

W. J. TINLINE.

MEANS FOR SHARPENING AND DRESSING PARTS OF HORSE CLIPPING AND OTHER MACHINES.

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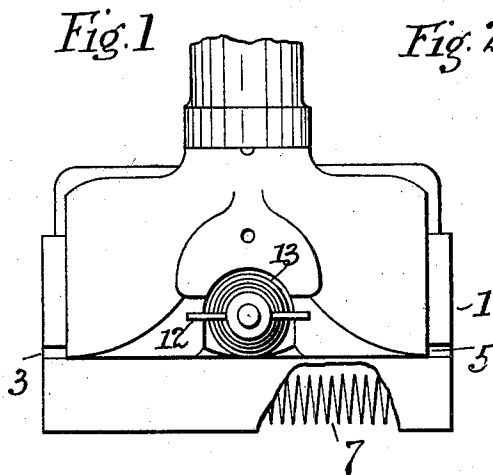


Fig. 2

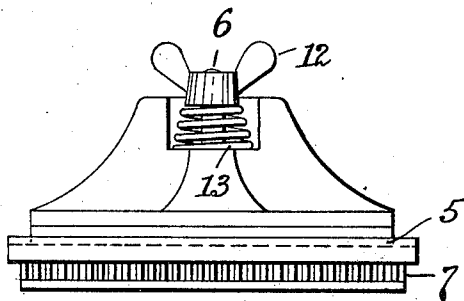
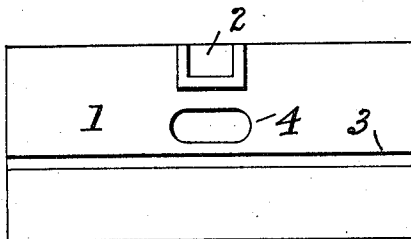


Fig. 4

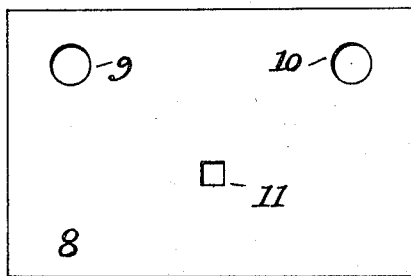


Fig. 3

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UNITED STATES PATENT OFFICE.

WILLIAM JAMES TINLINE, OF HASTINGS, NEW ZEALAND.

MEANS FOR SHARPENING AND DRESSING PARTS OF HORSE-CLIPPING AND OTHER MACHINES.

1,002,095.

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To all whom it may concern:

Be it known that I, WILLIAM JAMES TINLINE, a subject of the King of Great Britain and Ireland, &c., residing at Hastings, Hawke's Bay, in the Dominion of New Zealand, have invented certain new and useful Improvements in Means for Sharpening and Dressing Parts of Horse-Clipping and other 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.

This invention relates to the grinding, sharpening, surfacing, or dressing of combs and cutters of horse clippers and other machines in which there is similar play of one part upon another.

In carrying my invention into effect, I provide devices or substitute members attachable to the head, handpiece, or tool of the machine carrying the parts to be sharpened; one device, because it takes the place of the comb and has some features of resemblance to it, is herein termed a "dummy comb," and another device is for corresponding reasons termed a "dummy cutter." These, which vary according to the effect desired, are simple, effective, and time saving. By my invention I sharpen or operate on the comb and the cutter separately, and while it is in its place as part of the said head or handpiece. This insures excellent correspondence of parts and enables the owner or user of the shearing, or the clipping, machine or the like to quickly and easily resharpen or resurface his combs and cutters at minimum cost. He will consequently attend to the sharpening more frequently than hitherto, and, naturally, will not in future delay action till these parts become decidedly blunt. Besides this practical advantage it will no longer be necessary to keep ready for use extra sets of combs and cutters to take the place of those put aside or sent away for sharpening.

The drawings herewith will now be referred to in further explaining this invention.

Figure 1 is a plan view of a clipping machine handpiece or head. Figs. 2 and 3 show, in plan view, a dummy cutter and comb respectively. Fig. 4 is a front elevation of the parts in Fig. 1.

As there are many styles of horse clipping,

sheep shearing, and other similar machines differing in minor details, while retaining a comb and cutter, so will my dummies differ, and it is obviously unnecessary to illustrate all these minor features.

In these views, 1 is a dummy cutter, shown with a socket 2, or member to be engaged by an eccentric pin, or driving member of the handpiece, as in the case of the actual cutter. It is also shown with a groove 3 for a handpiece guide lip 5, and a slot 4 for an ordinary tension pin 6. It has in fact any such parts as enable it, when placed on the tool, as in Figs. 1 and 4, to move in the way the actual cutter would. It is of any suitable size, being shown wider than the comb 7 and extending in front beyond the teeth of the latter, to show which part of dummy 1 is broken away in Fig. 1. There are no teeth on the dummy cutter or on the dummy comb 8. The latter has any suitable setting means to enable it to be substituted for the real comb, as holes 9, 10 to fit over the ordinary pins projecting from the handpiece base, and a tension pin hole 11.

Each dummy is made of one or more suitable metals or materials or combinations thereof, and has its grinding or otherwise operative surfaces perfectly flat in some cases. Or it has means to allow attachment of flat plates, or sheets of emery cloth, or abrasive, surfacing, or dressing material; thus a coating of any suitable grinding or dressing paste may be applied to a flat faced dummy. The dummies are when desired specially faced in any obviously appropriate way, to act as grinding, sharpening, surfacing, or dressing means. Any suitable mechanical means are at will provided for clamping or attaching the emery cloth, or other parts, to the dummy combs and cutters; thus glue or an adhesive is usable. During the process next described oil, water, or a mixture containing emery powder, or any suitable substance for the treatment desired, may be applied at will, in any suitable way.

To begin sharpening the comb, when the dummies (which term includes the substitute members with or without attachments or combinations as aforesaid, as desired) are ready, the operator leaves the comb in place, removes the cutter, and substitutes the dummy cutter. Then suitable tension is applied, (in the kind of clipper illustrated by

adjusting nut 12 on spring 13) according to the details of the machine used, and the machine is worked in the ordinary manner, the desired result being produced on the comb.

Instead of having wholly or partly metal dummies, they may be of carborundum, stone, or any other suitable sharpening, grinding, surfacing, or dressing substance effectively usable in the indicated way, but the simplest substitutes I use are of hard steel, and flat faced, the cutter on the underside and the comb on top.

To sharpen or dress the cutter, it and the comb are removed, the dummy comb is substituted and the actual cutter replaced. The dummy comb is sufficiently wide to allow for cutter play,—hence is shown wider than the actual comb. The tension is adjusted (it can be suitably varied at will) and the machine worked in the ordinary way.

Instead of using one pair of dummies, there may be extra ones differing in minor details provided and used, if desired, for different stages of treatment, as for preliminary grinding, and then for finishing, for example. Magnetized metal dummies may be used. The speed of working may be varied and be made as great as desired.

What I claim as my invention is:—

1. In a clipper having a head portion, a comb plate, a cutter plate and means for reciprocating said cutter plate, a downwardly projecting lip being formed transversely of the underneath face of the top head portion, the combination of sharpening means for

said comb plate comprising a member having a flat operating surface, and provided with a groove extending transversely of its face opposite to its operating surface, means for mounting said grooved member in substitution of said cutter plate with its groove receiving said lip, and means for connecting said grooved member with said reciprocating means, substantially as described.

2. In a clipper having a head portion provided with a downwardly projecting lip extending transversely thereof, a comb plate, a cutter plate, and means for reciprocating said cutter plate, the combination of sharpening means for said comb plate comprising a member having a flat operating surface, and provided on its opposite surface with a transversely disposed groove, a central elongated slot and a socket on its rear edge, said member being adapted to be substituted for said cutter plate, with said lip seating in said groove and with said reciprocating means seating within said socket, and means for securing said grooved member to reciprocate in substitution of said cutter plate, comprising a pin passing through said elongated slot, a coiled spring encircling said pin and engaging said head, and a thumb nut threaded on said pin and engaging said spring, substantially as described.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

WILLIAM JAMES TINLINE.

Witnesses:

ALFRED WILLIAMSON PARKINSON,
ALLAN MCGREGOR WHITE.