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SHAVING IMPLEMENT HAVING RECIPROCATING CUTTERS
IN A PIVOTALLY CONNECTED HEAD AND
WASTE COLLECTING MEANS
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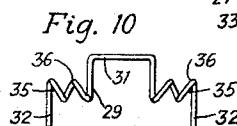
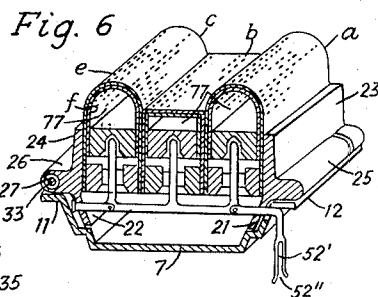
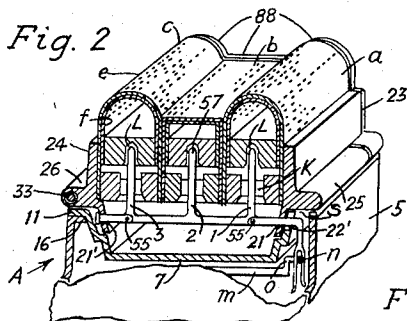
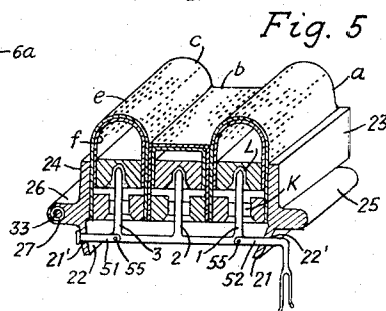
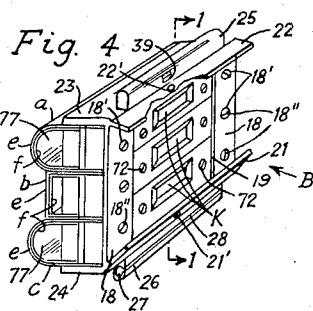
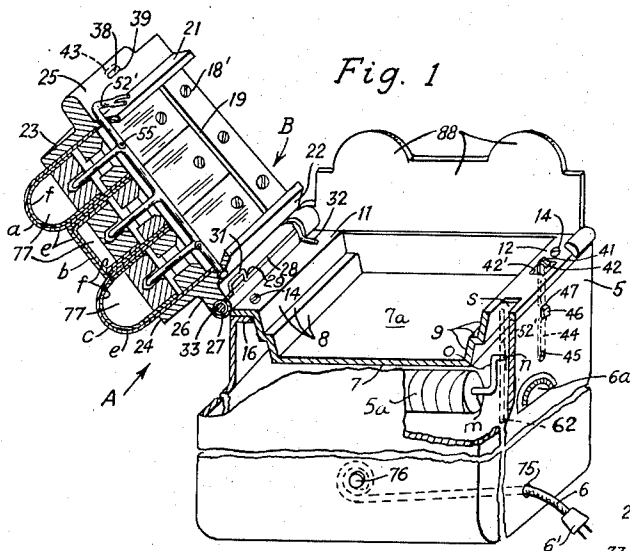


Fig. 3

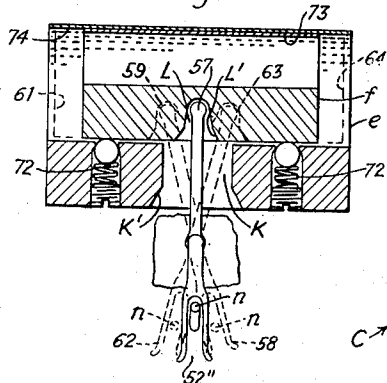


Fig. 8

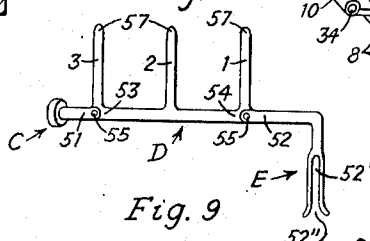


Fig. 9

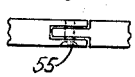
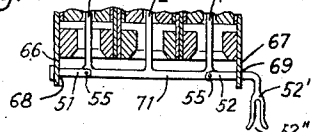


Fig. 11



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SHAVING IMPLEMENT HAVING RECIPROCAT- ING CUTTERS IN A PIVOTALLY CONNECTED HEAD AND WASTE COLLECTING MEANS

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Application September 3, 1953, Serial No. 378,356

35 Claims. (Cl. 30—41)

This invention relates to the construction of shaving implements in general, and more particularly to a type known as electric razors or dry shavers; and is filed as a continuation in part of my copending applications for Shaving Implements, Serial Numbers 226,685, filed May 16, 1951, and 338,089, filed February 20, 1953.

In accordance with my invention, I produce a shaving implement wherein there are no actuating elements extending from the motor (located in the handle) through the seat-floor for direct contact with the assembled removable shearing unit for operating the movable shearing member, and wherein the seat for holding the assembled removable shaving unit is provided with a non-perforated floor having no openings leading into the motor compartment, and wherein the assembled removable shaving unit is provided with the movable means for operating its movable shearing member for shaving purposes, and with wall portions extending above said seat for covering the open end portions of the shaving units while shaving, and with means for moving the assembled shaving units away from the wall portions to uncover said open end portions, and with means for holding the assembled shaving units in shaving position, and with means for housing the cable cord within the handle.

There is, therefore, thus produced, in accordance with my invention, a shaving-implement wherein the floor of the handle seat for holding the shearing section secured thereto is non-perforated or non-punctured thereby eliminating the usual openings leading through such seat into the motor compartment, and also eliminating the actuating element which usually extend from the motor through such seat for direct engagement with the shearing members for operable purposes, and wherein such seat floor forms an imperforated receptacle for housing sheared hair while shaving to prevent the entrance of such sheared hair into the motor compartment, and wherein the shaving section comprises a carrier forming a base portion having individually assembled shearing units secured thereto by suitable means for example screw-threaded elements and simultaneously therewith carrying means for operating such shearing units for shaving purposes, and wherein the assembled units are each provided with chambers having open end portion, and wall portions extending above the seat floor for covering such end portions when the latter are in normal shaving position to prevent the escape of sheared hair therefrom while shaving, and wherein the assembled shearing section may be moved or hinged out of normal shaving position away from said receptacle and the said wall portions to uncover the open end portions for the removal of sheared hair from such chambers and from the said receptacle, and means for holding such shearing section in such non-shaving position, and wherein such shearing section is adapted to be reverted back into normal shaving position, and wherein the handle is provided with a compartment for housing the cable cord.

To illustrate the ordinary commercial utility of my

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shaving implement in daily life, a shaving implement constructed in accordance with my invention, of whatever style or type it may be made, can be utilized to great advantage; for example, in the ordinary type of electric razors the motor is provided with actuating elements and the seat section of the handle (which is adapted to hold the shearing section) is provided with openings adapted to permit such actuating elements to pass therethrough for engaging the movable shearing member for operable purposes. Each of these openings are of a size larger than the thickness of the actuating element for the purpose of permitting such element to move freely within such opening. A great number of sheared hair, which come through the shearing openings or slots of the shearing members, accumulate within the chamber of the reciprocatory member. The hairs usually make their way through the opening of the stationary member and then through the openings of the seat section into the motor compartment and clog up the motor, in which case the motor becomes defective and the parts thereof can not operate freely and properly. Furthermore, the movements of the clogged up joined sections increase motor noise and occasionally cause the motor parts to wear out quickly and lose their proper frictional fit, in which case the motor becomes deficient and useless.

Whereas in an electric razor made in accordance with my invention, the above-mentioned objectionable features are completely eliminated. In my invention my motor has no actuating elements extending from the seat floor for reciprocating the movable shearing members; the seat for the shearing section of my handle comprises an imperforated floor and is therefore completely closed, there are no openings in the floor of the shearing seat of my handle for sheared hair to enter into the motor compartment, the motor in my structure is therefore fully protected against possibilities of being clogged up by sheared hair while shaving. Thus the normal operation of my motor will not be hampered by any foreign matter thereby prolonging its life, efficiency and smooth operation, rendering better service and greater shaving comfort and satisfaction to the user to an extent not accomplished heretofore by the ordinary type of electric razors.

The simple and easy manner in which the assembled shearing section of my shaving unit can be moved out of its normal shaving position into a non-shaving position, and the fact that my shearing section can be removed as an assembled unit, with or without the stem element, with or without the box section, will greatly facilitate the removal of sheared hair, or the replacement or adjustment of parts, and the easy manner in which my shearing section can be reverted back into normal shaving position for shaving purposes, affords the possibility for the user to clean the shaved hair from the instrument with greater ease and convenience and keep such instrument in a better condition for shaving purposes than is possible with the ordinary type of electric shavers. And the fact that my motor is encased in a completely closed compartment muffles the sound and reduces the motor noise, thereby eliminating annoyance and irritation to the user, and instead rendering a quiet, pleasant and nerve-soothing feeling while shaving. This of course is a very desirable feature which will tend to stimulate the marketing of such razor.

Then too, the fact that in my structure the cable cord is secured to the inner structure of the handle and is being housed in such handle when not in use, will add greatly to the comfort of the user. The cord will always be ready for use without danger of damaging or distorting the parts at the point of connection, thereby assuring safe and comfortable shaving operations.

Thus, an electric shaver, produced, in accordance with

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my invention, fulfills a long-felt need in the electric shaver industry. My herein invention teaches a new and unique form of structure not known heretofore in the art of manufacturing electric razors. A structure wherein the motor compartment is protected against the inflow of shaved hair into the vicinity of the motor, so that such motor is maintained within its closed compartment in a clean condition, thereby prolonging the life and efficiency and service of such motor, and wherein wall portions extending above the seat for the shaving units act as closure elements for the chambers of the shearing members when the latter are in normal shaving position, eliminating the need of separate closure elements, and wherein the shearing section may be moved or hinged away from the wall portions into a non-shaving position for cleaning or repair purposes, and wherein the motor is built without the usual actuating elements thereby reducing manufacturing cost of such motor and eliminating the usual actuating openings in the motor compartment, and wherein the connecting cord is housed within the handle compartment, thereby prolonging the life and usefulness of the shaving implement; such achievements have not been accomplished heretofore in the art of making electric shavers. Thus my invention solves the most vexing problems confronting the manufacturers of electric shavers; and is therefore, from a business point of view, a practical and very important contribution to the electric shaver industry. An electric shaver, made in accordance with my invention, will last longer, will operate more efficiently, will be more economical, and will render better service to the user. Such an implement can be utilized to greater advantage and in a more satisfactory manner, and may therefore prove quite valuable commercially.

The variety of possible application of my novel construction in connection with different types of shaving-implements, as hereinabove indicated, is so prolific that for the purpose of illustrating the invention the specific embodiment of my invention in its application to a shaving-implement exhibiting the greatest difficulties has been selected. Such shaving-implement is one which necessarily must conform most rigidly to the contours of the portion to be shaved and one which has the field of greatest possible commercial use. For this purpose I have selected for illustration of my novel construction, a shaving-implement constituting a multiple-head electric shaver, so that the principles of construction may be best illustrated in a shaving-implement known as a multiple-head electric shaver.

For a fuller understanding of the nature and objects of the invention, reference is had to the following detailed description in connection with the accompanying drawings, in which:

Fig. 1 is a perspective view of my shaving implement with the shearing section in an open non-shaving position, partly broken away, showing part of the motor structure and part of the inner structure of the shearing section;

Fig. 2 is a perspective view of my shaving implement with the shearing section in a closed position for shaving purposes, partly broken away, showing the position of several of the elements;

Fig. 3 is a cross-sectional view of one of the assembled shaving units, showing the operable movements of the stem structure and the reciprocatory member;

Fig. 4 is a perspective view of my carrier having several assembled shaving units secured thereto;

Fig. 5 is a perspective cross-sectional view of my assembled shearing section carrying the stem structure for operating the reciprocatory members;

Fig. 6 is a view showing my assembled shearing section secured to the removable receptacle forming the seat element of the handle;

Fig. 7 is a view showing the removable receptacle having a non-perforated floor;

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Fig. 8 is a view showing my assembled stem structure for operating the reciprocatory members;

Fig. 9 is a view looking upwardly showing the manner in which the portions of my stem structure are connected to each other;

Fig. 10 is a view showing the spring structure for holding the assembled shearing section in an open non-shaving position; and

Fig. 11 is a view showing the individually assembled shearing units being secured to each other, without the use of the carrier, and my stem structure being carried by the units.

For a better and clearer understanding of my invention, I am showing several of the cross-sectional views along a line which is located centrally of the shearing section, for example, line 1—1 of Fig. 4.

Referring more particularly to the drawings, in which similar reference characters identify similar parts in the several views, in my novel shaving implement.

Arrow A indicates my shaving implement comprising a motor-containing handle 5 having a motor 5a; the handle 5 may be made of any suitable material, metal or plastic, and may be molded or machined to any suitable style or shape, and is adapted to be connected to a source of power by a cable cord 6.

A box-shaped element or partition 7, comprising a non-perforated floor 7a provided with stepped side walls 8 and 9 having flange portions 11 and 12, is positioned upon the upper open end portion of the handle 5 and secured thereto by any suitable means, for example, screw elements 14 inserted through openings 15 of the flange portions 11 and 12 and then into screw-threaded openings of the flanges 16 (screw-threaded openings not shown) thereby covering such open end portion of the handle 5.

The carrier arrow B is provided with floor portions 18 each having openings 18', and with a centrally located spaced or enlarged opening 19, and with inclined wall portions 21 and 22 located at the lower portion thereof; and is also provided with upwardly disposed wall sections 23 and 24 having rib portions 25 and 26.

A plurality of individually assembled shaving units a, b and c, each comprising outer stationary members e and inner movable or reciprocatory members f, are individually secured to the floor portions 18, between the wall portions 23 and 24, by suitable means; for example, screw-threaded elements 18'' positioned through the openings 18' of the floor portions 18 and then in a rotatable manner into screw-threaded openings of the units (screw-threaded openings not shown) drawing the floor portions 18 and its respective individual unit towards each other thereby combining such units and carrier into an assembled unitary structure or shearing section. This assembled shearing section may be secured to the receptacle or partition 7 by any suitable means; for example, the rib portion 26 may be provided with an opening 27 having a slot 28. A spring 29 is then slidably inserted within the opening 27 having its center portion 31 and its end portion 32 slide within the slot 28 until such end portion 32 is positioned in a freely movable manner on the outside of the end portion of the slot 28; the rib portion 26 is then placed between the extensions 10 and 10' of the partition 7 (Fig. 7), and a member 33 having a screw-threaded end portion is then positioned through the opening 34 of the extension 10 and through the openings 35 formed by the spring coils 36 and then in a rotatable manner into the screw-threaded opening 37 of the extension 10', in a manner whereby the center portion 31 of the spring 29 will rest against the upper portion of the slot 28 and the freely movable end portions 32 will rest against the flange 11 of the partition 7, thereby holding the assembled shearing section in an open position with respect to the partition 7 (see Fig. 1). Bringing the rib 25 towards the handle 5, will cause the edge portion 38 of the opening 39 to engage the tapered

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outer face 41 of the hook 42 (extending from the opening 42') forcing same inwardly until such hook 42 will engage the inner face 43 of the edge portion 38 of the opening 39 and hold the shearing section indicated by arrow A upon the handle 5 in position for shaving purposes (see Fig. 2). The hook 42 is provided with an extension 44 secured in desired position by suitable means, for example, a screw or rivet 45 (see dotted lines Fig. 1), the extension 44 is provided with a knob 46 protruding through an opening 47, so that upon pressing against the knob 46 the hook 42 will move away from the edge portion 38 and the shearing section (indicated by arrow A) will, because of the tension of the spring 29, again be moved into an open non-shaving position as shown in Fig. 1.

One of the most important features of this invention is my stem structure. It is this form of structure that eliminates the present type of actuating elements extending from the motor (through specially arranged openings located at the roof portion of the motor compartment of the handle which forms the seat for the shearing section), of the ordinary type electric shavers for engaging the reciprocatory members of the shearing section for shaving purposes. It is through these openings that the sheared hair flow from the shearing section into the motor compartment while shaving clogging up the motor. Particular attention is called to the form or mode of structure and co-operation of my stem structure (carried by the carrier of my assembled shearing section) and my motor which is positioned within the motor compartment. Note, there are no openings in the floor of the shearing seat forming the roof of the motor compartment in my handle structure, and there are no actuating elements extending from my motor through the seat floor for direct engagement with the movable shearing members of the shaving units through such roof portion for direct engagement with the movable shearing members of the shaving units; with this in view I am now going to describe my novel stem structure.

My novel stem structure comprises a headed end portion indicated by arrow C, a center section indicated by arrow D and an angularly shaped end portion indicated by arrow E. The wall portions 21 and 22 of the carrier arrow B are provided with openings 21' and 22'. The slotted portion 51 is positioned through the opening 21' and the slotted portion 52 is positioned through the opening 22'; the center section (indicated by arrow D) is then positioned between the two end portions (arrows C and E) and secured thereto having its stem elements 1, 2 and 3, placed within the openings K and L of the shearing units *a*, *b* and *c*, and having its corners 53 and 54 positioned within the slots of the portions 51 and 52. A rivet or screw element 55 is then placed within openings in the walls of the slotted end portion 51 and the corner 53, and also within openings in the walls of the slotted end portion 52 and the corner 54, in a manner, for example, as shown in Fig. 9.

The above-mentioned end portion (indicated by arrow E) is provided with a slitted extension 52' having outwardly curved end portions forming an enlarged end opening 52''.

The motor 5a has no actuating elements, but instead, such motor is provided with a rotatable shaft *m* having an offset portion *o* terminating into a straight shoulder, extension or pin *n*. This pin *n* forms an eccentric element with respect to the shaft *m*. When the assembled shearing section arrow A is placed upon the receptacle or handle seat in position for shaving purposes, the slitted extension 52' will enter the slot S of the flange 12 and the enlarged end portion 52'' will engage the pin *n* leading same into the slot 52'. And upon inserting the plug 6' into an electric socket, and moving the starter 6a in the desired direction, the shaft *m* will rotate and the pin *n* will move the slotted extension 52' from side to side, pivoting or turning the stem structure within the open-

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ings 21' and 22' back and forth, causing the upper end portions 57 of the stem elements 1, 2 and 3 each to move its respective movable shearing member.

It is naturally understood, that while the pin *n* is holding the stem elements in normal position the upper end portion 57 of such stem element will in turn hold the movable shearing member *f* centrally located within the stationary shearing member *e*, but when the pin *n* is being moved towards the position as indicated by the dotted lines 58 the stem structure will move or turn within the openings 21' and 22' and bring their upper end portions 57 into a direction as indicated by the dotted lines 59 (see Fig. 3) moving the inner movable shearing member *f* within the stationary shearing member *e* towards one end portion of such stationary member, as indicated by the dotted lines 61; and when the pin *n* is being moved into opposite direction, as indicated by the dotted lines 62 the stem structure will move or turn within the openings 21' and 22' and bring the upper end portions 57 into opposite position, as indicated by dotted lines 63 moving the inner movable shearing member *f* towards the opposite end portion of the stationary shearing member *e* as indicated by the dotted lines 64. Thus the rotatable shaft *m* operates the stem structure arrow D for moving the reciprocatory member *f* within the stationary shearing member *e* for shaving purposes. It should be noted that when the shearing section is placed upon the handle seat in position for shaving purposes, the flange 25 and the wall portion 21 will cover the slot S so that there will be no opening for sheared hair to get into the motor compartment.

It is naturally understood that the disclosures herein are for illustrative purposes only and not for limitation purposes; for example, if desired the carrier may be eliminated and the individual units *a*, *b* and *c* may be secured to each other by any other suitable means, and the outer units *a* and *c* may each be provided with downwardly extending wall portions 66 and 67 having openings 68 and 69 for carrying the stem structure 71 (Fig. 11).

The assembled shaving units *a*, *b* and *c* may each be of a type provided with chambers having open end portions 77. These units when in closed shaving position have their open end portions 77 covered by the wall portions 88 (see Fig. 1), to prevent the escape of sheared hair while shaving, but when moved into open or non-shaving position these open end portions 77 move away from the wall portions 88 and become exposed for cleaning purposes, thereby eliminating the necessity of providing specially built closure elements for such open end portions.

The stationary shearing member *e* is provided with the usual tensioning means 72 for frictional engagement of the movable shearing face 73 with the stationary shearing face 74 for shaving purposes.

It will be seen that the opening K of the stationary shearing member is provided with a bevelled or enlarged end portion or opening K' and the opening L of the movable shearing member is provided with a bevelled or enlarged end portion or opening L'; these bevelled end portions or openings K' and L' form leaders for leading the upper portion 57 of the stem structure into desired position within its respective opening.

With respect to the cable cord 6 it will be seen, that my handle 5 is provided with a compartment having an opening 75 housing my cable cord 6, so that when it is desired to use the instrument for shaving purposes, the plug 6' may be attached to a source of power, and the cable cord 6 is then pulled out of the opening 75 to the desired length; and when through shaving, the plug 6' is then disconnected from its source of power and, by pressing the knob 76, the cord 6 will automatically be drawn into its compartment, thereby shielding such cable cord 6 against possible damage.

From the above it is evident that my present invention

teaches an entirely new form of structure in the art of making electrically operated shaving implements. The novel form, or manner, in which my shaving implement is constructed, the novel feature of having my shearing section carrying the stem structure for operating the reciprocatory shearing section, whether it be a single assembled unit or a plurality of assembled units, whether secured to a carrier or secured to each other; the combination of a motor, without actuating elements, co-operating with the stem structure carried by the shearing section for operating the movable or reciprocatory shearing member; the new combination of parts and sections combined in a new and heretofore unknown manner, provides a shaving instrument constructed on an entirely new principle. The manner in which provision is made, by means of my non-perforated floor or partition, for the protection of the motor, and also the provision for the protection of the cable cord, establishes an entirely new and modern principle in the construction of electric shavers. It creates an electrically operated shearing device of a new and unique design, provided with practical and outstanding features, performing new functions unknown heretofore, capable of performing its shaving operations to the fullest extent of its structural shearing ability, rendering a complete, clean and precise shave in a comfortable and pleasing manner to the user. It will therefore be seen that my invention, herein illustrated and described, provides a practical and useful shaving-implement, of a novel structure and patentable nature, solving the most vexing problems in the electric razor industry. It can be utilized to great advantage by the user and is therefore believed to be of great commercial value.

It will therefore be seen, that I have invented and perfected a shaving-implement provided with a removably mounted shearing section of a new and unique design and structure, a shaving-implement which is practical, useful and therefore of commercial value, and although I have shown certain preferred forms or illustrations in order to explain and describe the novelty of my invention, yet, by showing such structure, I do not, by any means, limit myself to these structures, nor to the terms used in describing same, as they are for illustrative purposes only. Various suggestions and changes of structure may be resorted to, and I desire it to be understood that I have same in mind when showing and describing this invention, and seek protection by Letters Patent. And although I have mentioned in describing this invention of what material certain parts may be made, how they may be formed, shaped or styled and how they may be assembled, yet I desire it to be understood that this structure, or parts thereof, may be made of any suitable material, and shaped, formed, styled or arranged in any desirable manner, and assembled in any convenient way so that the parts may be easily taken apart, removed, cleaned, replaced and reassembled, and that various changes in detail may be resorted to without departing from the spirit of this invention.

I claim:

1. A removable shearing section for a shaving implement comprising a stationary shearing member and a cooperating movable shearing member and a stem element, a partition, said stem element carried by said shearing section having its upper portion engaging the said movable shearing member to operate said shearing section for shaving purposes, a removable pivot, said pivot connecting said shearing section to said partition, said pivot providing hingeable means for said shearing section to be hinged away from the said partition and to be hinged back towards said partition, said partition adapted to be secured to a handle for holding said shearing section in position for shaving purposes, said partition underlying said shearing section for storing hair sheared by the said shearing members, and a tensioning spring for holding said shearing section in desired position with respect to said underlying partition.

2. A shaving implement comprising a handle and a shearing section and stem elements, said handle having a pair of upwardly projecting spaced apart wall portions, a seat between said wall portions, said shearing section comprising a plurality of individually assembled shearing units associated with each other, each of said units comprising a stationary shearing member having a chamber and a cooperating shearing member operable within said chamber, said chambers having open end portions, said stem elements carried by said section for operating said cooperating shearing members for shaving purposes, hingeable means securing the said shearing section to said seat having the said wall portions covering the said open end portions, said shearing section adapted to be hinged out of said seat and away from said wall portions for having the said open end portions uncovered to remove sheared hair therefrom.

3. A shaving implement comprising a handle having upwardly projecting wall portions and a seat between such wall portions and a removable shearing section positioned upon said seat, said shearing section comprising at least one complete shaving unit, said unit having stationary shearing means and movable cooperating shearing means, said stationary shearing means having a chamber, said chamber having open end portions, a stem element, said stem element carried by said shearing section for operating said movable shearing means, hingeable means connecting said shearing section to said seat, said shearing section movable between said wall portions for having such wall portions covering the said open end portions while in shaving position and for having such end portions uncovered when hinged out of said shaving position.

4. A shearing section for a shaving implement to be secured to a handle for shaving purposes, said shearing section comprising a carrier having individually assembled shearing units secured thereto, a receptacle having a non-punctured floor, said carrier pivotally connected to the said receptacle having the said floor underlying the said shearing section for storing thereon hair sheared by said individual shearing units, said receptacle having means for being secured to said handle, said shearing section being movable from the said receptacle without removing such receptacle from the said handle.

5. As a new article of manufacture, an assembled shearing section for a shaving implement, said shearing section comprising a carrier having individually assembled shearing units positioned upon its upper face, a receptacle having a non-punctured floor, means pivotally securing said receptacle to one of the side portions of said carrier having its non-punctured floor underlying the said shearing section for storing thereon hair sheared by said individual units, said receptacle and the said shearing section forming an assembled structure, said pivotal connection providing hingeable means for said carrier to be hinged to and from said receptacle, said receptacle having means for being secured to a handle for holding said shearing section in position for shaving purposes, said connection being disconnectable for the removal of the said carrier from said receptacle while such receptacle is secured to said handle.

6. As a new article of manufacture, an assembled shearing section to be secured to a handle for shaving purposes, said shearing section comprising a carrier having an open floor, individually assembled shearing units, said units secured individually to the upper portion of said floor, a stem structure, said stem structure carried by the said carrier, said stem structure positioned underneath the said units for engaging and operating such units for shaving purposes, a receptacle, having a non-punctured floor, said receptacle secured to said carrier having the said non-punctured floor underlying the said shearing section for storing thereon hair sheared by said shearing units, said shearing section and the said receptacle forming an assembled structure, said receptacle

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having means for being secured to said handle to hold said shearing section in position for shaving purposes, said shearing section to be removed from the said receptacle without removing the said receptacle from the said handle.

7. A shearing section for a shaving implement comprising a carrier having an open floor and having a plurality of individually assembled shearing units secured to the upper face of said floor, a stem structure, said stem structure carried by the said carrier, said stem structure positioned underneath the said upper face having portions thereof extending through said open floor for engaging and operating said shearing units for shaving purposes, a receptacle having a non-punctured floor, said receptacle secured to said carrier having the said non-punctured floor underlying said open floor for storing thereon sheared hair passing through such open floor, said carrier and the said units and said stem structure forming a unitary structure, said unitary structure and the said receptacle forming an assembled structure, said receptacle having means for being secured to a handle for holding said shearing section in position for shaving purposes, said unitary structure being removable from the said receptacle without removing such receptacle from the said handle.

8. A removable shearing section for a shaving implement, said shearing section comprising a carrier having a floor provided with an enlarged opening, a plurality of individually assembled shearing units, said units secured to the upper face of said floor, a stem structure having a plurality of upwardly extending portions, said stem structure carried by the said carrier, each of said units comprising a stationary shearing member having a co-operating movable shearing member, said stationary member comprising a base portion and a perforated shearing wall, said base portion having a through opening, each of the said extending portions positioned through the said enlarged opening of said floor and through the opening of one of said base portions engaging and operating its respective movable shearing member for shaving purposes, the said carrier and the said shearing units and the said stem structure forming a unitary structure, a receptacle having a non-punctured floor, said receptacle having means for being secured to said carrier, said non-punctured floor underlying the said openings for storing sheared hair passing therethrough during the shaving operation of said units, said unitary structure and the said receptacle forming an assembled structure, said receptacle having means for being secured to a handle for holding said shearing section in position for shaving purposes, said unitary structure being removable from said receptacle without removing the said receptacle from the said handle.

9. A removable shearing section for a shaving implement, said shearing section comprising a carrier having a through opening within its floor, said opening having wall portions extending below the upper face of said floor, said wall portions having openings, individually assembled shearing units, said units secured to said upper face of said floor, a stem structure, said stem structure carried by the openings of said wall portions, portions of said stem structure positioned within the opening of said floor and extending therefrom for engaging and operating said units for shaving purposes.

10. A removable shearing section for a shaving implement, said shearing section comprising a carrier having a floor portion, said floor having an upper face and an under face, said floor having a through opening, individually removable assembled shearing units, said units secured to the said upper face of said floor, said under face having downwardly extending wall portions, each of said wall portions having a through opening, a stem structure, said stem structure carried by the openings of said wall portions, the upper portions of said stem struc-

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ture extending through the opening of said floor for engaging and operating said units for shaving purposes.

11. A removable shearing section for a shaving implement comprising a carrier, said carrier having a floor, said floor having an opening, a plurality of individually assembled shearing units, said units secured to the upper face of said floor, the under face of said floor having two downwardly projecting portions each having a loophole, a stem structure, said stem structure carried by the said loopholes, the upper portions of said stem structure extending through the opening of said floor for engaging and operating the said units for shaving purposes.

12. A removable shearing section for a shaving implement comprising a carrier having a floor portion, said floor having a centrally located opening, a completely assembled shearing unit, said unit secured to the upper face of said floor, said carrier having two spaced apart downwardly projecting facing wall portions extending below said upper face, each of said facing wall portions having an opening, a stem structure, said stem structure comprising a center section and two end portions, one of said end portions positioned within the opening of one of said wall portions and the other of said end portions positioned within the opening of the other of said wall portions, each of said end portions united with one of the lower end portions of said center section for holding a portion of said stem structure positioned within said centrally located opening to engage the said shearing unit for operable purposes.

13. A structure as defined in claim 12, wherein the said end portions are each connected individually to one of the lower end portions of the said center section of said stem structure by means of a pin.

14. A structure as defined in claim 12, wherein the said end portions and the said lower portions of said center section of said stem structure are each provided with openings and wherein such end portions are each secured to the said center section by means of a removable element positioned within the said openings of the said stem structure.

15. A structure as defined in claim 12, wherein the said end portions are secured to the said center section of the said stem structure by means of a mortise-and-tenon joint.

16. A structure as defined in claim 15, wherein aligned openings are formed through said mortise-and-tenon joint portions and one of said openings is provided with a screw-thread for holding therein a screw-threaded element.

17. A removable shearing section for a shaving implement comprising a carrier having a floor portion, said floor portion having a centrally located through opening, a shaving unit, said unit secured to the upper face of said floor, said carrier having two spaced apart downwardly projecting facing wall portions extending below said upper face, each of said facing wall portions having an opening, said openings being in alignment with each other, a stem structure, said stem structure comprising a center section and two separate end portions, one of said end portions having an enlarged head section and the other of said end portions having a downwardly extending section, said end portions each positioned individually within one of the openings of the said facing wall portions and secured to the lower portion of the said center section of said stem structure to hold a portion of such stem structure positioned within said centrally located opening for engagement with the said shearing unit for operable purposes.

18. A structure as defined in claim 17, wherein the said downwardly extending section is provided with a slitted portion.

19. A shaving implement comprising a handle and a removable shearing section, said shearing section comprising a carrier having a perforated floor, individual

shearing units, said floor having an upper face for having at least one of said units secured thereon, a stem structure, said carrier having wall portions extending below said upper face, each of said wall portions having an opening for carrying therein a portion of said stem structure, a portion of said stem structure positioned through the said perforated floor and extending therefrom to engage and operate the said shearing unit, a receptacle, said receptacle secured to said carrier, said receptacle having a non-punctured floor for underlying the said carrier to store thereon sheared hair passing through the said perforated floor while shaving, said unit and the said carrier and said stem structure forming a unitary structure, the said unitary structure and the said receptacle forming an assembled structure, means for securing the said receptacle to the said handle for holding thereon the said unitary structure for shaving purposes, said unitary structure being removable from the said receptacle without removing such receptacle from the said handle.

20. A shaving implement comprising a handle and a removable shearing section, said shearing section comprising a carrier having a floor, said floor having an opening, completely assembled shearing units, said floor having an upper face for having said units secured thereto, the underface of said carrier having downwardly extending wall portions, a stem structure, said wall portions having means for carrying the said stem structure, a receptacle comprising a non-punctured floor, said receptacle secured pivotally to said carrier having said non-punctured floor underlying the said opening for receiving therethrough hair sheared by said shearing units, said units and said carrier and the said stem structure forming a unitary shearing section, said unitary shearing section and the said receptacle forming an assembled structure, screw threaded means, said screw threaded means securing said receptacle to the said handle for holding the said shearing section thereon in position for shaving purposes, said unitary shearing section being removable from the said receptacle without removing such receptacle from the said handle.

21. A shaving implement comprising a handle and a removable shearing section, said shearing section comprising a carrier having a floor portion, said floor portion having a through opening, individually assembled shearing units, said floor having an upper face for having said units secured thereto, said carrier having wall portions located below the said upper face, a stem structure, said wall portions provided with means for supporting said stem structure to engage and operate the said shearing units, a receptacle, said receptacle having a non-punctured floor and flange portions, said receptacle secured to said carrier having said non-punctured floor underlying said through opening to receive therethrough hair sheared by said shearing units, certain of said flange portions having through openings, said handle having screw-threaded openings, screw-threaded members, said members individually positioned within the openings of said flange portions to engage rotatably the said screw-threaded openings for securing said receptacle to the said handle and covering the said openings of such flange portions, said carrier and said units and the said stem structure and the said receptacle forming an assembled structure, said units and said stem structure and said carrier and the said receptacle being removable from each other without removing the said receptacle from the said handle.

22. A shaving implement comprising a handle and an assembled removable shearing section, said shearing section comprising a carrier and a stem structure and individually assembled shearing units and a receptacle having a non-perforated floor, said individual shearing units secured to the upper portion of said carrier and the said stem structure secured to the lower portion of said carrier for engaging and operating said shearing units, said receptacle secured pivotally to said carrier having the

said non-perforated floor underlying the said shearing units, said receptacle secured to said handle, means within said handle for moving said stem structure to operate said shearing units for shaving purposes, said assembled shearing section adapted to be hinged out of its position to uncover the said receptacle for the removal of sheared hair from such receptacle and to be hinged back into shaving position and to cover the said receptacle, and locking means for holding said assembled shearing section in desired position for shaving purposes.

23. A structure as defined in claim 22, including spring means for holding said assembled shearing section in desired hinged open position.

24. A structure as defined in claim 22, wherein said locking means comprises a spring-latch connection between said assembled shearing section and the said handle.

25. A structure as defined in claim 22, wherein the means in said handle comprises an electrically operated motor, and a separable connection between said motor and the said stem structure.

26. A structure as defined in claim 22, wherein the assembled shearing section is hingeable transversely of said handle.

27. A shaving implement comprising a handle and an assembled removable shearing section, said shearing section comprising a carrier having individual shearing units secured thereto and simultaneously therewith carrying a stem structure for operating said shearing units, said units each provided with a chamber opening through its respective end portions, said handle having a seat and wall portions extending above said seat, said assembled shearing section secured to said seat by pivotal means, said wall portions covering the open end portions of said chambers while said shearing section is in normal shaving position upon the said seat, said assembled shearing section adapted to be hinged out of its normal shaving position for moving the said units away from said wall portions to uncover the said open end portions for the removal of sheared hair from said chambers, said shearing section adapted to be hinged back into normal shaving position for shaving purposes.

28. A shaving implement comprising a handle and an assembled removable shearing section, said shearing section comprising a carrier having at least one shearing unit secured thereto and simultaneously therewith carrying a stem structure for operating said shearing unit, said unit having a chamber opening through its respective end portions, said handle having a seat and wall portions extending above said seat, a receptacle having a non-perforated floor underlying said carrier, said shearing unit adapted to be secured to said seat having the said end portion of said chamber covered by said wall portions, said shearing unit adapted to be removed from said seat for the removal of sheared hair therefrom, said unit adapted to be placed back into its seat in position for shaving purposes.

29. A shaving implement comprising a handle having a motor compartment and wall portions and a seat between said wall portions and an assembled removable shearing section positioned upon the said seat, said shearing section comprising a carrier and a stem structure and a shearing unit and a receptacle having a non-perforated floor, said shearing unit secured to the upper portion of said carrier and said stem structure secured to the lower portion of said carrier for engaging and operating said shearing unit, said unit having a chamber opening through its respective end portions, said carrier secured pivotally to said receptacle overlying and covering the said non-perforated floor, said receptacle secured to said seat, said assembled shearing section movable between said wall portions for having such wall portions covering the said end portions of said chamber while such shearing section is in normal shaving position, said shearing section adapted to be hinged out of normal shaving position into

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a non-shaving position uncovering its open end portions and the said non-perforated floor for the removal of sheared hair therefrom, said shearing section adapted to be hinged back into normal shaving position upon the said seat for shaving purposes.

30. A shaving implement comprising a handle having a motor compartment and a removable shearing section, said shearing section comprising a stationary shearing member and an inner movable shearing member, said stationary member comprising a base portion having a centrally located opening, a stem structure, the wall portions of said base section having openings, portions of said stem structure positioned within said openings and carried by the said wall portions having an upwardly projecting portion of such stem structure located within said centrally located opening and engaging the said inner shearing member for operable purposes, a receptacle comprising a non-punctured floor, said non-punctured floor underlying the said shearing section and covering the said motor compartment, and means associated with said handle for moving said stem structure to operate said shearing section for shaving purposes.

31. A shaving implement comprising a removable shearing section and a handle, said handle having a motor compartment, said shearing section comprising a plurality of shaving units secured to each other, the outer side wall portions of said shearing section having openings, a stem structure, portions of said stem structure positioned within said openings and carried by the said outer side wall portions having spaced portions of such stem structure positioned individually within each of said units for operable purposes, a receptacle comprising a non-perforated floor, said non-perforated floor covering the said motor compartment and underlying the said shearing section, and means within said handle for moving said stem structure to operate said units for shaving purposes.

32. A shaving implement comprising an assembled removable shearing section and a handle having a seat for said shearing section, said handle having an open motor compartment, a motor within said compartment, a cable cord connected to said motor and extending outwardly therefrom, said shearing section comprising a carrier and a stem structure and at least one shearing unit and a receptacle having a non-punctured floor, said carrier having an open floor, said shearing unit secured to the upper face of said floor, said carrier having side wall portions, said side wall portions having means for supporting said stem structure thereon, a portion of said stem structure positioned through said floor opening and in operable engagement with said shearing unit, said carrier secured to said receptacle, said receptacle secured to said seat having the said non-punctured floor covering said open motor compartment and underlying said open floor to block entrance of sheared hair into said compartment, a separable connection between said motor and said stem structure, said cord adapted to be connected to a source of power to operate said motor for moving said stem structure to operate said unit for shaving purposes.

33. A shaving implement comprising a handle and a removable shearing section, said section comprising sta-

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tionary shearing means and movable shearing means, a stem structure carried by said shearing section, said stem structure having an extension, a motor within said handle, said motor having a rotatable element, said handle having a seat, said seat comprising an imperforated box-shaped floor having flange portions, an opening within one of said flange portions, said extension adapted to be positioned within said flange opening to engage said rotatable element, said rotatable element adapted to move said extension for pivoting said stem structure to operate said movable shearing means for shaving purposes.

34. A shaving implement comprising a handle and a removable shearing section, said shearing section comprising stationary shearing means and movable shearing means, a stem structure carried by said shearing section, said stem structure having a slitted extension, a motor within said handle, said motor having a rotatable shaft, said shaft having a pin, said handle having a seat for said shearing section, said seat comprising a non-perforated box-shaped floor having side flanges, an opening within one of said side flanges, said slitted extension adapted to be positioned within said opening to engage the said pin, said pin adapted to move the said slitted extension for pivoting said stem structure to operate said movable shearing means for shaving purposes.

35. A shaving implement comprising a handle and a removable shearing section, said shearing section comprising a carrier having a plurality of individually removable shearing units secured thereto, each of said units comprising a stationary shearing member and a movable shearing member, each of said members having floor portions, each of said floor portions having openings, a stem structure carried by said carrier, said stem structure having a plurality of stem sections and a slitted extension, the upper end portions of the stem section of said stem structure each being positioned individually within the openings of one of said individual units, a motor within said handle, said handle having a seat for said shearing section, said seat comprising a non-perforated box-shaped floor having side flanges, one of said side flanges having an opening, said motor having an eccentric pin, said slitted extension adapted to be positioned within said opening of said flange portion for engaging said eccentric pin, said pin adapted to move said slitted extension for moving said stem structure to cause said upper end portions of said stem sections to operate said movable shearing members for shaving purposes.

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