May 25, 1937. L. V. ADAMSON ET AL 2,081,129

DRY SHAVER

Filed May 1, 1936 2 Sheets-Sheet 1

Fig. 1.

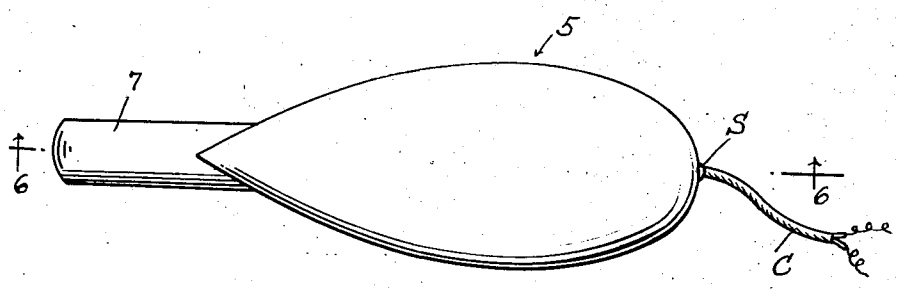


Fig. 2.

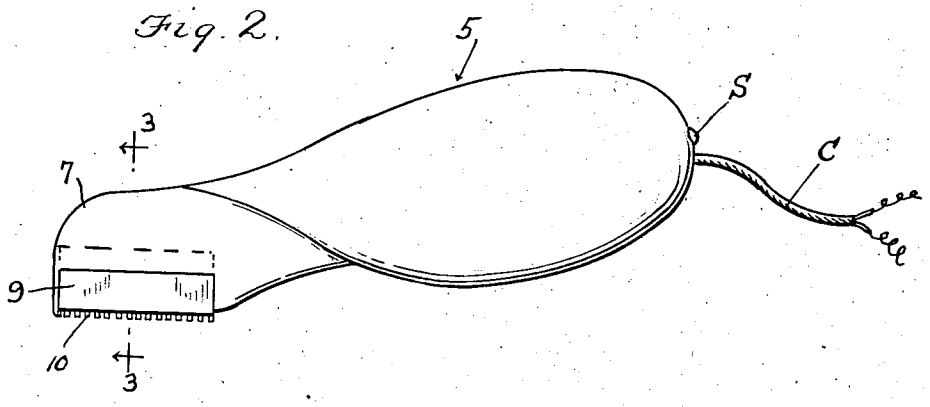


Fig. 3.

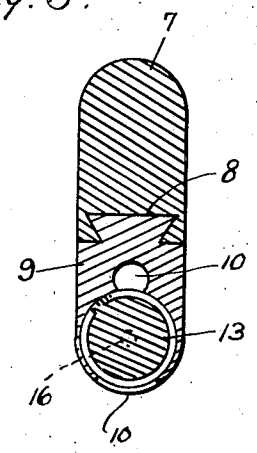


Fig. 4.

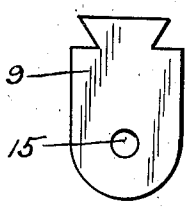
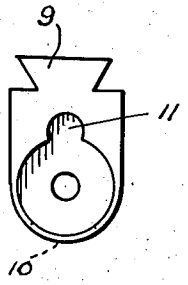


Fig. 5.



Inventors

Lloyd V. Adamson,

Harvey H. Hoy

By L. B. James

Attorney

May 25, 1937. L. V. ADAMSON ET AL 2,081,129

DRY SHAVER

Filed May 1, 1936 2 Sheets-Sheet 2

Fig. 6.

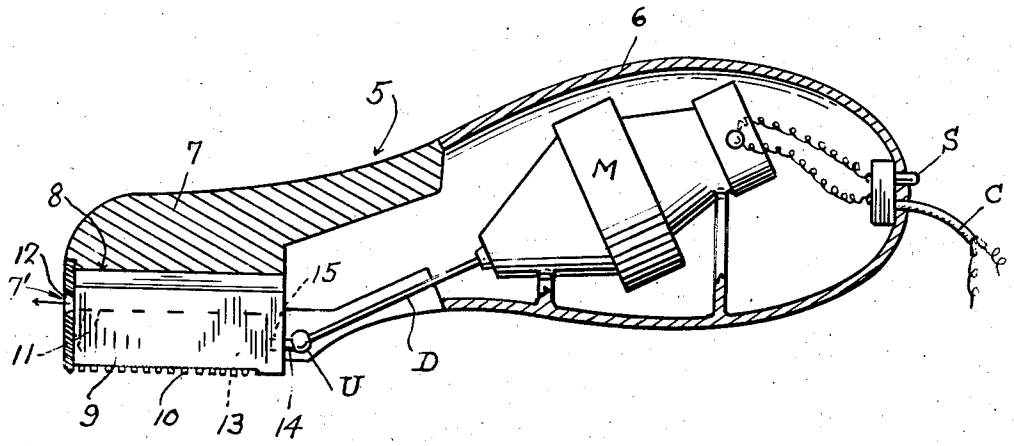


Fig. 7.

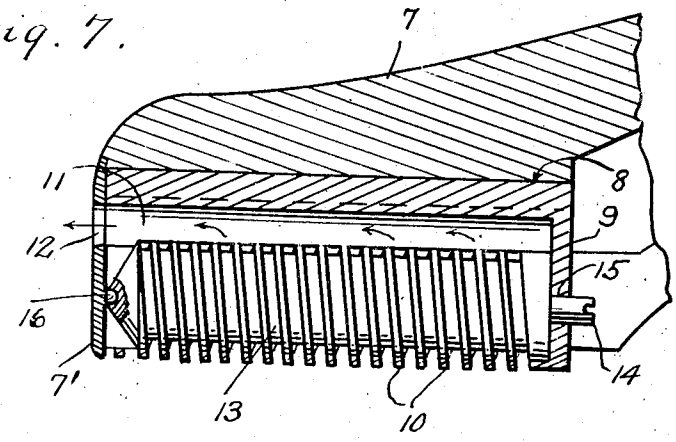


Fig. 8.

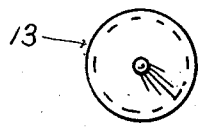
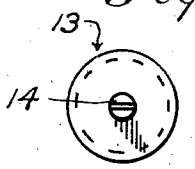


Fig. 9.



Inventors

Lloyd V. Adamson,

Harvey H. Hoy

By L. B. James

Attorney

Patented May 25, 1937 2,081,129

UNITED STATES PATENT OFFICE

2,081,129

DRY SHAVER

Lloyd V. Adamson and Harvey H. Hoy, Fillmore, Calif.

Application May 1, 1936. Serial No. 77,421

5 Claims. (Cl. 30—43.5)

This invention relates to cutlery and more particularly to that class of inventions known as dry shavers.

The primary object of this invention resides in the provision of a dry shaver adapted to perform its cutting action by a rotating cutting blade.

Another object of this invention resides in the provision of a dry shaver adapted to perform its cutting action by a rotating spiral cutting blade.

A further object of this invention resides in the provision of a dry shaver adapted to perform its cutting action by a rotating cutting blade in axial alignment with its driving medium.

A still further object of this invention resides in the provision of a dry shaver of such construction that clogging or jambing the cutting blade thereof will be obviated.

With these and other objects in view this invention resides in certain novel features of construction and arrangement of elements to be hereinafter more fully set forth in the specification, illustrated in the accompanying drawings and pointed out in the appended claims and, while this disclosure depicts our present conception of the invention, the right is reserved to resort to such changes in construction and arrangement of elements as come within the scope of the claims.

In the accompanying drawings forming a part of this application:

Fig. 1 is a plan view of a dry shaver as constructed in accordance with this invention.

Fig. 2 is a side view thereof.

Fig. 3 is an enlarged vertical sectional view approximately on line 3—3 of Fig. 2.

Fig. 4 is an end view of the stationary cutting blade.

Fig. 5 is a similar view of the opposite end of the stationary cutting blade.

Fig. 6 is an enlarged longitudinal sectional view approximately on line 6—6 of Fig. 1.

Fig. 7 is an enlarged detail sectional view through the head of the shaver approximately on line 7—7 of Fig. 1.

Fig. 8 is an end view of the rotating cutting blade.

Fig. 9 is a similar view thereof of the opposite end of the rotating cutting blade.

In the present illustration of this invention the numeral 5 designates, in general, a clipper or shear which is known as a dry shaver, the same being herein shown as consisting of a hollow handle 6 provided with a head 7 preferably having a dove-tail groove 8 therein for the reception of a stationary cutting blade 9, said head 7 is provided with a depending front portion 7' to form a stop for the stationary cutting blade 9.

The stationary cutting blade 9 is provided with a rib adapted to be seated in the dove-tail groove 8 of the head and is provided with elongated serrations 10 communicating with a bore therein adapted to house a rotating spiral cutting blade 13.

Formed in one end of the stationary blade 9 is an aperture 15 adapted to rotatably accommodate a shaft 14 formed on one end of the rotating blade 9, said shaft is connected to a shaft D of an electric motor M by a suitable universal joint U, the electric motor M is suitably secured within the handle 6 and is electrically connected to an electricity conduit C through the instrumentality of a suitable switch S.

That end of the rotating cutting blade 13 opposite the end having the shaft 14 protruding therefrom is preferably of conical configuration and is provided with a bearing socket therein for reception of a stud 16 formed on the depending portion of the head 7 so as to axially journal the said cutting blade within the bore of the stationary cutting blade and dispose the spiral ribs thereon in close proximity to the walls of the serrations 10 to provide a shearing action between the spiral ribs of the rotating cutting blade and walls of serrations 10 during rotation of the cutting blade.

In order to obviate jambing or clogging of the rotating cutting blade the stationary cutting blade is provided with an elongated passage 11 communicating throughout its length with the bore accommodating the rotating cutting blade and also in registration with an outlet aperture 12 formed in the depending portion 7' of the head and, through the provision of this construction, hair or the like will be ejected by the spiral cutting ribs on the rotating cutting blade during its cutting action.

With this invention fully set forth it is manifest that a dry shaver is introduced which will readily perform a shearing action in cutting hair or the like by a rotating cutting blade and, through the instrumentality of the coacting elements thus involved jambing or clogging of the same is obviated.

Having thus described our invention what we claim and desire to protect by Letters Patent is:

1. In a dry shaver of the character set forth the combination of a handle, a head on the handle and having a dove-tail groove in its under surface, a depending portion formed on the head

at the outer extremity of the dove-tail groove and having a discharge aperture therein, a stationary cutting blade having a beveled tongue seated in the dove-tail groove and a bore in communication with a longitudinally extending hair discharging passage therein in registration with the aperture in the depending portion of the head, a rotatable cutting blade mounted in the stationary cutting head, a motor in the handle, and driving means connecting the rotatable cutting blade to the motor.

2. In a dry shaver of the character set forth comprising a handle, a head on the handle and having its lower surface provided with a dove-tail groove, a depending portion on the end of the head having an exit aperture therein, a bearing stud formed on the inner side of the depending portion of the head, a stationary cutting blade provided with a beveled portion seated in the dove-tail groove and having a bore in communication with an exit passage registered with the exit aperture in the depending portion of the head, a rotatable cutting blade mounted at one end on the bearing stud and at its other end in the stationary cutting blade, a motor secured in the handle, a shaft extending from the motor, and a universal joint connecting the shaft to the rotatable cutting blade.

3. In a dry shaver, a carrier formed with an undercut seat and an extension at one end of the seat formed with an opening and under the opening having a bearing stud projecting from its inner face, a block having mounting means engaged in said seat, said block being formed with a longitudinally extending bore closed at its front end by said extension and a longitudinally extending hair receiving pocket having its front end registering with the opening in the extension and its lower portion opening into the bore, and a rotary cutter in said bore having its front end rotatably supported by said stud and its rear end provided with a stub shaft journaled through the rear end of the block, the under portion of said block being slotted into the bore to provide transverse teeth for cooperating with the rotary cutter.

4. In a dry shaver, a handle, a head having its under face provided with a longitudinally extending seat, a block under said head having a rib engaged in said seat to mount the block under the head, said block having a longitudinally extending bore and a longitudinally extending hair receiving pocket over the bore having its lower portion opening into the bore, an extension at the front of said head closing the front end of the bore and formed with an opening registering with the front end of the hair receiving pocket, a rotary cutter in said bore having its front end rotatably supported by said extension and its rear end provided with a mounting shaft journaled through the rear end of the block, the under portion of said block being slotted transversely into the bore to provide teeth spaced from each other longitudinally of the bore and cooperating with the rotary cutter, and a motor carried by said handle and connected with the rear end of the cutter shaft.

5. In a dry shaver, a handle, a head carried by said handle and having its under face formed with a groove constituting a seat open at its rear end, a block having a rib along its upper face seated in said groove, said block being formed with a longitudinally extending bore leading from its front end and at its rear end having an axially extending passage leading therefrom, a longitudinally extending recess being formed above said bore and constituting a hair receiving pocket having its forward end open and its lower portion opening into the bore, slots being formed in the under portion of the bore transversely thereof and defining stationary cutting blades, a rotary cutter in said bore and formed with a spirally extending rib having sharpened edges cooperating with the stationary cutting blades, a mounting shaft extending from the rear end of the stationary cutter and journaled through the passage at the rear end of the bore, a depending extension at the front end of said head bearing against the front end of said block and having an opening registering with the front end of the hair pocket and a bearing rotatably engaging the front end of the rotary cutter, a motor carried by said handle, and a shaft for the motor connected with the rear end of the shaft of the rotary cutter.

LLOYD V. ADAMSON.
HARVEY H. HOY.