April 3, 1951 F. T. EVANS 2,547,077

WATCH POCKET SHAVER

Filed Aug. 29, 1945 2 Sheets-Sheet 1

Fig. 1.

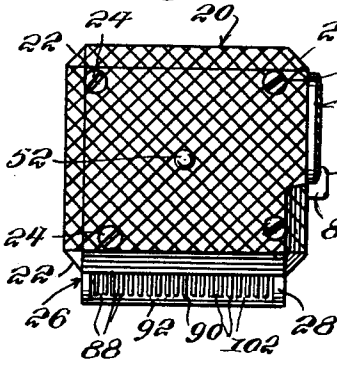


Fig. 2.

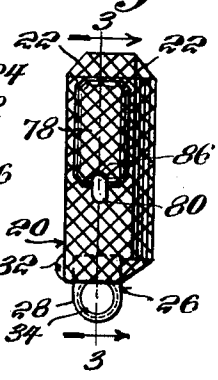


Fig. 5.

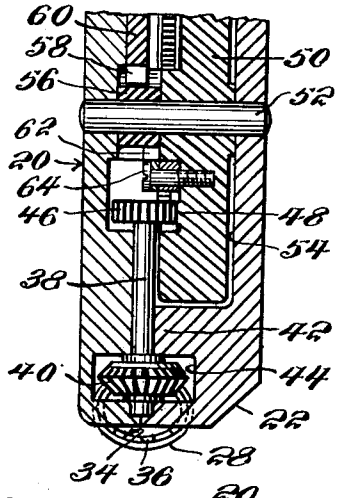


Fig. 3.

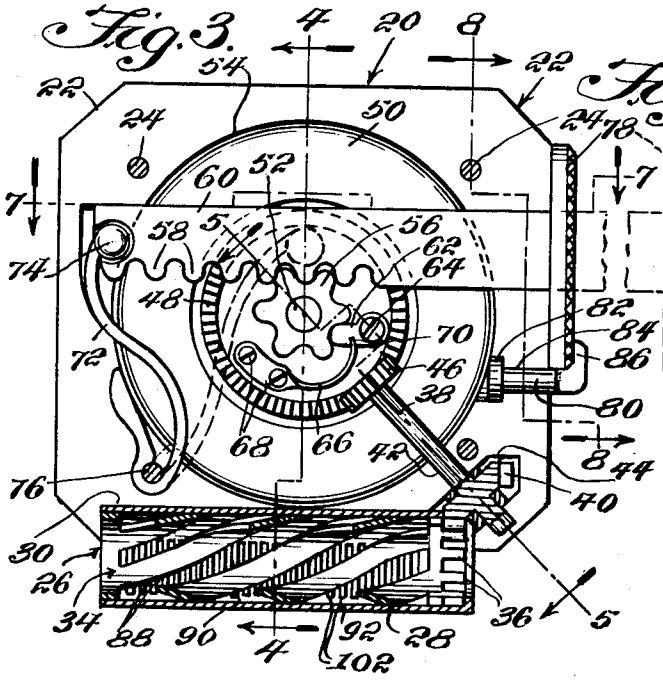


Fig. 4.

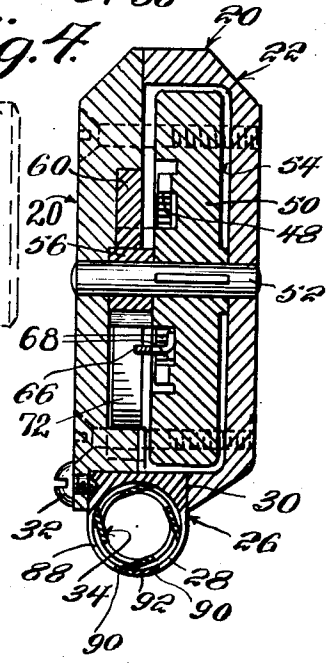
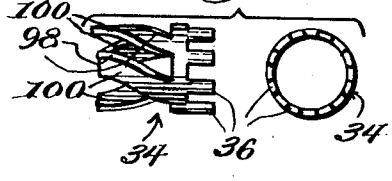


Fig. 6.



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April 3, 1951 F. T. EVANS 2,547,077

WATCH POCKET SHAVER

Filed Aug. 29, 1945 2 Sheets-Sheet 2

Fig. 7.

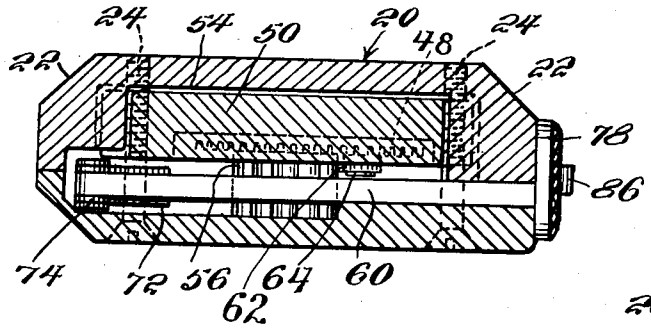


Fig. 8.

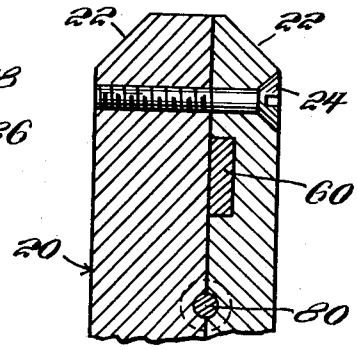


Fig. 9.

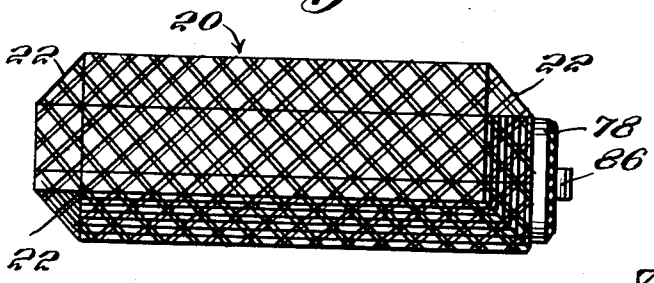


Fig. 11.

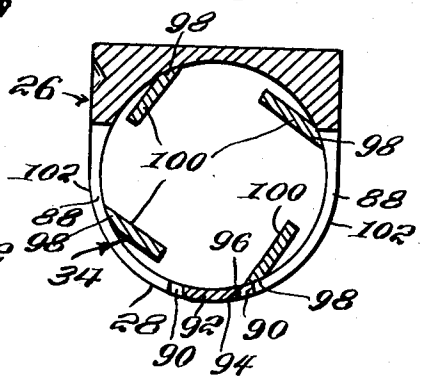
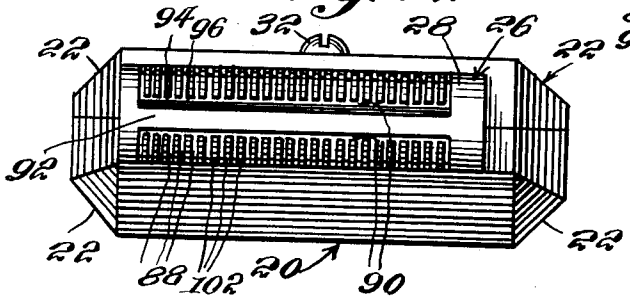


Fig. 10.



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WATCH POCKET SHAVER

Francis T. Evans, Fairfax, Va.

Application August 29, 1945, Serial No. 613,288

1 Claim. (Cl. 30—43)

1

This invention relates to a watch pocket shaver and the main object thereof is to provide a device that can be used by men in the service, and civilians to give a quick dry shave, where water and electricity are not available.

The invention embodies a device that can be carried in a small pocket such as a watch pocket, and that is available at all times.

Another object of the invention is to furnish a device that can be used by service men in the field, in barracks or on the train, by civilians in boarding houses, or the office where toilet facilities are limited or inadequate.

A further object of the invention is to provide a device that will not create static in the radio and that is about the same size as the usual cigarette pocket lighter.

A still further object of the invention is to provide a device that is simple in construction, inexpensive to manufacture and can be operated by the thumb and fingers of either hand.

With the above and other objects and advantages in view, the invention consists of the novel details of construction, arrangement and combination of parts, more fully hereinafter described, claimed and illustrated in the accompanying drawings in which:

Figure 1 is an elevational view of an embodiment of the invention.

Figure 2 is an end view thereof.

Figure 3 is a sectional view on the line 3—3 of Figure 2.

Figure 4 is a sectional view on the line 4—4 of Figure 3.

Figure 5 is a sectional view on the line 5—5 of Figure 3.

Figure 6 is a fragmentary detailed view of the cutter and one end thereof.

Figure 7 is a sectional view on the line 7—7 of Figure 3.

Figure 8 is a sectional view on the line 8—8 of Figure 3.

Figure 9 is a rear view of the device.

Figure 10 is a front view and

Figure 11 is an enlarged sectional view of the cutter.

Referring more in detail to the drawings the numeral 20 designates the body of the device which is substantially square in shape, having bevelled corners 22 and can be made of plastic or similar materials. The body is made in two sections secured in unit assembly by bolts 24.

The forward edge of the body 20 is provided with a removable cutting head 26, having the circular bottomed fixed cutter 28 and the head

2

26 is retained in the recess 30 in the body 20 by the stub screw 32, mounted for rotation in the cutter 28, is the circular spiral cutter 34, which is provided with a toothed gear end 36, which is operatively connected to the power supply shaft 38 by a bevel gear 40, fixed on one end of the shaft 38, which is journalled in the bearing 42, adjacent the recess 44 in which the gear 40 is rotatively mounted.

A gear 46 fixed to the other end of the shaft 38 meshes with the ring gear 48 of the power flywheel 50, which is keyed to the shaft 52, that extends transversely of the body 20 and the flywheel 50 rotates within the recess 54.

Loosely mounted over the shaft 52 is the power ratchet gear 56, which is actuated by meshing with the teeth 58 of the power thrust bar 60. Rotation of the flywheel 50 is caused by the gear 56 being locked in unison with the flywheel by the spring pressed dog 62 which is pivoted on the flywheel 50 by the pivot pin 64, the spring 66 is also secured to the flywheel by screws 63 and the free end thereof is received in the slot 70 in the dog 62. Thus when the thrust bar 60 is pressed inwardly the gear 56 causes rotation of the flywheel, but when the bar is thrust outwardly by the spring 72 the gear will rotate loosely on the shaft 52.

The spring 72 is secured at one end by a pin 74 to the bar 60 and at the other end by a pin 76 to the body 20.

The bar 60 is provided at its outer end with a button 78 and a latch 80 having the enlarged head 82 on one end is received in the opening 84 in the body 20. The other end of the latch 80 is provided with a finger 86, which can be moved into and out of engagement with the button 78 to latch the thrust bar 60 within the confines of the body 20.

As seen in Figures 3, 6, 10 and 11, the cutter 28 is provided with a plurality of narrow slots 88, which extend inwardly from the elongated slots 90 formed on the sides of the cutter bar 92 and form the teeth 102. The opposite edge 94 of the bar 92 is sharpened at 96, to coact with the sharpened edges 98 of the convolute blades 100 of the rotary cutter 34. Thus the blades assume somewhat the shape of the reel of a lawn mower; as seen in Figure 11, the sharpened edges coact to shear the beard which enters the elongated slots 90 of the cutter 28.

It will be understood that the inward movement of the thrust bar will operate the flywheel by means of the power gear and dog at a high rate of speed and this movement will continue

during the action of the thrust bar so that the rotary blade will continue to rotate at a high rate of speed continuously during the squeezing and return movement of the bar.

There has thus been provided a dry shaver that can be easily carried in the pockets of a garment, and one which will accomplish the objects of the invention.

It is to be understood that minor changes in the details of construction arrangement and combination of parts may be resorted to without departing from the spirit of the invention or the scope of the appended claim.

Having thus described the invention what is claimed as new and desired to be secured by Letters Patent is:

A device of the character described, comprising a sectional vest pocket size body, which is substantially square in cross section, a circular spiral rotary cutter head mounted at one side of said body, a toothed gear on one end of said cutter head, a shaft journalled centrally of said body, a flywheel keyed to said shaft for rotation within said body, a ring gear on said flywheel, a power supply shaft mounted in said body at an angle to said first shaft, a gear on one end of said power supply shaft meshing with the ring gear on said flywheel, a bevelled gear on the other end of said power supply shaft engaging the toothed gear on the end of said rotary cutter whereby said rotary cutter is actuated, a power ratchet gear loosely mounted on said first mentioned shaft within the ring gear of said flywheel, a spring pressed dog on said flywheel for locking said ratchet gear to said flywheel, a power thrust bar adapted to engage said ratchet gear for the manual rotation thereof, a spring means connected to said housing and the inner end of said bar to urge said bar outwardly of said housing into operative position and means on said body for retaining said thrust bar within said body against action of said spring in inoperative position.

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