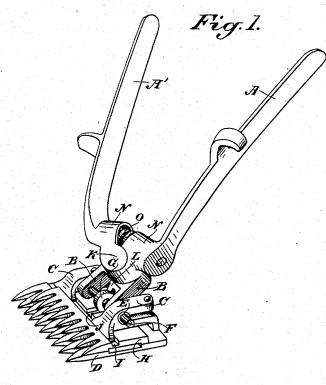
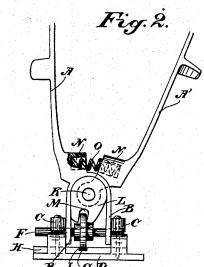
(No Model.)

## O. OLSEN. HAIR CLIPPING MACHINE.

No. 522,765.

Patented July 10, 1894.





Witnesses, Bt Source F.F. Ascheck Ole Olsen By Dewy Hoo attent

## United States Patent Office.

OLE OLSEN, OF OAKLAND, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO THE UNITED STATES HAIR CLIPPER MANUFACTURING COMPANY, OF SAN FRANCISCO, CALIFORNIA.

## HAIR-CLIPPING MACHINE.

SPECIFICATION forming part of Letters Patent No. 522,765, dated July 10, 1894.

Application filed January 24, 1894. Serial No. 497,910. (No model.)

To all whom it may concern:

Be it known that I, OLE OLSEN, a citizen of the United States, residing in Oakland, Alameda county, State of California, have in-5 vented an Improvement in Hair-Clipping Machines; and I hereby declare the following to be a full, clear, and exact description of the

My invention relates to a machine which is 10 intended for the purpose of clipping hair.

It consists of handles to be grasped and moved to and from each other by the operator, transversely reciprocating toothed comb and cutting plates adjustable with relation 15 thereto, and intermediate actuating mechanism, with details of construction which will be more fully explained by reference to the accompanying drawings, in which-

Figure 1 is a perspective view of my device.

20 Fig. 2 is a bottom view of the handles with the cutting plates turned to a position approximately at right angles therewith.

The object of my invention is to provide a hair clipping machine having a hinged con-25 nection between the cutter-head and the handles, and a mechanism whereby the cutter may be actuated from the handles in whatever position it may stand with relation to said handles.

A A' are the handles pivoted together and suitably constructed to be grasped in the hands of the operator, so that they may be closed by compression, and allowed to open by the action of a spring to be hereinafter described. The handle A which may be termed the stationary handle for convenience, has extension lugs B projecting from its lower end, and exterior to these lugs are journaled the brackets C which are secured to the main or 40 bottom plate D of the cutters. Through the

brackets C holes are made transversely and journal-boxes E extend into these holes from the ends of the extensions B, so that the cutter-head is turnable about these journals. Through these journal-boxes a shaft F extends having fixed to its center a disk G.

H is the top reciprocating plate of the cutter. Both the comb and cutter plates are toothed, as shown, and the top plate is adapted I greatest distance apart, and when the handles

to reciprocate above the bottom one, so that 50 the sharp angles of the adjacent faces of the teeth act as cutters when the top plate is reciprocated across the bottom one.

The brackets C are secured to the lower comb plate D at the rear and their front ends 55 overhang the upper cutting plate H and extend downward so as to enter a transverse groove or channel I which is made in this plate behind the teeth and these brackets thus serve to guide the plate H in its recip- 60 rocations. The plate H has made in its center a slot or channel J into which the edge of the disk G fits, and as the cutter-head is journaled to turn about the shaft F, it will be manifest that whatever the position occupied 65 by the cutter-head relative to this shaft and the handles may be, the edge of the disk G will always enter the slot or channel J, and when the shaft F and the disk are reciprocated from side to side, it will be seen that 70 the disk will move the upper cutting plate H over the lower plate D. In order to cause this reciprocation, the handle A' is fulcrumed to the handle A at the point K, as shown in both figures, and the fulerum pin or shank is 75 attached to the handle A' so as to be movable with it. Fixed to this fulcrum pin is the short cam-shaped arm L, the front edge of which has made in it a slot or channel M in such a position that it clasps the edge of the 80 disk G, or is otherwise loosely connected therewith, so that whenever the handle A' is closed toward the handle A, it acts through the arm L upon the disk G so as to reciprocate it and its shaft F, sliding in the journal-boxes as 85 previously described; and the edge of the disk G engaging the slot in the plate H of the cutter causes this to reciprocate in like manner above the plate D.

Just behind the pivotal center K of the han- 90 dles A A' are formed the transversely disposed sockets N N which are of sufficient interior diameter to receive a stout spiral spring O. These sockets are long enough to receive a spring so long that it will not become set by 95 use. The tension of this spring is sufficient to hold the handles A A' normally at their

have been pressed together by the hands of the operator so as to reciprocate the movable cutting plate over the stationary one in one direction, and as soon as the pressure upon the handles is relaxed, the spring acts to throw the movable handle and plate, and through it the reciprocating plate, back to its original position. The power of this spring is so great that it exercises a positive pressure upon the reciprocating plate sufficient to cause it to cut as strongly when moved back as it does when forced in the opposite direction by the pressure of the hands, and the machine thus becomes a positive double acting cutter. 15 reason of the hinge joint by which the cutterhead is connected with the handles, the recip-

rocating shaft and the circular disk upon said shaft, the periphery of which always engages the plate to be reciprocated whatever be the 20 position of the cutter-head with relation to the handles, it will be seen that the apparatus may be turned to any convenient position for work without its becoming disconnected.

Having thus described my invention, what 25 I claim as new, and desire to secure by Letters Patent, is-

1. A hair clipping machine consisting of two handles pivoted together, adapted to approach and separate from each other, a cutter-head 30 consisting of a stationary toothed comb plate hinged to and turnable about the extensions of one of the handles, a shaft slidable axially through said hinge joint having a disk fitted to it, the periphery of which engages a slot or 35 channel in the reciprocating cutter-plate

which travels above the stationary one, a cam-

shaped arm fixed to the fulcrum shaft and movable with the movable handle, said arm having its outer end slotted or provided with a channel adapted to loosely engage the pe- 40 riphery of the disk whereby the movement of the handles will reciprocate the disk shaft and movable cutter-plate in any position occupied by the cutter-head with relation to said handles, substantially as herein described.

2. A hair clipping machine consisting of the stationary and movable toothed comb and cutter-plates, brackets by which the stationary plate is hinged to extensions of one of the handles of the device, a shaft slidable axially 50 through said hinge joint having a central disk, the periphery of which engages a channel in the movable plate, a movable handle fulcrumed to the one which carries the cutterhead, having a cam-shaped arm which engages 55 the periphery of the disk whereby the reciprocation of the disk shaft and movable cutterplate in one direction are effected by the pressing of the handles toward each other, said handles having the transversely disposed 60 sockets just behind the fulcrum pin and a spring fitted transversely in said sockets between the handles whereby the reciprocation of the parts in the opposite direction is insured, substantially as herein described.

In witness whereof I have hereunto set my

hand.

OLE OLSEN.

Witnesses:

S. H. NOURSE, H. F. ASCHECK.