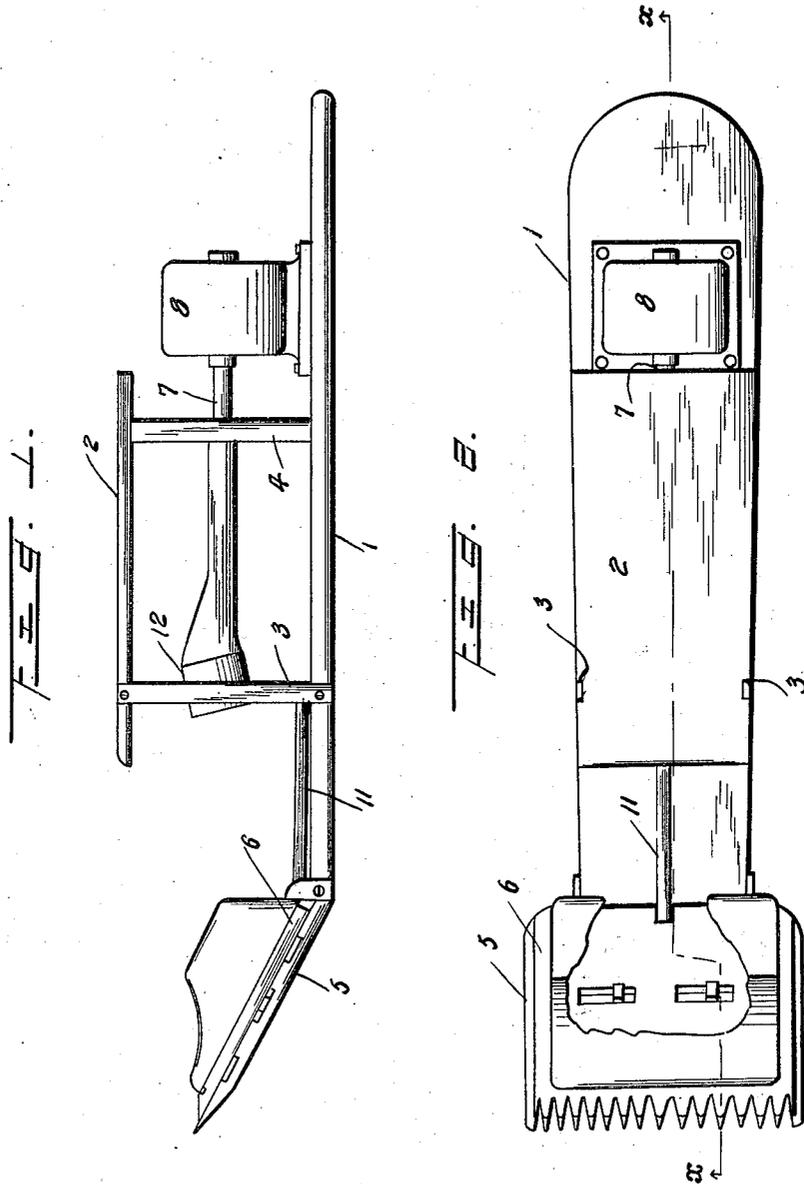


W. W. QUINN.
ELECTRIC HAIR CLIPPING MACHINE.
APPLICATION FILED MAR. 24, 1921.

1,438,136.

Patented Dec. 5, 1922.
2 SHEETS—SHEET 1.



Inventor
W. W. Quinn

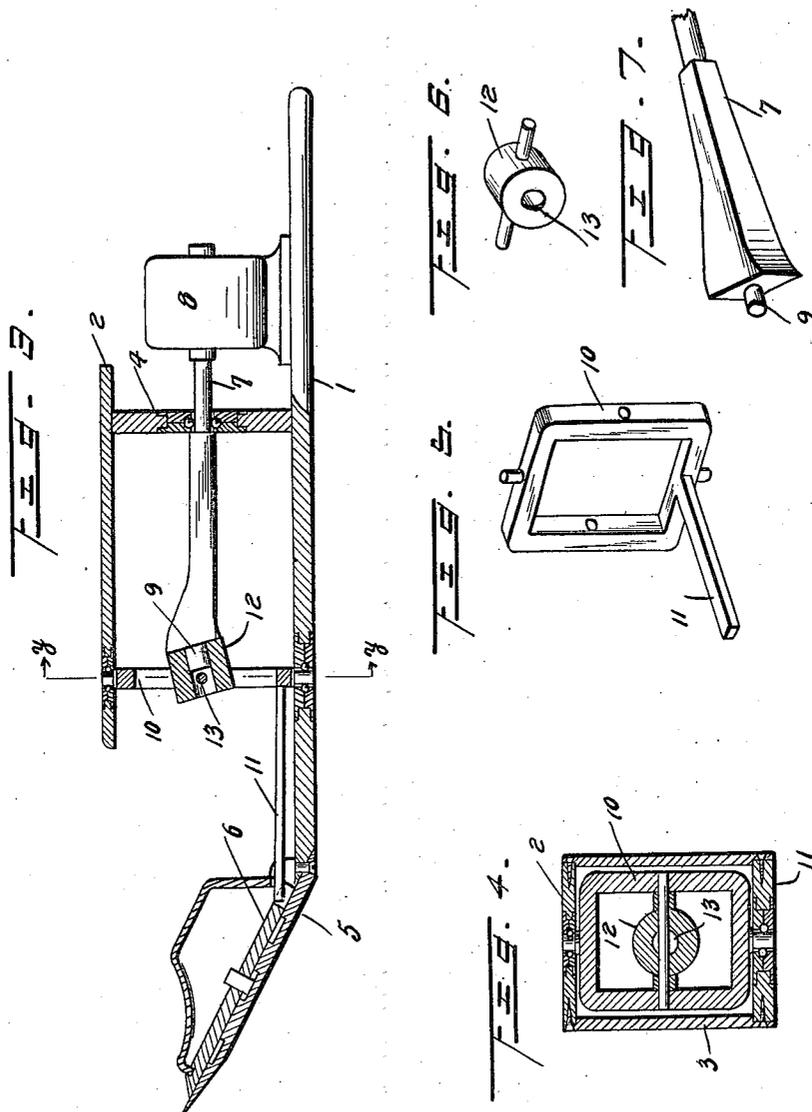
By *A. Randolph, Jr.* Attorney

W. W. QUINN.
ELECTRIC HAIR-CLIPPING MACHINE.
APPLICATION FILED MAR. 24, 1921.

1,438,136.

Patented Dec. 5, 1922.

2 SHEETS—SHEET 2.



Inventor
W. W. Quinn

By *A. Kauder, Jr.* Attorney

UNITED STATES PATENT OFFICE.

WILLIAM W. QUINN, OF BREMERTON, WASHINGTON, ASSIGNOR OF ONE-THIRD TO EDWARD HIGGINS AND ONE-THIRD TO PERRY T. KLEPPER, BOTH OF BREMERTON, WASHINGTON.

ELECTRIC HAIR-CLIPPING MACHINE.

Application filed March 24, 1921. Serial No. 455,021.

To all whom it may concern:

Be it known that I, WILLIAM W. QUINN, a citizen of the United States, residing at Bremerton, in the county of Kitsap and State of Washington, 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 invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention relates to clippers for shearing sheep and cutting the hair close to the hide or skin, the object being the provision of a machine of this type particularly designed to be run by an electric motor.

The invention resides more particularly in the means for transmitting motion to the reciprocating blade of the clipper and in the general structure.

Other objects and advantages will be apparent and suggest themselves as the nature of the invention is understood.

While the drawings illustrate an embodiment of the invention it is to be understood that in adapting the same to meet different conditions and requirements, various changes in the form, proportion and minor details of construction may be resorted to without departing from the nature of the invention.

Referring to the accompanying drawings forming a part of the specification,

Figure 1 is a side view of a hair clipping machine embodying the invention,

Figure 2 is a top plan view thereof,

Figure 3 is a vertical longitudinal section on the line $x-x$ of Figure 2,

Figure 4 is a transverse section on the line $y-y$ of Figure 2, looking in the direction of the arrow,

Figure 5 is a detail perspective view of the yoke and arm,

Figure 6 is a detail perspective view of the socket member, and

Figure 7 is a detail perspective view of the end of the drive shaft cooperating with the socket member.

Corresponding and like parts are referred to in the following description and designated in the several views of the drawings by like reference characters.

The machine embodies a base plate 1 and a cap plate 2, the latter being spaced from the base plate and connected thereto by

front uprights 3 and rear uprights 4. The cutting mechanism is located at one end of the base plate 1 and comprises a fixed blade 5 and a reciprocating blade 6. The cutting mechanism is preferably disposed at an angle to the base plate 1 for convenience of operation.

A longitudinally disposed drive shaft 7 is mounted in the rear upright 4 and receives motion from a suitable source of power such as an electric motor 8 which is preferably mounted upon the rear portion of the base plate 1. The forward end of the drive shaft 7 is provided with a pin 9 having an eccentric arrangement, whereby to operate the movable blade 6. As shown most clearly in Figure 7, the forward portion of the drive shaft 7 is enlarged and the extremity inclined so that the pin 9 is perpendicular thereto.

A yoke 10 is journaled between the plates 1 and 2 so as to oscillate about an axis at right angles to the drive shaft 7 and perpendicular to the plates 1 and 2. The yoke 10 is preferably disposed between the front uprights 3. An arm 11 extends forwardly from the yoke 10 and engages the blade 6 so as to impart a reciprocatory movement thereto when the shaft 7 is rotated. The yoke 10 consists of an open frame and the arm 11 preferably extends from the lower portion thereof. A socket member 12 is pivotally mounted in the yoke 10 so as to oscillate about an axis at right angles to the axis of the yoke. The member 12 is provided with a socket 13 which receives the eccentric pin 9. A close joint is provided between the opposing ends of the socket member 12 and the drive shaft 7. The yoke 10 and the socket member 12 constitute elements of a universal joint whereby rotation of the drive shaft 7 imparts an oscillatory movement to the arm 11 and a reciprocatory movement to the blade 6 of the cutting mechanism. The yoke 10 oscillates about a vertical axis and the socket member 12 oscillates about a horizontal axis, the parts being so disposed as to obviate any binding action and insure a freedom of movement.

In practice, the machine is adapted to be connected by means of an electric cord to any convenient outlet of a conductor supplying an electric current. The connection is effected in a manner well understood in

coupling electric appliances to sockets or plugs of a system of wiring whereby electricity is supplied for industrial purposes.

What is claimed is:

5 A clipper having a base plate provided with a blade, a blade slidable on said plate to coast with the first mentioned blade, a cap plate, front and rear uprights securing said cap plate to the base plate, a drive
10 shaft journaled in the rear uprights, an open frame intermediate the front uprights, said frame being swiveled in the cap plate and in the base plate, an operating arm for the slidable blade extending forwardly and

rigidly from the frame adjacent said base 15 plate, a socket member pivoted within and to said frame on an axis crossing the axis of the frame, said shaft at its forward end being enlarged, and an eccentric projection on the latter end of said shaft extending 20 into said socket member.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM W. QUINN.

Witnesses:

FRANCIS T. CORBETT,
L. A. BADHAM.