June 23, 1964 M. A. LA POLLO 3,138,414

SANITARY RACK FOR TOOTHBRUSHES AND DENTIFRICE

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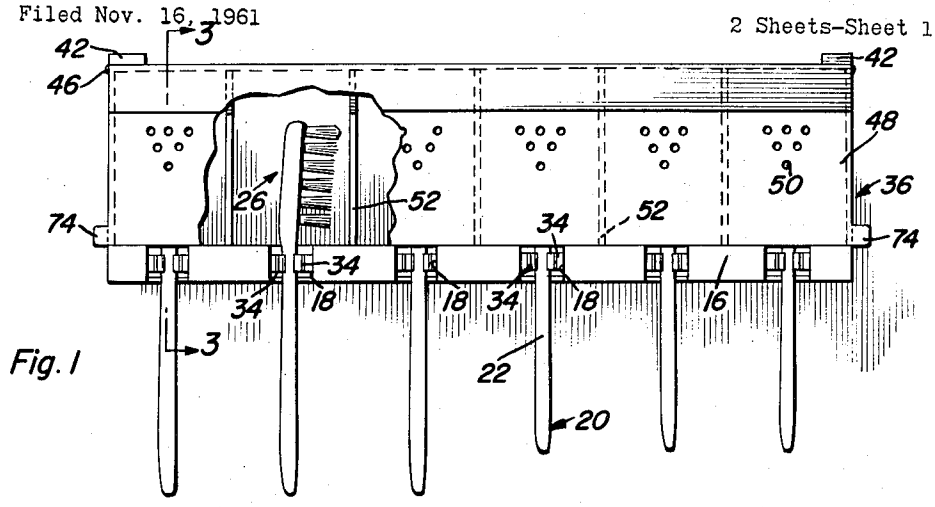



Fig. 1

Fig. 2

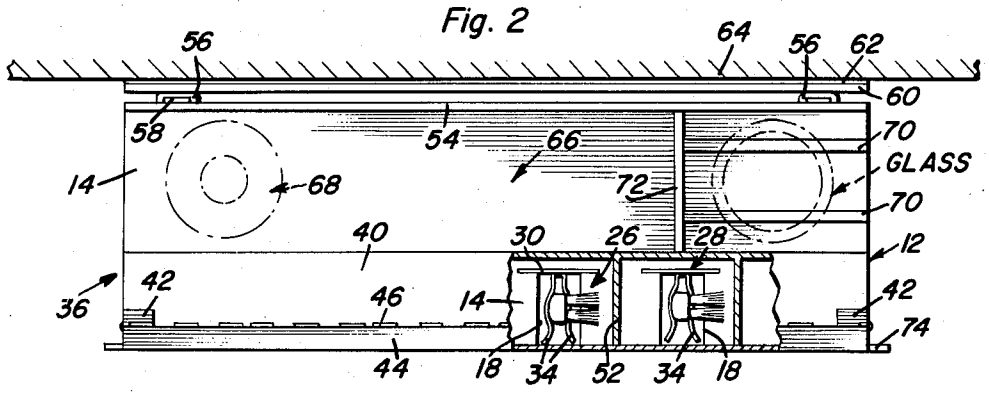



Fig. 3

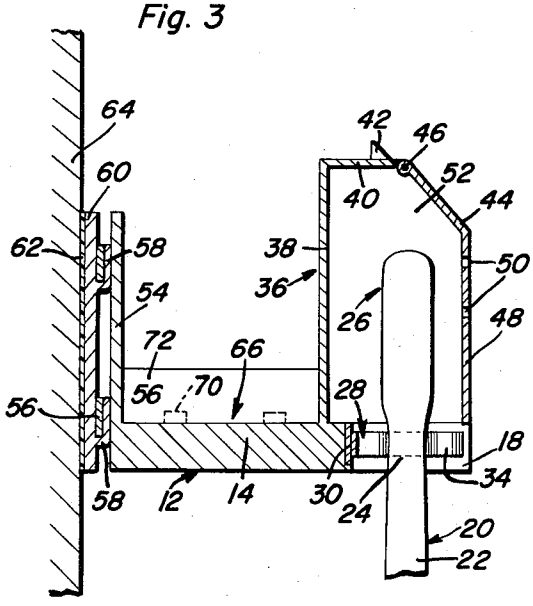



Fig. 4

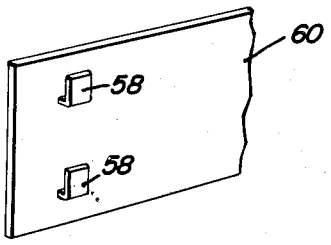
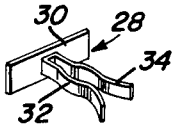



Fig. 5




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SANITARY RACK FOR TOOTHBRUSHES AND DENTIFRICE

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Fig. 6

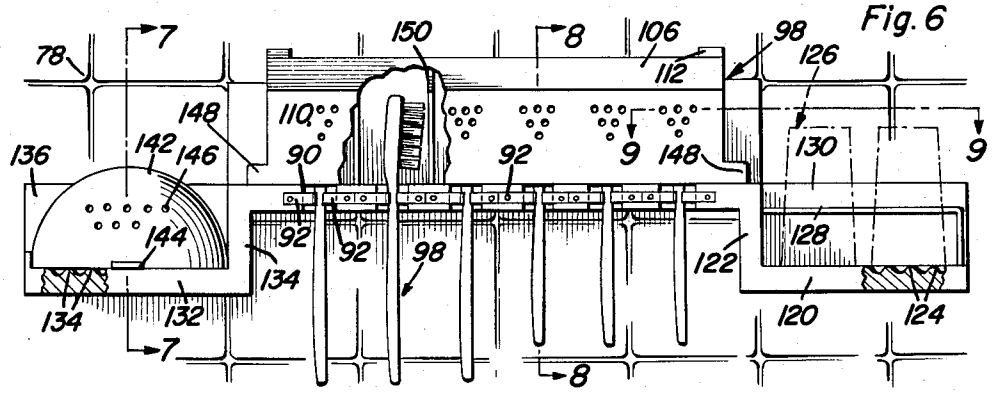



Fig. 7

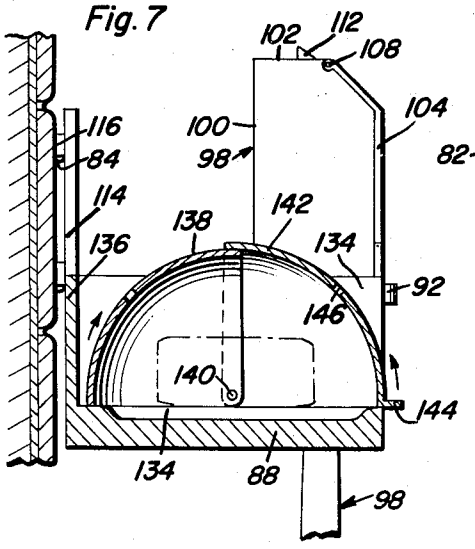



Fig. 8

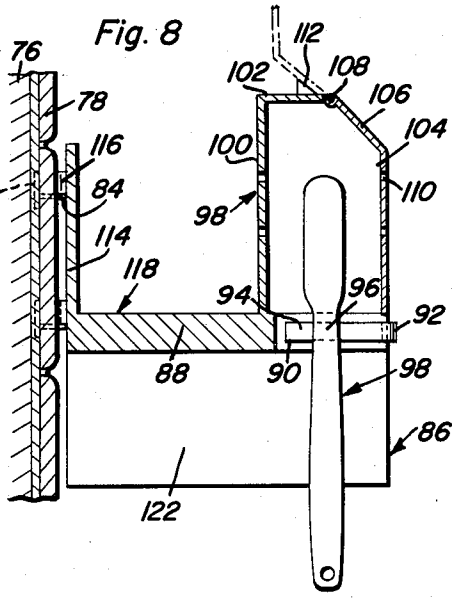



Fig. 9

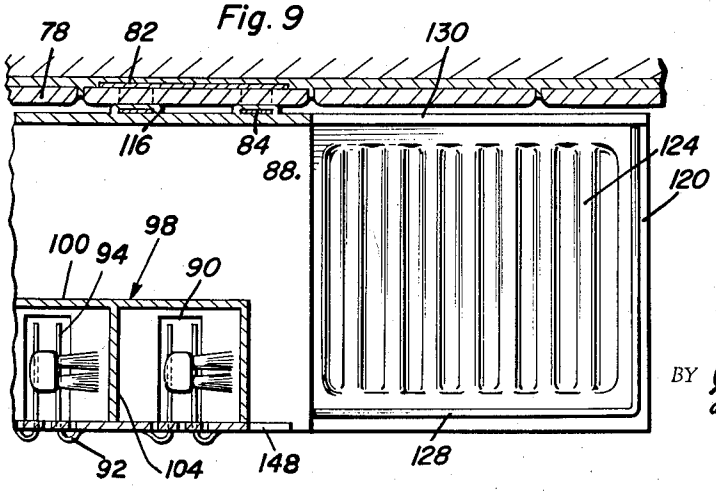
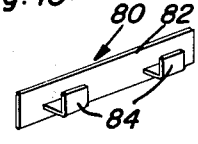



Fig. 10




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# 3,138,414
# SANITARY RACK FOR TOOTHBRUSHES AND DENTIFRICE

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5 Claims. (Cl. 312—207)

This invention relates to a multipurpose rack which is expressly designed and constructed for use in one's bathroom or a corresponding area and pertains to a novel structural adaptation which lends itself for use in accessibly supporting family toothbrushes, a drinking glass, cake of soap, tube of toothpaste or the similar small frequently used toilet articles.

Briefly, the invention herein disclosed comprises a simple, practical and economical device embodying facilities which are readily usable and offer the user results which are highly desirable. To the ends desired a shelf is provided. The forward edge portion of this shelf is provided with novel toothbrush holders and a suitably aligned housing therefor, the latter serving as a dust-proofing shield or enclosure and which greatly assists in maintaining the toothbrushes in an acceptable clean and sanitary condition. The shelf is also provided with a flange which is such in form and position that it may be readily and removably hung from a tiled or similar wall surface.

By arranging the upstanding elongated enclosure or housing to extend lengthwise across the front or forward edge portion of the shelf and spacing the rear vertical wall thereof from the opposed upstanding flange, the then existing intervening open ended space defines a trough-like channel. This channel provides an ideal storage space for readily accessible items such as tubes of toothpaste and the like, drinking glasses, comb and brush and so on. Also, in one embodiment, a step-down auxiliary shelf is fashioned into a soap dish and provided with a novel sectional dome or shell to enclose the soap.

Then, too, the toothbrush accommodating notches and associated holders are of unique construction and, in addition, means is provided for reliably, but detachably mounting the entire device or appliance on the bathroom wall.

These together with other objects and advantages which will become subsequently 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, and in which:

FIGURE 1 is a view in front elevation with a portion broken away illustrating a sanitary multipurpose rack for toothbrushes and the like constructed in accordance with the principles of the invention;

FIGURE 2 is a top plan view of the same with portions broken away and appearing in section;

FIGURE 3 is a cross-section on an enlarged scale taken on the plane of the vertical section line 3—3 of FIGURE 1 looking in the direction of the arrows;

FIGURE 4 is a fragmentary perspective view of an adapter panel constituting a part of the bracketing or hanger means;

FIGURE 5 is a view in perspective of a specially constructed toothbrush-holding clip;

FIGURE 6 is a view similar to FIGURE 1 in front elevation and with portions broken away and appearing in section and illustrating a modified form of the invention;

FIGURES 7 and 8 are enlarged cross-sectional views on the section lines 7—7 and 8—8, respectively, of FIGURE 6;

FIGURE 9 is an enlarged fragmentary view primarily



in section taken on the horizontal line 9—9 of FIGURE 6; and

FIGURE 10 is a view in perspective of a hanger bracket of a type embedded in the tile or equivalent wall.

A review of all of the figures of the drawing will show that many of the predominating characteristics and features of the overall concept are common to both embodiments. However, it seems advisable, however, to take up the embodiments separately. Accordingly, reference will first be made to FIGURES 1 to 5, inclusive.

The rack as an entity is denoted in FIGURES 2 and 3 by the numeral **12**. It is of horizontally elongated form and comprises a suitable base which constitutes a shelf **14**. The forward lengthwise edge portion **16** of the shelf is provided at longitudinally spaced points with brush-accommodating notches **18** which open through the edge **16** (FIGS. 1 and 3). These notches serve to accommodate conventional toothbrushes one of which is denoted at **20** in FIG. 3. The construction is such that the handle portion **22** is hung or suspended below the shelf while the neck or shank portion **24** is situated in the notch with the bristle-equipped head **26** supported in a plane above the top of the shelf. Each holder is the same in construction and it will be noted that the marginal portions of the notch itself do not support the brush as is usual. Instead the notch serves to accommodate a novel holding bracket which is denoted generally by the numeral **28** in FIG. 5. Each bracket comprises a removable cleat **30** which is suitably anchored at the bottom or closed end of the notch as illustrated in FIG. 3. The cleat is provided with a U-shaped resilient metal or equivalent clip having opposed parallel clamping or gripping fingers **32** with flared free ends **34**. When the bracket is in position the fingers border the edges of the notch and in fact are situated within the confines of the notch. The fingers are such in shape that the shank or neck portion **24** is gripped thereby in a manner to safely support the bristles of the head in a plane well above the top of the shelf and out of contact with the shelf surfaces. Any number of holders may be employed depending on the needs of a particular family.

The bristled heads of the supported brushes are not only elevated for sanitary purposes but are shielded or protected within the hollow confines of an elongated box-like enclosure or housing denoted generally at **36**. The housing is commensurate in length with the length of the shelf and is preferably formed integral with the top of the shelf and the hollow portion is above and lined up with the notches. The rear vertical wall is designated at **38** and the top wall at **40**, said top wall being provided at end portions with V-shaped or equivalent lugs **42** which serve as limit stops for the upper inclined portion of the openable and closable lid or cover **44**. The upper portion of the cover is hinged to the top wall as at **46**. The main vertical wall of the cover is denoted at **48** and is provided with venting or air circulating holes **50**. In addition the housing is provided on its interior with partitions or dividing walls **52** thus defining a series of individual compartments for the individual brushes as illustrated in FIGURES 1 and 2. The wall **38** is parallel to and spaced forwardly from an upstanding vertical flange **54** which serves as the attaching and supporting means for the shelf. This flange is provided on its attachable side with loops **56** constituting keepers engageable with keeper hooks **58** provided therefor on the adapter panel or plate **60** which is glued or otherwise fastened in a vertical position as at **62** on the bathroom or equivalent wall **64**. By spacing the flange **54** from the housing wall **38** an intervening trough-like space or channel **66** is provided and this channel serves as a storage space for toilet articles of one type or another. Primarily it was adopted to accom-

modate a container or tube of dentrifrice 68 as shown in phantom lines in FIGURE 2. Obviously there will be ample space for several articles perhaps including a comb or a brush if not too large for the space available. At one end longitudinal ribs 70 are provided to support a drinking glass. At this end portion a short divider or partition 72 is employed to isolate the drinking glass area or space from the major portion of the rack or channel 66. It is yet to be mentioned that the lower corner portions of the lid or cover may be provided with suitable outstanding fingergrips 74.

It will be evident that when the lid or cover is swung up to an open position the inclined upper hinged portion rests against the stop or limit lugs 42 whereby the cover is conveniently held open for access to the selected compartments. It will further be evident that by attaching the panel or plate 60 to the wall 64 the surface is readied to accommodate the rack 12. The rack is hung in place in the manner shown and is used in a seemingly self-evident manner achieving the features and advantages of an appliance of this type.

In the modified adaptation (FIGURES 6 to 10, inclusive) the room wall is denoted at 76 and facing tiles at 78. In this arrangement the hanger brackets or fixtures 80 are incorporated in the wall at the time the wall is erected. Here again the bracket or fixture comprises a cleat or plate 82 having projecting L-shaped hanger or keeper hooks 84 which project to supporting positions in the manner illustrated.

The rack is denoted, as an entity, by the numeral 86 and likewise comprises a horizontal elongated shelf 88 generally rectangular in plan. The forward edge portion of the shelf has notches 90 which open through the forward edge and are provided with clips. In this arrangement L-shaped resilient or spring metal clips are provided and the outer end portions 92 are suitably anchored on the edge and the gripping finger portions 94 project into the notches and serve to engage the shank 96 of the toothbrush 98 supporting the head above the level of the shelf. The enclosure or protective housing 98 is mounted atop the stated edge portion and has a vertical rearward wall 100, a top wall 102 and end walls and a cover wall 104 the inclined upper portion 106 being hinged at 108 to the top wall. Suitable venting holes are provided at 110. Again the triangular stop or limit lugs are provided at 112 to hold the cover in an open position as shown in doted lines in FIGURE 8. Also in this form of the invention the rearward flange 114 is spaced from the wall 100 and is mounted along the rearward longitudinal edge and provided on its attachable or rear side with U-shaped or loop-like keepers 116 which are engageable with the keeper hooks 84. The channel-shaped or trough-like rack for the usable articles (not shown) is denoted at 118. In this form of the invention the transverse end portions of the shelf proper are provided with auxiliary shelves. The one at the right in FIG. 6 is horizontally disposed and denoted by the numeral 120 and is supported on a depending shelf portion 122 thus defining a sort of a step-down shelf. The top surface of the auxiliary shelf is corrugated or fluted as at 124 to provide appropriate supporting surfaces for the inverted drinking glasses 126. If desired a suitable rail is provided at 128 to effectively retain the drinking glasses and a short vertical wall is provided at 130 to make the glass enclosures more effective and secure.

A similar step-down auxiliary shelf is provided across the lefthand end portion as denoted in FIG. 6 and it is designated by the numeral 132 being supported by the depending shelf portions 134. The surface is preferably ribbed or corrugated as at 134 to define, in conjunction with the upstanding wall 36, a practical soap dish. The soap dish is preferably provided, in turn, with a sectional dome or an equivalent two-part shell for effectively housing the cake of soap. One section 138 is semi-spherical and hingedly mounted at 140. It cooperates telescopingly with the forward semi-spherical half-section 142 which is also pivoted and provided with a fingergrip 144. Both sections are provided with suitable aerating or ventilating holes 146.

As is evident this modified rack 86 is supported on the tiled wall in the manner shown and functions in the same manner as the first described form of the invention. It may be added that the lid or cover is provided at its bottom adjacent its ends with suitable fingergrips 148 and on the interior of the housing dividers or partitions 150 are provided to define cells or compartments for the headed upper ends of the toothbrushes.

It is believed that a careful consideration of the figures of the drawings in conjunction with the specification and claims will enable the reader to obtain a clear and comprehensive understanding of the construction, features and advantages, and mode of using the invention. Therefore, a more extended description is believed to be unnecessary.

The foregoing is considered as illustrative only of the principles of the invention. Further, 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, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. In combination, a vertical stationary support wall having outstanding hanger hooks, a readily attachable and detachable rack comprising a horizontal shelf having a rearwardly positioned edge provided with an upstanding vertical flange, said flange having loop members on a rearward side providing keepers, the latter being detachably connectible with said hooks and serving to removably suspend the rack on the wall, toothbrush holders provided along the forward edge of said shelf, a housing mounted atop the forward edge portion of said shelf and enclosing said toothbrush holders, said housing having a rear vertical wall rising vertically from the top of said shelf and confronting and spaced forwardly of and parallel to said flange and cooperating therewith in providing an article storing space between said wall and flange, said shelf being provided at opposite ends beyond the respective terminal ends of said housing with depending step-like auxiliary shelves, said top surface of said auxiliary shelves having corrugations and being disposed in a plane below the plane of the top of the main shelf and permitting the cooperating open end portions of said article storing space to remain unobstructedly open and so that, even when said auxiliary shelves are being used the article or articles supported thereon do not interfere with the user gaining access to the space whenever necessary or desired.

2. A multipurpose rack for use in one's bathroom or similar quarters comprising a horizontally elongated shelf having a rearward lengthwise edge portion provided with an upstanding shelf-mounting and supporting flange, said flange being of a length commensurate with the length of the shelf and provided on an exterior attachable side with means whereby it may be removably hung from support means provided therefor on a relatively stationary room wall, said shelf having a lengthwise forward edge portion provided with a plurality of individual selectively usable notches, said notches being transverse to the lengthwise axis of the shelf and having open ends opening through said forward edge portion, said notches having opposed marginal edge portions thereof provided with yieldable gripping means which, when the handle of a brush is seated in the notch, then comes into play in supporting the handle and the bristled brushhead with the bristles of the brush at a level above the top of said shelf, a hollow housing mounted atop the forward edge portion of said shelf in line with and covering and shielding the notches and of a length commensurate with the length of the

shelf and having a rearward vertical wall which confronts and is spaced forwardly from and is parallel with said flange and thus cooperates with the flange in providing an open-ended channel-like storing space between the wall and flange, the vertical cross-section of said housing being substantially the same as the vertical height of said flange, said shelf being provided at at least one transverse end with a depending portion disposed on a level below the level of the shelf proper and carrying an outstanding horizontal portion constituting an auxiliary shelf, the latter adapted to support a drinking glass, cake of soap or the like.

3. A rack comprising a shelf having means at a rearward marginal edge portion thereof whereby said shelf may be readily and satisfactorily mounted on and supported from a relatively stationary room wall, the opposite forward marginal edge having at least one notch therein opening outwardly through said edge for ready receptive accommodation of the handle of an insertable and removable toothbrush, brush handle gripping and suspending means embodying opposed spaced parallel yieldable grips located within the confines of said notch and designed and adapted to clampingly grip the shank portion of the handle, whereby the bristled head may be elevated above the top level of the shelf, thus keeping the bristles out of direct contact with said shelf or grips, a dustproofing enclosure for said brush mounted atom said shelf in alignment with and enclosing said notch and having an upwardly and rearwardly hinged cover permitting access to be had to the interior of said closure and also said grips, said cover being normally closed, the mounting means on said rearward edge portion of the shelf embodying an upstanding flange for supporting the shelf, and means whereby said flange may be removably hung on and supported from said wall, said flange being spaced from a rearward vertical wall portion of said enclosure whereby to provide an intervening open-ended channel-like storage rack between said first flange and wall portion for a drinking glass, tube of dentifrice or other small bodily applicable daily usable articles.

4. In combination, a relatively stationary support wall, at least one cleat embedded in said wall and provided with L-shaped hanger hooks, said hooks protruding beyond the surface of the wall, a readily attachable and detachable multipurpose rack embodying an outstanding horizontal shelf provided along a rearward longitudinal edge with an upstanding flange, said flange being provided on an attachable side thereof with U-shaped keepers and said keepers being releasably engageable with said hooks in a manner to support the rack on said wall, said shelf being provided along a forward edge thereof with a plurality of longitudinally spaced brush-accommodating notches, each notch provided within the marginal confines thereof with spaced parallel resilient brush clamping and retaining members, a protective housing mounted atop the forward edge portion of said shelf and partitioned on its interior to provide individual compartments, said compartments being aligned with their respective notches, said housing having a rearward vertical will spaced from the aforementioned flange and defining an intervening channel-shaped storage space, said housing also having a horizontal top wall and vertical front wall, said vertical front wall having an upper rearwardly inclined portion with a rearward edge hingedly connected to a forward edge of said top wall, said hingedly mounted front wall constituting a cover for said housing and said cover being normally closed but when open assuming an upwardly disposed position with the hinged inclined portion residing atop said top wall.



5. A multipurpose rack for use in one's bathroom comprising: an elongated rigid shelf having a flat top side, said shelf being adapted when in use to assume a horizontal position and having a rearward longitudinal edge portion provided with an integral upstanding vertically disposed shelf-mounting and supporting flange, said flange being of a length commensurate with the length of the shelf and being provided on an exterior attachable side with means whereby said flange may be removably hung on stationary support means provided for that purpose on a wall, said shelf having a forward longitudinal edge portion which is provided with a plurality of individual longitudinally spaced selectively usable notches, said notches opening through top and bottom sides of said shelf and having forward ends opening through the cooperating longitudinal forward edge portion of said shelf, each notch being provided within the limits of its confines with a pair of constantly yieldable brush handle accommodating and gripping jaws, said jaws being normally spaced from cooperating longitudinal edge portions of said notch in a manner to permit the brush handle to be readily inserted in the jaws and held or bodily detached from said jaws when ready for use, a hollow housing of a length commensurate with the length of the shelf and having a rearward vertical wall integral with the forward portion of the shelf and spaced forwardly from and being parallel with said flange and cooperating with the flange and providing an intervening open-ended trough-like article storing space between the wall and flange for small insertable and removable articles, the vertical cross-section of said housing being comparable with the vertical height of said flange, said housing embodying a rear vertical lengthwise wall and a front vertical lengthwise wall and an intervening top wall, the upper lengthwise portion of said front wall being inclined upwardly and rearwardly and having a longitudinal edge hingedly joined to a forward longitudinal edge of said top wall whereby said front wall constitutes a hingedly mounted readily openable and closable cover for the housing and also the aforementioned notches.


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