Oct. 30, 1951 J. A. CUPLER, II 2,573,311

RECEPTACLE

Filed Oct. 18, 1946

Fig. 1.

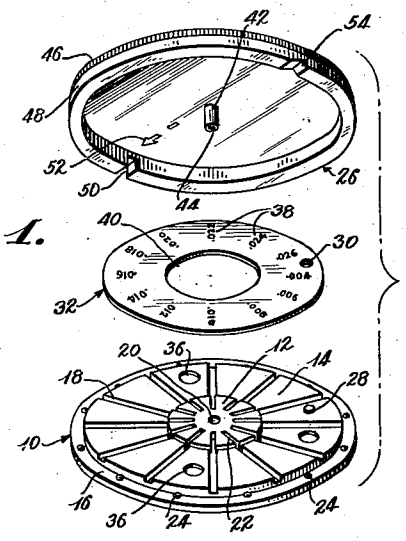


Fig. 2.

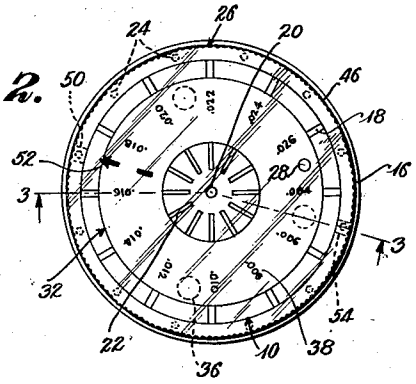
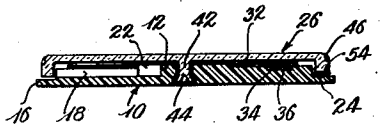


Fig. 3.



Inventor

John A. Cupler, II

By Raymond Wheatley

Attorney

Patented Oct. 30, 1951

2,573,311

UNITED STATES PATENT OFFICE

2,573,311

RECEPTACLE

John A. Cupler, II, Cumberland, Md.

Application October 18, 1946, Serial No. 703,960

11 Claims. (Cl. 206—16)

1

This invention relates to receptacles of the type adapted for the storage and dispensing of a large variety of articles. It is especially well adapted for use in connection with small drills, sewing needles, phonograph needles and other articles having sharpened ends which require protection.

The structure contemplated is particularly characterized by its simplicity, minimum number of parts, low production costs and the facility with which accurate indexing can be accomplished.

In general, the receptacle comprises a body containing a plurality of radial pockets which are accessible from the periphery of the body, a cover pivotally mounted with respect to the body, the cover having a skirt depending therefrom for closing the ends of the pockets, the skirt containing an opening for selective registry with the ends of the pockets. In order to protect the sharpened ends or tips of the articles to be housed in the receptacle, the pockets may have their convergent portions reduced to prevent the articles from bottoming therein. These pockets are preferably in the form of stepped grooves opening to one surface of the body and at the periphery thereof. The body may be molded from a suitable plastic composition to provide a central aperture and stepped to provide a hub portion, an annular portion, and a lower flange at its periphery. The grooves or pockets are preferably provided in the hub and annular portions to define the magazine, being stepped to provide narrower or reduced portions of the grooves or pockets in the hub portion of the body. The upper surface of the body may be provided with a boss for registry with an annular index element or cover sheet which is adhesively secured to the body by means of a suitable adhesive received in shallow recesses or depressions formed in the upper surface of the body. Such a cover sheet will serve to partially close the grooves or pockets and will preferably bear indicia to indicate the size of the article contained in each such groove or pocket.

The lower peripheral flange of the body may be provided with integral projections between each pair of pockets for cooperation with a notch or other detent arrangement provided in the skirt of the cover. The cover is preferably molded from a thermoplastic material such as a vinyl resin or cellulose acetate, having integral therewith a central pin providing a pivot received in the central aperture of the body. When the cover has been assembled upon the body,

2

the end of the pin can be expanded by lightly touching it with a heated tool, whereupon the parts will be assembled ready for shipment. The edge of the cover from which the skirt depends is preferably roughened by means of fluting or the like to facilitate its rotation with respect to the body. This roughened edge will ordinarily be grasped by one hand of the user, while the peripheral flange of the body, which projects slightly beyond the skirt of the cover, will be held in the other hand, permitting the opening in the cover to be brought into registry with the end of any of the pockets from which it is desired to extract a drill or other article or into which it is desired to return such an article. To facilitate registry of the opening in the skirt of the cover with the end of a paticular pocket, a line or an arrow may be formed on the upper surface of the cover so that when it registers with the indicia carried by the index element corresponding to the article to be withdrawn or returned the opening will be in registry with the proper pocket.

Thus it will be seen that in accordance with the present invention a practical, inexpensive and useful article has been produced, utilizing a minimum number of parts.

A more complete understanding of the invention will follow from a more detailed description based upon the accompanying drawing wherein:

Fig. 1 is an exploded view showing the elements prior to assembly;

Fig. 2 is a plan of the assembled receptacle; and

Fig. 3 is a section taken along lines 3—3 of Fig. 2.

The body 10 is preferably molded from a thermoplastic or thermosetting composition to define a stepped structure having a hub portion 12, an annular portion 14, and a lower peripheral flange 16. The annular portion is provided with a plurality of pockets, or grooves 18 opening at its periphery and extending with a reduced width into the hub portion to converge towards an aperture 20 located centrally of the body. The reduced portions 22 of the pockets or grooves are stepped with respect to the peripheral portions at the juncture of the hub portion and annular portion of the body member. On the upper surface of the peripheral flange 16, intermediate the ends of the pockets, projections 24 are provided to releasably retain the cover 26 in certain adjusted positions. A boss 28 formed on the upper surface of the annular portion of the body between a pair of the grooves 18 serves to register with a perforation 30 formed in the index element or cover sheet

32 which is adhesively secured to the annular portion of the body by means of adhesive 34 received in a suitable number of recesses or depressions 36 formed in the upper surface of the annular portion of the body intermediate certain of its grooves.

The index element or cover sheet 32 may be formed annularly from paper or other suitable sheet material and have imprinted upon its upper surface, suitable indicia 38 caused to register with the respective grooves or pockets by means of the boss or locating pin 28 which penetrates the perforation 30 provided in the annulus. The central opening 40 of the annulus receives the hub portion 12 of the body, and by virtue of the adhesive receiving recesses 36, lies substantially flat upon the annular portion 14 of the body.

The cover 26 is preferably formed from a thermoplastic composition such as a vinyl resin or cellulose acetate and has integral therewith a pin 42 of similar composition whose end is provided with an opening 44 to receive the end of a heated expanding tool used in the assembly of the cover upon the body. The upper edge 46 of the cover is fluted or otherwise roughened to provide a hand hold to facilitate rotation of the cover with respect to the body. Depending from this edge, the cover is provided with a skirt 48 whose lower edge is received by the upper surface of the peripheral flange 16 when the parts have been assembled. A port or opening 50 is provided in the skirt for selective registration with the peripheral or outer ends of the pockets or grooves 18 for extraction or return of an article for which the receptacle is intended. A distinctive line or arrow 52 is suitably applied so as to be visible from the upper surface of the cover, which being preferably transparent, can receive the inscription on either its upper or lower surface. This arrow has been shown as broken so as not to obscure the indicia 38 presented by the index element 32. By arranging the axis of the arrow along the same radius on which the opening 50 is formed, registry of the arrow with a given numeral on the index element occurs when the opening 50 registers with the corresponding groove or pocket. Diametrically opposite the opening 50, the lower edge of the skirt 48 has been provided with a notch 54 for cooperation with the projections 24 formed on the body flange to constitute detent means for holding the opening 50 out of registry with the pockets or grooves 18 when the receptacle is not in use to avoid accidental loss of the articles contained. By virtue of the resilient nature of the cover imparted by the compositions contemplated, when the notch 54 is moved to a position overlying one of the projections 24, the parts will be restrained from further accidental movement.

To assemble the parts of the receptacle, adhesive will be introduced into the recesses 36, the index element 32 will be pressed upon the annular portion 14 with its perforation 30 receiving the boss or locating pin 28, whereupon the cover will be applied with its central pin 42 extending into the aperture 20, and a heated tool will be applied from the bottom of the body to the opening 44 of the pin to expand it to somewhat the form depicted in Fig. 3 of the drawing.

Where the receptacle is employed in connection with drills or other articles having a shoulder or tapered configuration, it will be clear that by properly designing the relative lengths of the

reduced and enlarged portions of the grooves or pockets, the sharpened tips of the articles will be prevented from bottoming against the body so that under all circumstances injury to the sharpened portions will be avoided.

Moreover, the relative widths and heights of the grooves 18 and their reduced portions 22, having been properly dimensioned to the requirements of the drills or other elements to be contained, will prevent the peripheral portions of the sharpened or cutting ends from engaging the cover or walls of the reduced portions of the grooves, thus eliminating any of the dulling effects so commonly encountered in receptacles of known types.

Whereas but one form of the invention has been depicted in the drawings and described in the foregoing specification, variations and modifications within the scope of the appended claims are contemplated.

I claim:

1. A receptacle comprising a body containing a plurality of radial pockets intermediately stepped to define reduced convergent portions, said pockets being accessible from the periphery of said body, a cover pivotally mounted with respect to said body, and a skirt depending from said cover for closing the peripheral ends of said pockets, said skirt containing an opening for selective registry with the peripheral ends of said pockets.

2. A receptacle comprising a body containing a plurality of radial grooves accessible from the periphery of said body, a cover pivotally mounted with respect to said body, a skirt depending from said cover for closing the ends of said grooves, said skirt containing an opening for selective registry with the ends of said grooves, and an index element interposed between said cover and body defining a wall overlying and partially closing said grooves.

3. A receptacle comprising a body containing a plurality of radial grooves accessible from the periphery of said body, a cover pivotally mounted with respect to said body, a skirt depending from said cover for closing the ends of said grooves, said skirt containing an opening for selective registry with the ends of said grooves, and an annulus interposed between said cover and body overlying and partially closing said grooves.

4. A receptacle comprising a body containing a plurality of radial pockets accessible from the periphery of said body, a transparent cover pivotally mounted with respect to said body, a skirt depending from said cover for closing the ends of said pockets, said skirt containing an opening for selective registry with the ends of said pockets, locating indicia carried by said cover, and indicia carried by said body remote from said opening and visible through said cover for establishing the position of said opening.

5. A receptacle comprising a body containing a plurality of stepped radial pockets accessible from the periphery of said body, a cover having a roughened edge pivotally mounted with respect to said body, and a skirt depending from the roughened edge of said cover for closing the ends of said pockets, said skirt containing an opening for selective registry with the ends of said pockets.

6. A receptacle comprising a molded unitary body containing a plurality of radial pockets accessible from the periphery of said body, said body having steps defining a hub, a magazine and a flange, a cover for said magazine pivotally

mounted at the hub of said body, and a skirt depending from said cover to said flange for closing the ends of said pockets, said skirt containing an opening for selective registry with the ends of said pockets.

7. A receptacle comprising a body provided with a boss and containing a plurality of radial pockets accessible from the periphery of said body, a cover pivotally mounted with respect to said body, a skirt depending from said cover for closing the ends of said pockets, said skirt containing an opening for selective registry with the ends of said pockets, and an annulus interposed between said body and cover having a perforation registering with said boss.

8. A receptacle comprising a body containing a recess and a plurality of radial pockets accessible from the periphery of said body, a cover pivotally mounted with respect to said body, a skirt depending from said cover for closing the ends of said pockets, said skirt containing an opening for selective registry with the ends of said pockets, and a cover sheet partially closing said pockets interposed between said body and cover and retained in position on said body by an adhesive located in said recess.

9. A receptacle comprising a body having a hub portion and an annular portion containing a plurality of stepped radial pockets accessible from the periphery of said body, said pockets being narrower in said hub portion than in said annular portion, a cover pivotally mounted with respect to said body, and a skirt depending from said cover for closing the ends of said pockets, said skirt containing an opening for selective registry with the ends of said pockets.

10. A receptacle for slender articles having sharpened tips comprising a body containing a plurality of radial pockets accessible from the periphery of said body, said pockets having stepped reduced inner ends to receive said tips, a cover pivotally mounted with respect to said body, a skirt depending from said cover for closing the outer ends of said pockets, said skirt containing an opening for selective registry with the outer ends of said pockets.

11. A receptacle comprising a body containing a plurality of radial pockets accessible from the periphery of said body, a cover pivotally mounted with respect to said body, a skirt depending from said cover for closing the ends of said pockets, said skirt containing an opening for selective registry with the ends of said pockets, and cooperating indicia carried by said body and cover remote from said opening indicating the relative position of said opening with respect to said pockets.

JOHN A. CUPLER, II.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
992,336	Burrows	May 16, 1911
1,412,943	Kennedy	Apr. 18, 1922
1,680,130	Conner	Aug. 7, 1928
2,236,224	Raschkind	Mar. 25, 1941
2,475,450	Dvorak	July 5, 1949

FOREIGN PATENTS

Number	Country	Date
228,642	Great Britain	Feb. 10, 1945