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2,876,471

FIXTURE PROTECTING APRON FOR USE WHILE SHAVING

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2 Sheets-Sheet 1

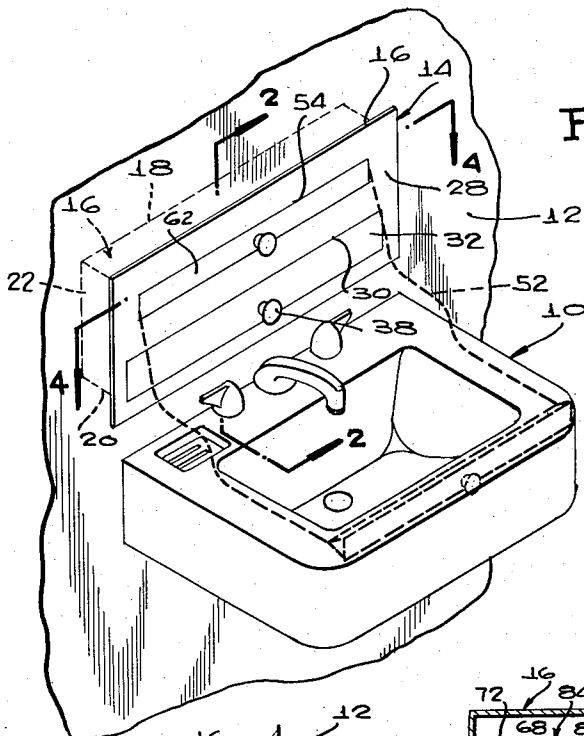


FIG. 1

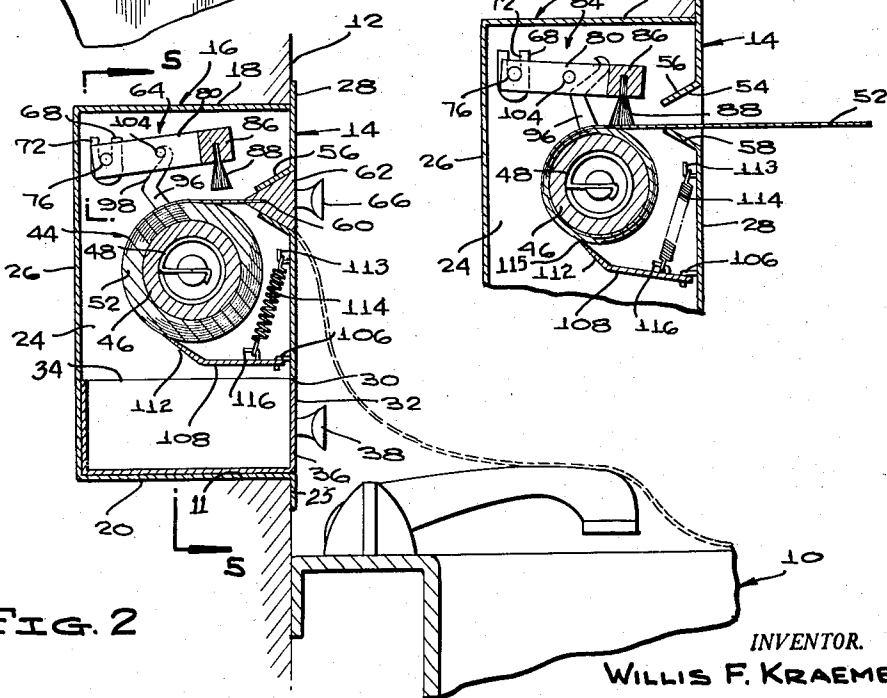


FIG. 2

FIG. 3

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FIG. 4

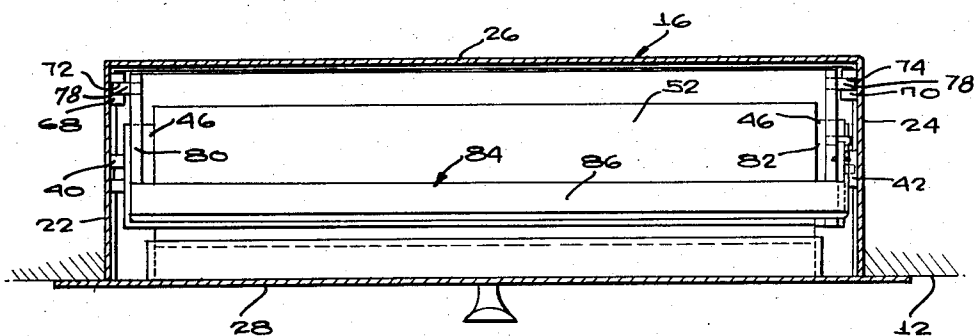
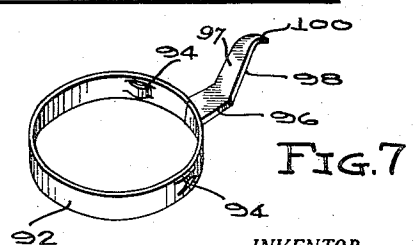
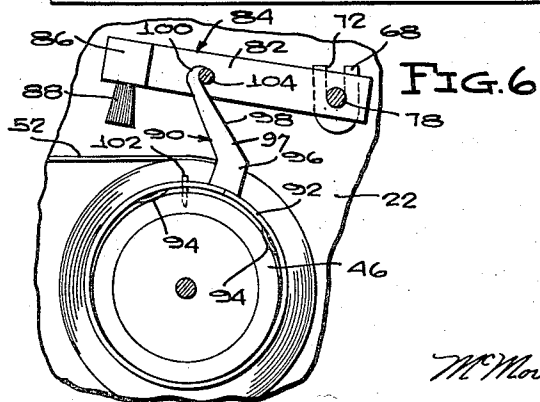
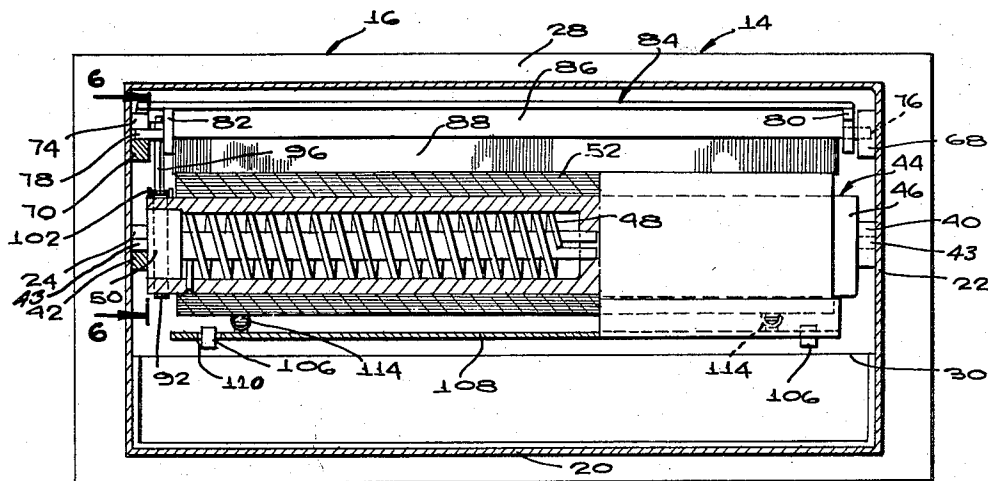


FIG. 5



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FIXTURE PROTECTING APRON FOR USE
WHILE SHAVING

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1 Claim. (Cl. 15—1)

This invention relates generally to sanitary appliances, and more particularly to a wall-mounted apron assembly for use while shaving, applying make-up, and the like operations, at a wash basin, dressing table or the like, for the purpose of catching beard-clippings, make-up, and the like, and thereby preventing soiling of a wash basin or dressing table therewith.

The primary object of the invention is to provide a practical and efficient apron assembly of the character indicated which may be either in the form of a permanent installation or in the form of an attachment, and which includes a self-winding roller in a housing, on which the apron is wound, a brush assembly in the housing for removing beard-clippings and the like from the apron, and scraper means for removing beard clippings from the apron and for dissipating static charges on the apron which would otherwise cause the clippings to adhere thereon, and an underlying receptacle for catching beard clippings removed by the brush assembly and scraper means.

A further object of the invention is to provide an apron assembly of the character set forth above which can be easily installed, and which can be made in attractive, rugged, and serviceable forms at relatively low cost, is easily used and maintained, and is highly satisfactory for the purpose intended.

These together with other objects and advantages which will become apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout the several views, and in which:

Figure 1 is a perspective view of an apron assembly of the present invention mounted in a wall above a wash basin, showing in dotted lines an extended operative position of the apron;

Figure 2 is an enlarged fragmentary transverse vertical sectional view taken substantially on line 2—2 of Figure 1, showing the brush assembly elevated prior to extension of the apron, and showing in phantom lines an extended position of the apron;

Figure 3 is a fragmentary vertical transverse sectional view similar to Figure 2, showing the depressed operative position of the brush assembly relative to the apron as the apron is being extended;

Figure 4 is an enlarged horizontal sectional view taken substantially on line 4—4 of Figure 1;

Figure 5 is a vertical longitudinal sectional view taken substantially on line 5—5 of Figure 2, portions being broken away and in section;

Figure 6 is an enlarged fragmentary vertical transverse sectional view taken substantially on line 6—6 of Figure 5; and

Figure 7 is an enlarged perspective view of the friction band and cam lever.

Referring in detail to the drawings, a wash basin is indicated generally at 10, which is suitably secured to a vertically disposed wall 12 beneath a wall mirror (not

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shown). An apron assembly of the present invention, generally designated 14, is mounted on the wall 12 above the basin 10, or equivalently above such as a dressing table (not shown).

The apron assembly 14 comprises a horizontally elongated, preferably rectangular housing 16 having top and bottom walls 18 and 20 suitably secured to end walls 22 and 24, a rear wall 26, and a front wall 28 having a peripheral mounting flange 25 for engaging the surface of the wall 12 around a conforming recess 11 on the wall on which the housing 16 is positioned.

In the lower part of the front wall 28 is a horizontally elongated opening 30 through which a drawer 32 is slidably positioned upon the bottom wall 20 of the housing 16. The drawer 32 has an open top 34 and a front wall 36 which closes the opening 30, the front wall 36 having thereon a handle 38 for removing the drawer 32 from the housing when filled with beard-clippings.

Journaled in aligned bearings 40 and 42 secured to the housing end walls 22 and 24 are pintles 43 of a roller assembly, indicated generally at 44, which is similar to a conventional window shade roller, and comprises a roller 46 and an internal spring assembly 48 having the usual clutch assembly 50 (not shown in detail), whereby the roller 46 is self-winding. A flexible beard clipping catching apron 52 has its inner end suitably secured to the roller 46 and when withdrawn or extended from the housing tightens or tensions the spring 48 in the usual manner, and a slight jerk on the apron frees the spring 48 to rewind the apron 52 on the roller.

In the front wall 28 of the housing and spaced above the opening 30 is a slot 54 which includes rearwardly converging upper and lower flanges 56 and 58 between which the apron 52 is withdrawn through the slot 54, see Figures 2 and 3. The apron 52 has suitably secured on its free end 60 a triangular cross section rod 62 which conforms to the converging flanges 56 and 58, see Figure 2, so that on full retraction of the apron the rod fills the space between and is stopped by the flanges 56 and 58 in the slot 54. A suitable knob 66 is provided on the rod 62.

Thus when a person using such as an electric shaver wishes to prevent beard clippings from falling on the wash basin 10, the apron 52 is extended to the position shown in Figure 1, so that clippings fall upon the apron 52 rather than on the basin.

Secured to the end walls 22 and 24 above and behind the roller 46 are upwardly opening U-shaped brackets 68 and 70 which pivotally receive in their slots 72 and 74, respectively, trunnions 76 and 78, respectively, on the rear ends of generally horizontal arms 80 and 82 of a brush assembly, indicated generally at 84, the arms 80 and 82 being located close to the end walls 22 and 24. The brush assembly 84 includes a longitudinally elongated brush head 86 suitably secured at opposite ends to forward end portions of the arms 80 and 82, said brush head having suitably secured thereto and extending downwardly therefrom bristles 88 or a strap of mohair, felt, or the like, which is engageable with the upper surface of the apron 52, see Figure 2, when the brush assembly 84 is depressed and the apron is withdrawn from the housing, as shown in Figure 3. When the apron 52 is retracted into the housing, the brush assembly 84 is elevated by automatically acting cam means, subsequently described herein, so as to prevent beard clippings on the apron from accumulating in front of the brush and being urged out of the slot 54 in the front wall of the housing. As the apron 52 is being withdrawn from the housing with the brush 88 engaged with the upper surface of the apron, any clippings which have accumulated on the apron are removed therefrom by the brush and deposited in the drawer 32.

For automatically elevating the brush assembly 84 as above described, there is included on one or both ends of the roller 46, cam means, indicated generally at 90, which comprises a friction ring 92 which is circumposed on an exposed end portion of the roller 46, said ring 92 having inwardly extending resilient gripping portions 94 which engage the periphery of the roller 46.

When the roller 46 is rotated as an incident to withdrawal of and retraction of the apron 52 from the housing, limited relative rotation between the roller 46 and the ring 92 is permitted. Secured to and extending laterally outwardly from the ring 92 is a cam lever 96 which has an angulated portion 97 having a rearwardly facing cam edge 98 and terminating in a rearwardly facing hook 100. Nails or pins 102 in the roller 46 at opposite sides of the ring 92 retain the ring 92 on the roller 46.

The cam means 90 also includes a cam pin 104 extending inwardly from an intermediate portion of one of the arms 80 and 82, as shown on the arm 82, said cam pin 104 being disposed in rearwardly spaced relationship to the brush head 86.

Thus when the roller 46 rotates in a counterclockwise direction, as the apron 52 is being retracted into the housing, the frictional engagement of the friction ring 92 on the roller 46, is sufficient to move the ring with the roller, so that the cam edge 98 engages under the cam pin 104 and raises the brush assembly to the elevated position shown in Figure 2, so as to permit the apron with beard clippings accumulated thereon to be wound on the roller 46. Rotation in a clockwise direction of the roller 46, as seen in Figure 3, causes the lever 96 to swing forwardly and downwardly with the cam pin 104 riding on the cam edge 98 so that the brush assembly subsides gravitationally until the bristles 88 engage the upper surface of the apron 52 and sweep accumulated beard clippings off the apron.

On the rear side of the front wall 28 of the housing above the opening 30 and below the roller assembly 44 are a pair of pivot lugs 106 which act as hinge means for the forward edge of a scraper plate 108 which extends along and beneath the roller 46. The plate 108 has slots 110, see Figure 5, receiving the pivot lugs 106 and providing for limited pivotal movement of the plate 108 about a horizontal axis. The plate 108 further includes an upwardly and rearwardly angulated rear edge portion 112, having a free edge 115, which is in engagement with the upper surface of the apron 52 on the roller 46 at the underside of the roller, see Figures 2 and 3, said

free edge 115 being effective both to scrape beard clippings from the apron and to dissipate static electric charges which may have accumulated on the apron due to its frictional engagement with the brush 88, and which might otherwise cause the beard clippings to adhere to the apron, the scraper plate 108 being of suitable electrically conductive material in order to perform the latter function.

Secured to and stretched between hooks 113 on the front wall 28 of the housing above the pivot lugs 106 and hooks 116 on the plate 108 are contractile springs 114 effective to constantly urge the scraping edge 115 of the plate 108 into engagement with the upper surface of the apron 52 on the roller 46.

The foregoing is considered as illustrative only of the principles of the invention. Since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, as fall within the scope of the appended claim.

What is claimed is:

In a protective apron assembly, a casing having top, bottom, end, front and rear walls, a self-winding roller extending between and journaled on said end walls, said roller being spaced from said top wall and said bottom wall, said roller having an upper side, a flexible apron having an inner end secured to the roller and wound thereon and leaving the roller at the upper side thereof, a horizontal longitudinal slot in said front wall on a level with the upper side of the roller through which the apron emerges forwardly from the housing, said apron having an outer end outside of the housing, an upward spring-pressed scraper blade mounted on said housing front wall on a level above said bottom wall, said blade having an upwardly angled free rear scraping edge engaged with the apron at the underside of the roller, said front wall having an opening therein below said scraper blade, and a drawer slidably seated on said bottom wall beneath the scraper blade for securing material scraped from the apron by the blade, said drawer being removable from the housing through said opening.

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