

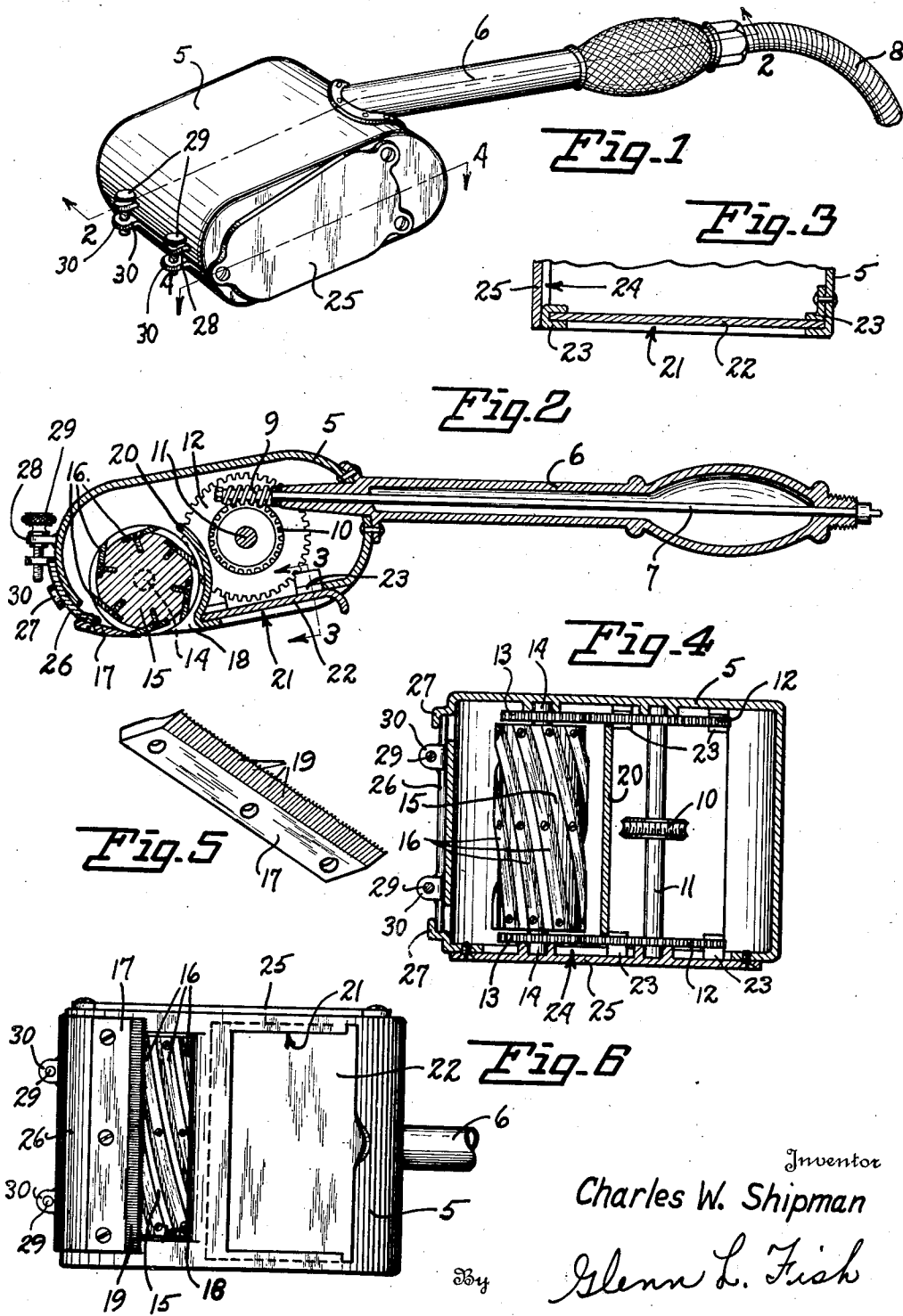
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MOWER RAZOR

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MOWER RAZOR

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1 Claim. (Cl. 30—12)

My invention relates to mower razors and the primary objects of the invention are to provide a razor of the mower type which is simple and inexpensive in construction, easy and efficient in its operation, which comprises a rotor carrying spiral cutting blades in engagement with a stationary knife and gear means for rotating the blades, and which embodies means for assembly and means for removing hair which accumulates therein.

With the above and other objects in view which will appear as the description proceeds, the invention consists of the novel construction, adaptation, combination and arrangement of parts hereinafter described and claimed. These objects are accomplished by devices illustrated in the accompanying drawing; wherein:

Figure 1 is a view in perspective of the device; Fig. 2 is a view in longitudinal vertical section of the same taken substantially on a broken line 2—2 of Fig. 1; Fig. 3 is a fragmentary view in transverse vertical section taken substantially on a broken line 3—3 of Fig. 2; Fig. 4 is a view in horizontal section taken on a broken line 4—4 of Fig. 1; Fig. 5 is a detail view in perspective of the stationary knife; and Fig. 6 is a bottom plan view.

Referring to the drawing throughout which like reference numerals indicate like parts, the numeral 5 designates the razor casing which has a hollow handle 6 fixed thereto, one end of which projects into the casing. A shaft 7 is mounted longitudinally within the handle and is rotated by a flexible cable 8 connected to its exterior end and which may be connected in any desired manner to a motor or other source of power not shown.

The inner end of the shaft 7 projects into the casing 5 and is wormed at 9. Said worm meshes with a worm gear 10 whose shaft 11 is journaled in the sides of the casing. Equal spur gears 12 are fixed on the end portions of said shaft and mesh with corresponding gears 13 fixed to trunnions 14 journaled in the casing 5 and which trunnions are integrally or fixedly connected to a rotor 15. Spiral cutting blades 16 are detachably connected to the rotor and are arranged to contact with the beveled edge of a stationary knife 17.

The stationary knife 17 is secured transversely to the lower edge of an adjustable plate 26. Said plate fits the contour of the front end of the casing 5, being held in place by means of lugs 27 pressed out of the casing. Small bearing brackets 28 are secured to the casing 5 and have thumbscrews 29 mounted therein whose ends are threaded into lugs 30 formed on the upper ends of the plate 26. By means of this arrangement the knife 17 may be adjusted to compensate for wear and sharpening.

The sharp beveled edge of the knife 17, which is disposed in engageable relation with the cutting blades 16, projects into a transverse opening 18 whereby the blades may be placed in contact with the beard or hair which is to be removed as will be understood. A series of grooves 19 is formed on the beveled edge of the stationary knife in order to prevent the hair from slipping laterally along the edge of said knife when it is engaged by the cutting blades. The opening 18 is formed by cutting into the bottom of the casing and bending the metal inwardly to provide a curved guard or shield 20 for the rotor 15 and its attached cutting blades.

Another rectangular opening 21 is provided in the bottom of the casing 5 to the rearward of the opening 18 and a door 22 is arranged to close said opening by slidably moving the door in guides 23 fixed to the casing in any desired manner. Hair thrown into the casing by the rotor 15 may be removed by slidably opening the door 22. For the purpose of installing the interior mechanism, an opening 24 is provided in one side of the casing and a plate 25 detachably fixed to the casing serves as a closure for said opening.

It will now be apparent that I have provided a mower razor that is simple and economical in construction and which is efficient and easy to operate. Having thus described my invention, what I claim and desire to secure by Letters Patent of the United States is:—

A mower razor comprising a casing having an opening in its bottom, a slidable door for said opening, said casing having a second opening in its bottom, a stationary knife fixed to the bottom and projecting into the second opening, a rotor mounted to revolve within the casing, a plurality of spiral cutting blades detachably fixed to the rotor and arranged to contact with the stationary knife, a shield for the rotor and its blades, a pair of spur gears fixed to the rotor, a pair of spur gears meshing with the first named gears, a shaft journaled transversely of the casing and supporting the last named gears, a worm gear fixed centrally on said shaft, a longitudinal shaft projecting into the casing, a worm formed on an end of the longitudinal shaft and meshing with said worm gear, a hollow handle fixed to the casing and housing the longitudinal shaft, said casing having an opening in its side, and a plate detachably fixed to the casing and closing said opening.

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