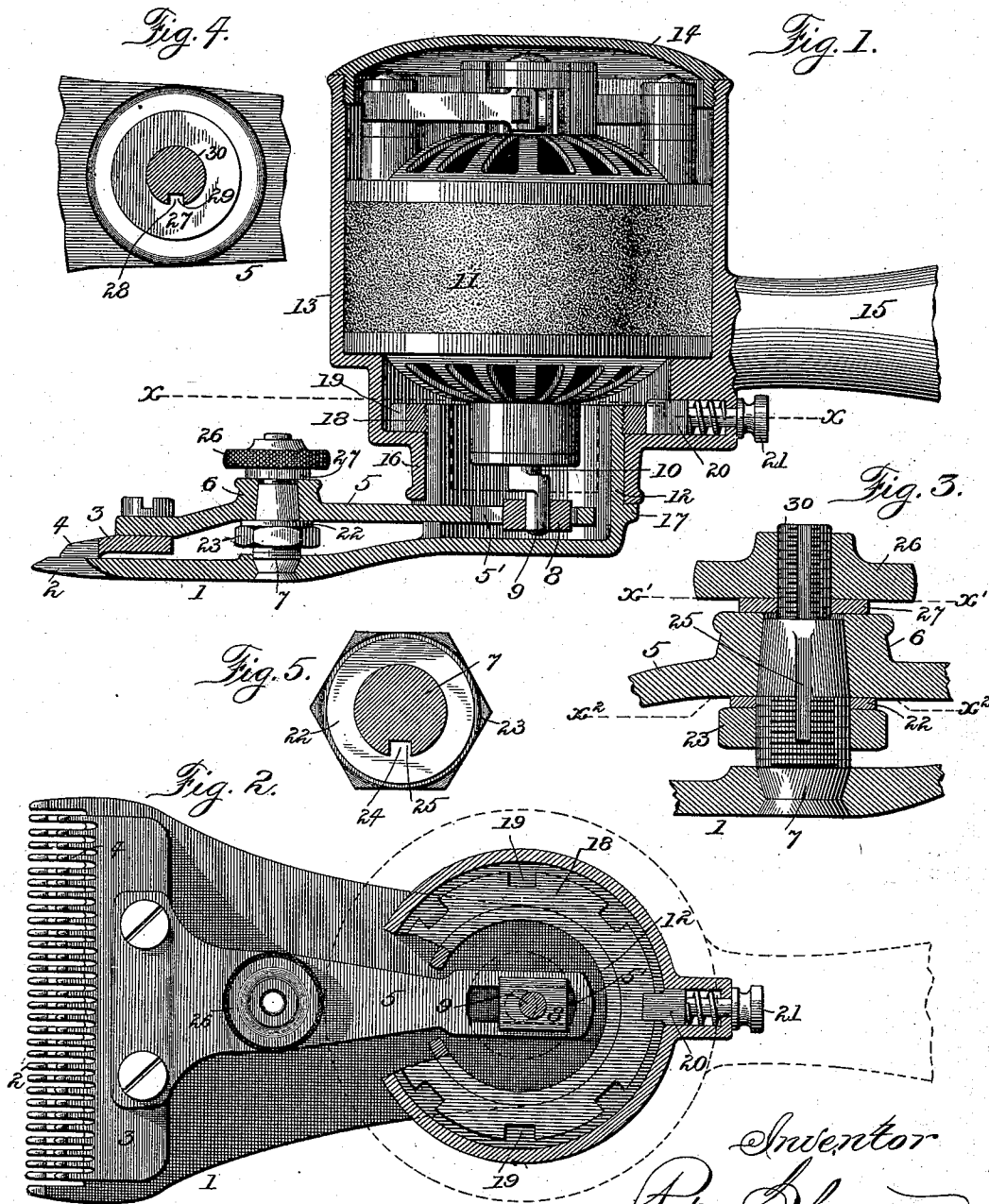


(No Model.)

P. SHANNON.
ELECTRIC HAIR CLIPPING MACHINE.

No. 532,188.

Patented Jan. 8, 1895.



Witnesses:
John Enders, Jr.
James A. Allen

Inventor
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UNITED STATES PATENT OFFICE.

PETER SHANNON, OF CHICAGO, ILLINOIS.

ELECTRIC HAIR-CLIPPING MACHINE.

SPECIFICATION forming part of Letters Patent No. 532,188, dated January 8, 1895.

Application filed April 27, 1894. Serial No. 509,242. (No model.)

To all whom it may concern:

Be it known that I, PETER SHANNON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Electric Hair-Clipping Machines; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to that class of hair clipping machines, in which the vibrating cutter plate or bar of the machine has connection with and is propelled by the revolving armature shaft of an electric motor.

The objects of the present improvement are as follows: to provide an improved construction and arrangement of the cutting, and electric impelling mechanisms, whereby a ready and convenient attachment and detachment of the electric motor proper can be effected; a convenient and efficient housing or inclosing of the electric motor parts against access of dust, flying particles of hair, &c.; a simple and accurate means of adjustment, for the cutter plates, with relation to each other to compensate for wear; and a durable and effective connecting mechanism between the armature shaft and the vibrating cutter plate, by which the proper vibration or reciprocation is imparted to such cutter plate in the operation of the machine. I attain such objects by the construction and arrangement of parts illustrated in the accompanying drawings, in which—

Figure 1, is a vertical sectional elevation of an electrical hair clipping machine, constructed in accordance with my present invention; Fig. 2, a horizontal section of the same at line $x-x$, Fig. 1, with parts broken away; Fig. 3, an enlarged detail sectional elevation, illustrating the construction of the pivot for the vibrating cutter plate; Fig. 4, a detail horizontal section of the same at line $x'-x'$, Fig. 3; Fig. 5, a similar view at line x^2-x^2 , Fig. 3.

Similar numerals of reference indicate like parts in the several views.

Referring to the drawings 1, represents the stationary cutter plate, having the usual cutting serrations or teeth 2, at its forward edge,

and which extends backward to carry the pivot stud of the vibrating cutter plate, as well as the inclosing housing of the electric motor mechanism.

3, is the vibrating cutter plate having the usual cutting serrations or teeth 4, at its forward edge, and which in the operation of the machine move across the teeth of the stationary plate 1, to effect a severing or clipping of the hair.

5, is a rearwardly extending bar or lever fixedly secured at front to the vibrating cutter plate, as shown, and midway of its length provided with a pivot neck 6, fitting the pivot stud 7, that is fixedly attached to the stationary plate 1. At its rear end the bar or lever 5 is provided with a longitudinally slotted yoke 5', in which slides the block 8, in which is journaled the crank pin 9, on the lower end of the shaft 10, of the armature of the electric motor 11.

12, is an upwardly extending neck on the rear portion of the main plate 1, slotted at front for the passage of the bar or lever 5, and forming an inclosing housing for the yoke portion 5' of such lever, and the sliding block 8 and operating crank on the motor armature.

The electric motor 11, is inclosed within a casing 13, having a removable lid 14, and a horizontally extending handle 15, by which the operator manipulates the machine. The lower end of the casing 13, is formed with a pivot collar 16, that has pivotal bearing on the neck 12, of the stationary cutter plate or base, between the lower fixed collar 17, and the upper annular nut 18, screwing upon the upper end of the neck 12, as clearly illustrated in Fig. 1. This improved construction admits of the casing and holding handle being swung around in a horizontal plane so that the handle can be placed in a desired and convenient position with relation to the cutter blades, at the will and judgment of the operator, and in order to lock the parts at the required adjustment, the annular nut 18, is formed with a series of peripheral notches 19, in which the spring bolt 20, is adapted to engage. This bolt is arranged to move in the casing 13, and at its outer end is provided with a thumb piece 21, by which it can be conveniently manipulated by the operator.

In the present improvement the lower bearing of the lever or bar 5, is upon a collar 22, supported by a nut 23, screwing upon the lower screw threaded portion of the pivot shank or stud, such collar being made non-rotary by a lip 24, sliding in a vertical groove 25, in the shank 7, so that such collar will take up the turning strain of the lever 5 in its vibrations, and prevent any transmission of the same to the nut 23, with the accompanying tendency of the same to unscrew away from its adjustment.

The lever or bar 5, is held in place by a temper nut 26, and an interposed collar 27, that is made non-rotary by a lip 28, sliding in a vertical groove 29, in the upper screw threaded extension 30, of the pivot shank as shown. The purpose of this non-rotary collar is similar to that of the collar 22, to prevent the turning movement of the lever 5, being imparted to the temper screw, and affect the desired tension adjustment of the same.

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

1. In an electrical hair clipping machine, the combination with the stationary and vibrating clipper plates, of a lever 5, secured to the vibrating clipper plate, and having a slotted yoke at its rear end, a sliding block 8, moving in said yoke, an electric motor supported on a rearward extension of the stationary cutter plate, the armature thereof carrying a crank pin engaging the sliding block 8, and an inclosing casing attached to rearward extension of the stationary cutter plate, and supporting the electric motor in a plane at right angles to such cutter plate, substantially as set forth.

2. In an electric hair clipping machine, the

combination with the stationary and vibrating clipper plates and an electric motor for operating the same, of a casing secured in a horizontally adjustable manner to the stationary cutter plate, and forming an inclosing and supporting means for the electric motor, substantially as set forth.

3. In an electric hair clipping machine, the combination with the stationary and vibrating clipper plate, and an electric motor for operating the same, of a casing secured in a horizontally adjustable manner to the stationary cutter plate, and forming an inclosing and supporting motor, and a spring dog for locking the same at the required adjustment, substantially as set forth.

4. In an electric hair clipping machine the combination with the stationary and vibrating clipper-plate, and an electric motor for operating the same, of a casing secured in a horizontally adjustable manner to an upwardly extending neck on the main plate 1 by collar 17, and annular nut 18, substantially as set forth.

5. In an electric hair clipping machine, the combination with the stationary and vibrating clipper plates, and an electric motor for operating the same, of a casing secured in a horizontally adjustable manner to an upwardly extending neck on the main plate 1 by collar 17, and annular nut 18, formed with peripheral notches 19, and a spring bolt 20, engaging notches, substantially as set forth.

In testimony whereof witness my hand this 11th day of April, 1894.

PETER SHANNON.

In presence of—

ROBERT BURNS,
JAMES LAVALLIN.