

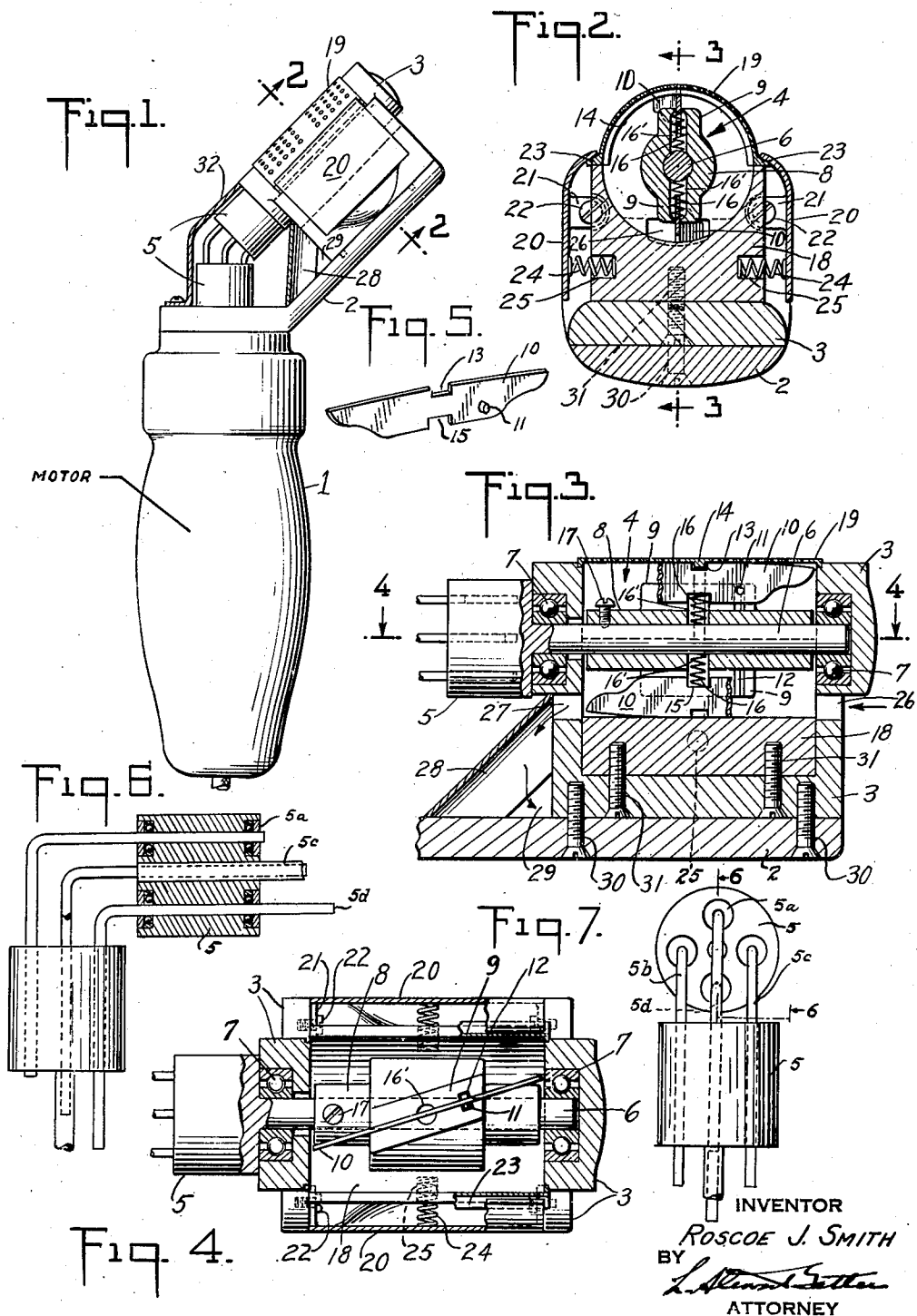
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ELECTRIC SHAVER

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ELECTRIC SHAVER

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3 Claims. (Cl. 30—43)

It is an object of my invention to provide an electric shaver which will have the following advantages over prior art devices:

a. An angulated head adapted to fit a shaving angle without visual obstruction and thus be far more adapted for the user.

b. A multiple blade shaver with resulting increase in speed or shorter time of shaving.

c. An inexpensive positive form of transmission.

d. A self sharpener for the blades.

e. A rotating rather than a reciprocating cutter, and with blades angulated to the axis of rotation and to the lateral axis of the cutter guard.

f. Removable blades.

These and other advantages will appear in the annexed specification and drawing, in which like numbers refer to like parts in the several views.

Referring to the drawing, Figure 1 shows a side elevation of the assembly, Figure 2 shows a section along the plane 2—2 of Figure 1. Figure 3 shows a section along the plane 3—3 of Figure 2 and Figure 4 shows a section along the plane 4—4 of Figure 3. Figure 5 shows a perspective view of one of the blades.

Figure 6 shows a section through a spindle housing of a slightly modified arrangement showing relative positions of the spindles on section line 6—6 of Fig. 7, and Figure 7 shows an end view of the same. These figures illustrate a preferred embodiment only of my invention.

Referring to the drawing in detail, at 1 is the motor and motor housing, 2 is a bracket for the shaving head support; at 3 is shown a bearing bracket and 4 is the cutter assembly. At 5 is shown the universal transmission of a non-gear type having spindles as shown. This flexible drive is similar to that disclosed in the French patent to Pierquet, 574,253. This type of drive provides means whereby a driving shaft can transmit power to another shaft at any angle up to 90° or more. It will appear that the Figures 6 and 7, show the relative position of the spindles designated 5a, 5b, 5c and 5d. 6 is the main blade support shaft and 7 are bearings for same. 8 is a sleeve for the shaft 6 and 9 is the shoulder on the sleeve 8. At 10 is shown blades mounted on the shoulders as shown and at 11 is the pro-

jection on the blades to position same in the sleeve and shoulder in the slot 12 in the shoulder 9. At 13 is a slot in the cutting edge of the blade 10, the latter being slightly curved as shown to fit as axially angulated under the guard of cover plate 19. This slot 13 clears the projection 14 on cover plate 19. At 15 is a slot in the inner edge of the blade 10 to give support for the spring 16. At 17 is shown set screw for sleeve 8; at 18 is illustrated the honing block and at 19 the cover plate or guard. 20 shows the side plates which are removable and have, at 21, supports for side plates and have, at 22, pivots for side plates. At 23 is the flange on the cover plate to fit against side plates, and at 24 the springs for side plates 20. At 25 are the holes in the honing block 18 for springs 24. At 26 and 27 are holes in the bearing bracket for cleaning.

It will appear that I have provided a pathway from 26 to 27 to 28 to 29 as shown by the arrows for the cut hair to be blown out. The operation of the razor is obvious.

Having thus described my invention, what I claim and desire to secure by United States Letters Patent is:

1. An electric shaver comprising a housing as a handle, having a motor therein, a shaft, a plurality of blades resiliently mounted on and driven in rotation by said shaft, a blade cover guard, said blade and said guard being in cutting relationship, a housing for said shaft and blade, a transmission means between said motor and said shaft adapted to provide an angulated spaced relationship between the axis of said motor and axis of said shaft.

2. A razor of the type claimed in claim 1, said blades angulated with respect to the axis of said shaft.

3. A razor as claimed in claim 1 having a universal transmission comprising a plurality of spindles, housings for the ends of said spindles, said transmission providing rotation of said shaft axis in the same general direction as the rotation of said motor axis, said spindles being free to move axially in their housings on both drive and driven side of said transmission.

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