Sept. 15, 1942. M. BOXER 2,295,987

HAIRPIN AND CLIP HOLDER

Filed June 10, 1941

Fig. 1.

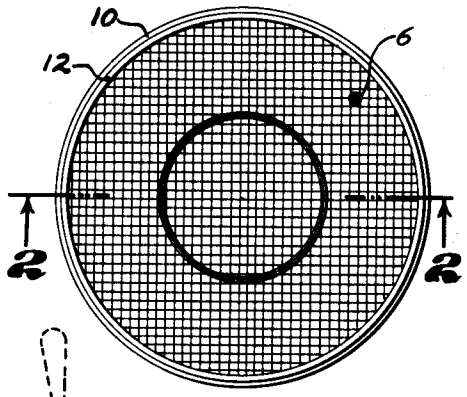


Fig. 4.

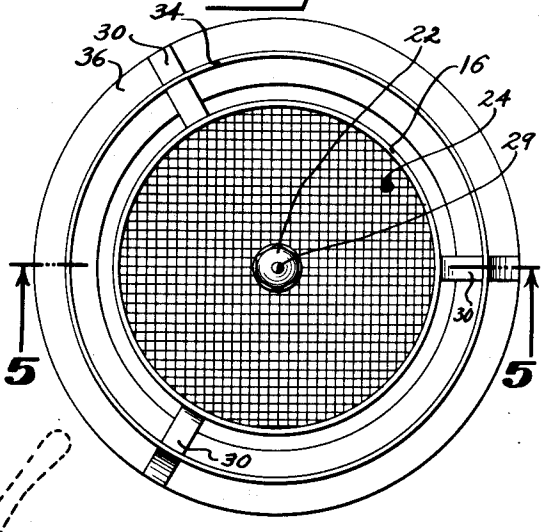


Fig. 2.

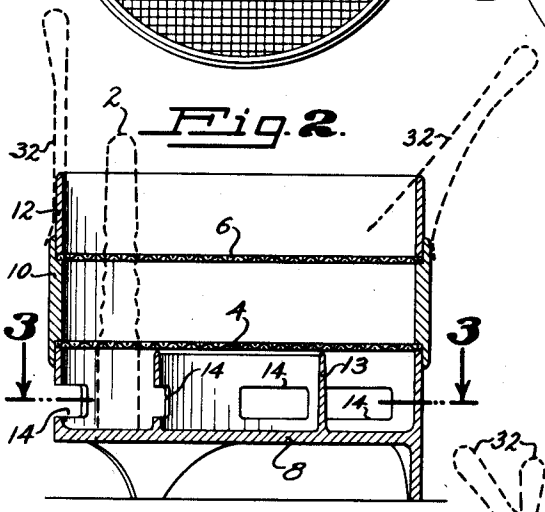


Fig. 5.

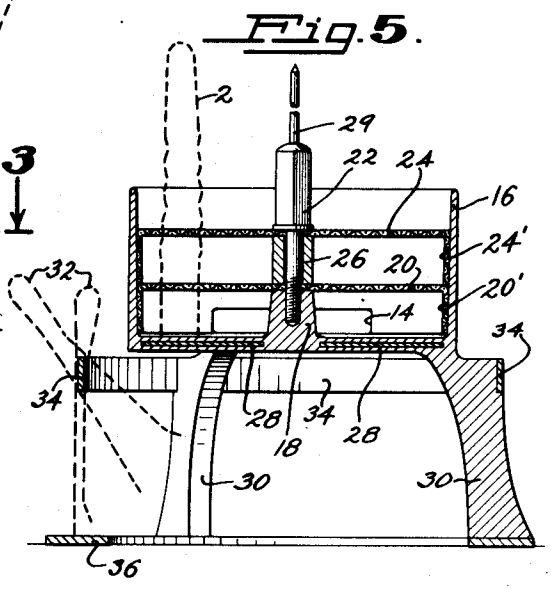
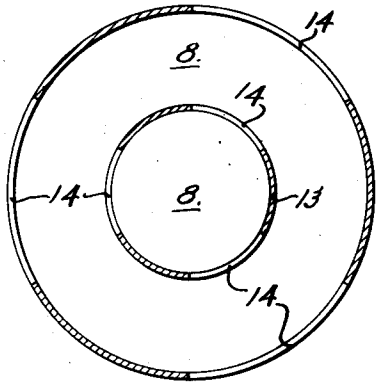


Fig. 3.



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Patented Sept. 15, 1942 2,295,987

UNITED STATES PATENT OFFICE

2,295,987

HAIRPIN AND CLIP HOLDER

Moses Boxer, San Francisco, Calif.

Application June 10, 1941, Serial No. 397,379

12 Claims. (Cl. 132—1)

This invention relates to racks intended to be set on a dressing table or hair-dresser's bench, and designed especially to hold hairpins, "bobbie" pins, hair clips and the like.

It is an object of this invention to provide a device of the character described, from which small articles employed for hair-dressing and the like may most readily be removed in convenient position for use. It is a further object of this invention to provide a device of the character described which may most readily be reloaded with the articles in proper position for subsequent removal.

Innumerable patents have been issued for various types of hairpin and "bobbie" pin holders calculated to do for these small hair-dressing articles what the common pin-cushion does for pins; but so far as I am aware none has come into general use. Common spaced-prong hairpins and resiliently engaging prong "bobbie" pins commonly are kept in boxes or lie sprawled in a drawer or on a table top where they tangle with each other and require more total time to pick up than to apply to the hair-dress. Even a cursory time-and-motion study reveals a great need for a device which is neat, simple, and effective enough to be adopted universally as has the common pin-cushion; and it is a primary object of this invention to fill that need.

Further objects of this invention are to provide a device of the character described which is durable, neat and attractive in appearance even when loaded with the small articles which might clutter a conventional box-like receptacle, and which is essentially sanitary and may readily be cleaned. Further important objects of my invention are to provide a holder of particular simplicity in construction and operation and one which may be produced and sold at low cost. Other and ancillary objects of this invention will be suggested by the following description and by use of devices embodying the invention.

Referring to the drawing:

Figure 1 is a top plan view of one embodiment of the device of my invention; Figure 2 is an axial section on the line 2—2 of Figure 1; and Figure 3 is a sectional plan view on the line 3—3 of Figure 2. Figure 4 is a top plan view of a modified form of the device of my invention, and Figure 5 is an axial section on the line 5—5 of Figure 4.

The device of Figures 1, 2 and 3 is a specialized holder for the common spaced-prong hairpin 2 (shown by dash lines in Figure 2). It consists essentially of a pair of spaced wire mesh screens 4 and 6, appropriately supported to admit and loosely hold the spaced double prongs of the common hairpin. While certain advantages of my invention might be realized with curved or non-parallel screens and with screens positioned other than horizontally; substantially flat parallel, horizontal screens are prescribed as definitely preferred. The screens are preferably hard brass, preferably nickel-plated, or of stainless steel, or of tinned preferably cold-drawn steel, or other suitable sturdy screen material.

The screens are supported at their perimeters in a receptacle-shaped support preferably fabricated of a shallow cylindrical cup 8 and superposed rings 10 and 12, with the screens held in properly spaced relationship between the shoulders of the cup 8 and rings 10 and 12. As shown in Figure 2, the middle ring 10 is formed with an internal diameter near its upper and lower edges substantially equal to the outer diameter of the upper ring 12 and lower cup 8; to permit a press-fit assembly of ring 10 over cup 8, with lower screen 4 interposed between the cup and the shoulder of ring 10; and to permit press-fit assembly of ring 12 into ring 10, with upper screen 6 interposed between ring 12 and the shoulder of ring 10. Suitable auxiliary means may be provided to hold the screens taut. In preferred design, the housing members 8, 10 and 12 are fabricated of a thermo-plastic synthetic resin which is softened with a solvent therefor or by other suitable means at the points of contact with the screens immediately prior to assembly. When pressed onto the screens, the rings then deform into interlocking relationship with the screen mesh and cement themselves to the screens and to each other. Alternative means not shown for holding the screens taut are feasible. Thus, for example, the edges of the screens may be upset or beaded when stamped out of the original sheet of screening, and a groove may be provided between the mating members 8, 10 and 12 to receive and hold the upset or beaded edges of the screens. A considerable strain may be imposed on the screens if attempt be made to thrust a whole handful of hairpins simultaneously down through the screen meshes. It has been found that the upper screen will stand deflection of its center down to the level of the lower screen and will thereafter spring back into proper position, but if both screens were forced down into contact with the bottom of cup member 8, permanent damage might result. Accordingly, an auxiliary support is provided in the form of a thin-walled vertical cylindrical web 13 integral with and rising from the central portion of the base of cup member 8 up to the level of the lower screen 4 where it terminates in a sharp edge. While it would be feasible also to provide rings 10 and 12 with thin vertical inwardly directed vanes or spokes (not shown) to insure against deflection of both screens in both directions, that added complication has not so far been required.

Receptacles of the nature described, are notorious dirt accumulators, and a simple but apparently not obvious feature of the design of

my devices resides in the provision of clean-out slots shown at 14 in Figures 2 and 3. These clean-out openings are formed through the side walls of cup member 8 and its integral web 13 as near the bottom thereof as structural considerations will admit. Dirt and dust which seep down through the screens may periodically be shaken, blown or washed out through these openings.

It will be noted that the bottom wall of the cup member 8 against which the lower ends of hairpins abut, is flat, horizontal, and parallel to the screens. Hairpins will accordingly be supported with their upper ends at heights proportional to their lengths; and when various sized hairpins are placed in the holder, the desired size may be selected with certainty and dispatch.

Unless some provision were made for holding resilient-pronged "bobbie" pins of the type shown dotted at 32 in Figure 2, it is virtually a certainty that a considerable proportion of users would insert "bobbie" pins into the screen meshes and would thus partially vitiate the function for which they were primarily designed. Accordingly, the upper ring 12 is made quite wide to leave a thin vertical wall projecting more than half the height of a "bobbie" pin above the upper screen 6. This thin upstanding wall is expressly designed to hold "bobbie" pins, which may be slid vertically down with their resilient prongs straddling and being held by the wall of ring 12. If the "bobbie" pins be removed at an angle inclined to vertical as shown by dash lines 32 at the right of Figure 2, they will be dispensed with their prongs sprung open in position to be slid over a lock of hair.

The modified form of device of my invention shown in Figures 4 and 5 avoids the complication of separate rings which must be assembled to hold the mesh screens, and instead provides a simple cup-shaped receptacle 16 having an upstanding central boss 18 upon which the center of the lower screen 20 rests. The boss is threaded to receive a screw 22 passing through central apertures in the center of each screen. A short tubular spacer member 26 is interposed between the two screens surrounding the screw 22; so that when the screw is tightened down it holds both screens 20 and 24 in properly spaced relation to the receptacle 16. The circumferences of each screen are upset to form a depending spacer wall 20' and 24' to assist in supporting the screens in spaced parallelism within the receptacle. The screens are a firm press-fit in the receptacle, and additionally may be cemented at their peripheries to the wall of the receptacle, or may be held against upward deflection of their peripheries by other suitable means.

When hairpins 2 are inserted vertically down through the screens 20 and 24 they tend normally to stand up quite straight and there is little tendency for them to tangle unless the receptacle is considerably overfilled. Occasionally however the prong of more than one hairpin may be inserted into the same opening of the screen mesh, causing some tendency for two hairpins to be ejected when but one is pulled out. A plurality of bar magnets 28 in the base of the receptacle 16 have been provided to avoid that difficulty. When the receptacle is made of a thermo-plastic synthetic resin, the magnet bars may be cast directly into the bottom wall as shown in Figure 5.

Projecting vertically from the top of screw 22 is a tall thin dull-pointed rod 29 adapted to receive and hold various apertured small articles such as the hair-curling clasps described in my copending application Serial Number 368,372, filed December 3, 1940.

The receptacle 16 is supported on legs 30 of a height moderately less than the length of a conventional resiliently contacting prong "bobbie" pin 32 (shown by dash lines in Figure 5.) The legs 30 carry a thin ring 34 onto which a "bobbie" pin may be slid vertically downward without substantially spreading the "bobbie" pin prongs. When thus not widely spread, the prongs will hold themselves onto the ring 34 without tending to spring off as is the case when a thick object is inserted between the prongs. The ring 34 is however of substantial width and will serve to spread the prongs sufficiently widely for application to a lock of hair when the "bobbie" pin is swung around the ring 34 to bring its prongs into engagement with the edges instead of the sides of ring 34. A "bobbie" pin 32 shown by dash lines in Figure 5 is illustrated as swung part way to this fully open position. In operation, the "bobbie" pin is swung into open position while grasped above ring 34 between thumb and forefinger, so that the fingers come into contact between the open prongs, thus holding the prongs open while the "bobbie" pin is removed horizontally from ring 34 and inserted onto a lock of hair.

The ring 34 is spaced below the lower level of the bottom surface of receptacle 16 by an amount substantially equal to the outward curvature of the end of one prong of the "bobbie" pin so that the "bobbie" pin will be fully open when swung around bar 34 until this end of the "bobbie" pin comes into contact with the under surface of receptacle 16. The under-surface of the receptacle is smooth and flat so that the "bobbie" pin may readily be slid horizontally off of ring 34.

The ring 34 is concentric to the receptacle 16 and is spaced sufficiently far out therefrom to just permit ready finger grasp of the "bobbie" pins. The "bobbie" pins should be inserted onto the ring 34 with their outwardly curved prong ends directed radially inward toward the holder, thus insuring that they will be dispensed horizontally with this outwardly curved prong upward and avoiding the danger of scratching the scalp with this outwardly curved prong end. If the ring 34 were out in clear space or were replaced by a straight rod accessible from either side, there would be considerable risk, in the haste and concentration of hair-dressing, that "bobbie" pins would be removed from the wrong side with their curved prongs downward to cut into the scalp. Obviously if the "bobbie" pins were inserted backwards onto even the one-side-access ring 34, they would be dispensed improperly, but the eyes and occupation are not elsewhere while the ring is being loaded with "bobbie" pins as is the case when they are being dispensed. Moreover, the "bobbie" pins would swing too far before abutting against the bottom surface of receptacle 16 if they had been placed backwards on ring 34, and the sense of touch would instantly feel that indication.

There is an ancillary virtue to the circular shape of ring 34 with various increments of its length extending in different directions. When the ring is being loaded with "bobbie" pins it is not necessary to twist the pin to a prong-inward

direction. It may merely be slid down over the ring **34** at a portion of the ring circle which conforms in direction to the particular angle of the "bobbie" pin when picked up at random.

A flat ring **36** joins the relatively tall legs **30** to strengthen the structure and to provide an abutment for the prong ends of the "bobbie" pins and insure against scratching the table-top or other surface upon which the device may be set.

A further unique feature applicable to both embodiments of the device of my invention resides in the prescription that the upper and lower screens be of dissimilar mesh and preferably that the lower screen be of finer mesh than the upper screen. It is found that hairpins may be inserted through the screens with considerably less interference when this prescription is followed, and that they are nevertheless well-supported. In actual practice I prefer to make the upper screens **6** and **24** of twelve mesh per inch wire screening and the lower screens **4** and **20**, of sixteen mesh per inch wire screening.

The embodiment of my invention described and illustrated herein is illustrative and not inclusive of all the forms my invention may assume. Advantageous results may be attained with use of less than all its preferred features and with modifications within its purview. It is petitioned therefore that my invention be limited only by the claims constituting its final determination.

I claim:

1. A receptacle for hairpins and the like, including a plurality of spaced screens having a multiplicity of openings adapted to receive and support the prongs of hairpins; adjacent said screens having dissimilar sized openings.

2. In a receptacle for hairpins and the like, a pair of superposed spaced wire mesh screens adapted to receive and support the prongs of hairpins; the upper of said superposed screens being of coarser mesh than the lower said screen.

3. A receptacle for hairpins and the like including a support and a plurality of vertically spaced substantially horizontal wire mesh screens firmly attached to said support whereby dislodgement of said screens is avoided when double-pronged hairpins are precipitately inserted and withdrawn through said screens.

4. A receptacle for hairpins comprising a support, a plurality of spaced wire mesh screens adapted to receive and support double-pronged hairpins, and means providing an abutment substantially parallel to one of the screens for limiting the inward thrust of the hairpins whereby hairpins of the same length project the same distance from the receptacle and hairpins of different lengths project correspondingly different distances from the dispenser.

5. A receptacle for hairpins comprising a support, a plurality of spaced wire mesh screens fixedly secured in said support and adapted to receive double-pronged hairpins, means providing an abutment spaced beyond said screens for limiting the inward thrust of hairpins, and means providing for access to the space between said screens and said abutment to provide for cleaning out dirt accumulating therein.

6. A receptacle for double-pronged hairpins and the like including a plurality of spaced wire mesh screens and a magnetized abutment beyond said screens adapted to limit inward thrust of hairpins and to hold ferrous hairpins non-positively whereby to facilitate removal thereof one at a time.

7. A method of supporting hairpins of the spaced double-prong type including the step of inserting the hairpin prongs into a spaced pair of wire mesh screens whereby both prongs of each hairpin enter through and are supported by the meshes of both screens.

8. A "bobbie" pin receptacle including a relatively wide thin bar adapted independently to hold a "bobbie" pin with the prongs thereof engaging opposite faces of said bar and adapted to spread said prongs when the "bobbie" pin is pivoted around said bar to position the prongs of said "bobbie" pin in engagement with opposite edges of said bar; and a relatively flat-surfaced stop member positioned with the plane of its surface substantially parallel and adjacent to one edge of said bar; said bar and stop member being relatively positioned to leave a substantial gap measured parallel to the plane of said stop member surface.

9. A receptacle for "bobbie" pins of the type comprising a looped bar of spring material forming prongs normally in resilient engagement near their ends and having a short reverse bend separating the extreme ends of said mutually engaging prongs; said dispenser including a long relatively thin relatively wide bar; said bar being sufficiently thin to permit its entrance and secure retention edgewise between the prongs of a "bobbie" pin whereby the tendency of said resilient prongs to spring off of a thick bar is obviated; and said bar being sufficiently wide substantially to spread said prongs when a "bobbie" pin is pivoted around said bar to position its prongs in engagement with opposite edges of said bar; and a relatively flat-surfaced stop member spaced a substantial distance from said bar and with the plane of its surface adjacent and substantially parallel to one edge of said bar whereby said stop member limits pivotal movement of a "bobbie" pin while being sufficiently flat surfaced and being spaced sufficiently far from said bar to avoid snagging the reverse bend at the extreme end of the "bobbie" pin.

10. A "bobbie" pin receptacle including thin wide bar means, each increment of length of which is adapted to retain a "bobbie" pin; said receptacle including a plurality of increments of bar length extending longitudinally in different directions whereby to reduce the necessity for twisting a "bobbie" pin into parallelism and front and rear orientation prior to sliding onto said bar means.

11. In a combined hairpin and "bobbie" pin receptacle, a support including thin walls adapted to receive and hold "bobbie" pins, and a plurality of spaced wire mesh screens supported between said walls and spaced a substantial distance from the thin "bobbie"-pin-receiving edges of said walls; said wire mesh screens being adapted to receive and hold double-spaced-prong hairpins.

12. A receptacle for hairpins, "bobbie" pins, hair curling clips, and other hairdressing and other appliances, comprising a support, a plurality of spaced wire mesh screens in said support adapted to receive and hold double-spaced-prong hairpins, a long relatively wide thin bar on said support adapted to receive, hold and spread double-resiliently-contacting-pronged "bobbie" pins, and a long upwardly extending narrow thin rod on said support adapted to receive and hold apertured devices such as grille-topped hair-curling clips; whereby the several hairdressing appliances aforecited are held in segregated juxtaposition.

MOSES BOXER.