, and on the outer threaded ends of said bolts screw the nuts N against the top of the said plate L, whereby the latter is firmly held in place and can be screwed tightly down on the cutter-plate C by adjusting the nuts N.

In the top plate, L, is formed an aperture, L<sup>3</sup>, through which passes the shaft I. On the latter is formed a bevel-pinion, O, meshing into a bevel gear-wheel, P, mounted to rotate on a stud, Q, secured to the bracket J, and said gear-wheel P is also provided with a crank-handle, R, for turning said gear-wheel P, and thereby imparting a rotary motion to the shaft I by means of the pinion O.

On the back plate, K, is pivoted a handle, S, provided with forked ends S', through which passes a bolt, T, held in the said end plate, K, and forming the pivot for the said handle S. On the outer threaded end of the bolt T screws a nut, U, preferably a winged nut, as shown in the drawings. The up-and-down movement of the pivoted handle S is limited by the projections K<sup>2</sup> and K<sup>3</sup>, formed on the end plate, K, directly above and below the forked ends S' of the handle S.

The operation is as follows: The operator, in order to use the clipper, takes hold of the handle S with one hand and with his other hand takes hold of the handle R for turning the gear-wheel P. The operator then places the comb-plate A on the part to be operated on and moves the machine forward by pushing on the handle S, at the same time turning the handle R, so that the gear-wheel P rotates the pinion O and the shaft I. The latter, by means of its cam H, imparts a reciprocating motion to the cutting-plate C, whereby the teeth or knives D slide over the teeth or knives B, and thereby cut the hair passing in between said teeth or knives. The top plate, L, by means of its turned-down edges L' and L<sup>2</sup>, is raised a considerable distance above the cutter-plate C, so that the hair passing on the cutter-plate C can drop out easily at its ends without being obstructed by the top plate, L. The pivoted handle S permits the comb-plate A to follow the respective shape of the part to be



operated on, thereby causing the teeth B to move easily over the respective part.

It will be seen that the operator is enabled to conveniently set the cutter-plate C in rapid motion, thereby permitting the operator to work the machine for a considerable length of time without becoming tired. In clippers as heretofore constructed it required a long time to make a "hair-cut," as it required many interruptions in order to rest the operator's hand.

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

15 In a hair-clipper, the combination, with the fixed cutter-plate A and the vertical back plate, K, extending up from the rear side thereof and

provided with the forwardly-extending arm J, projecting over the center of the cutters, of the laterally-reciprocating cutter-plate C, having longitudinal slots F F at its ends, and the central transverse slot, G, the pins or bolts E, projecting up from the plate A through the slots F, the vertical shaft I, journaled in the arm J and plate A, the cam H on said shaft within slot G, and engaging the wall thereof with the forward end only, the beveled gear O, also on said shaft, and the drive-wheel P, journaled on the arm J and engaging the gear O, substantially as set forth.

JOHN BESTGEN.

Witnesses:

EUGENE RICHTMANN,  
JAMES P. DAVIS.