Sept. 19, 1950 H. H. COLLINS 2,522,703

UTILITY PLATE

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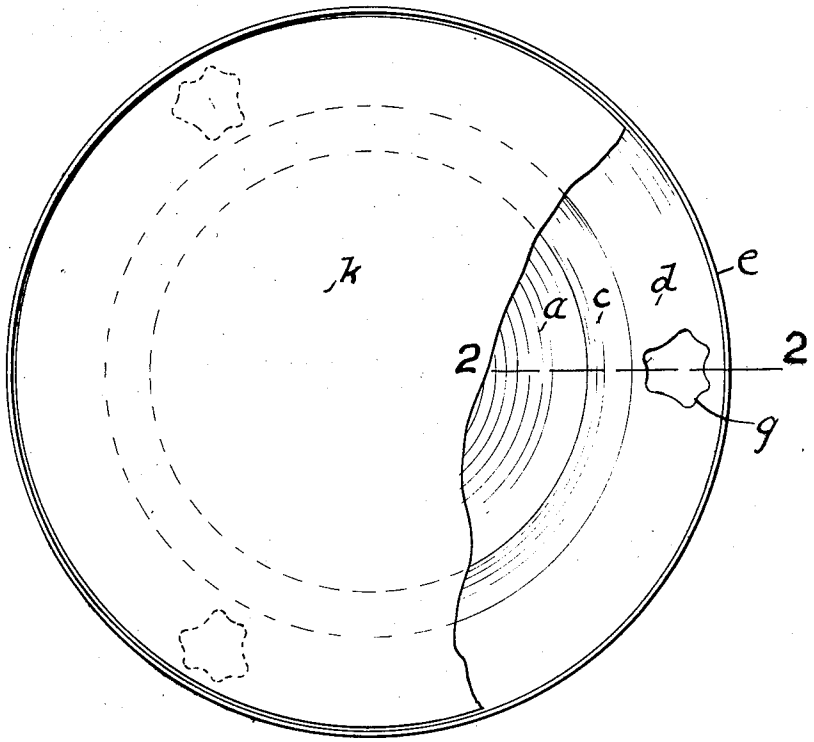

FIG. 1.

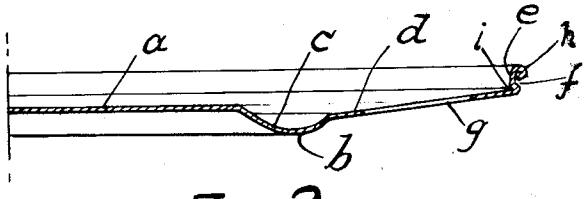

FIG. 2.

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WITNESS:

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UTILITY PLATE

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1 Claim. (Cl. 65—15)

1

My invention relates to utility plates of the kind disclosed in a patent reissued to me December 6, 1938, Re. No. 20,934. Plates of this character comprise a permanent rigid base member, normally of metal, adapted to receive a temporary cheap flexible cover element, usually of paper, which, after (usually) a single use of the plate, is removed and replaced by a similar cover element. The object of that invention, as of that forming the subject-matter of this application, is to insure the retention of the temporary covering element in the permanent base member until, after a single use, it is removed and replaced by another covering element. A further object of the invention is to provide a base plate of such construction that it is adapted to receive and securely retain a flexible cover element having a flat disc contour.

In the patented plate the first named object is accomplished partly by a rigid base plate having a special shape including a depressed central portion and a wide substantially horizontal outer annular portion connected to the central portion by an abrupt vertically extending ring portion which lifts the annular outer portion substantially above the level of the central portion. The object of the invention is then completely accomplished by a cover member of special construction.

The manufacture of a cover element of the peculiar shape disclosed in the patent presents difficulties. and this element, due to its thinness and flexibility, cannot be relied upon to retain its shape. Moreover, while cheapness of the covering element, due to the necessity of "refilling" an indefinite number of times, is a commercial necessity, the manufacture of the special covering element is, as compared with a mere flat disc, comparatively expensive. Consequently, flat disc plates are often applied to the permanent rigid base plate, thereby seriously diminishing orders for replacement; and since flat disc plates do not satisfactorily function, the demand for base plates is impaired, and a satisfactory market for both elements cannot be adequately maintained.

The object of my invention is to provide a base plate of such specific construction that a temporary covering element having a flat disc shape may be securely retained therein during the short period of the use of the complete article.

A preferred embodiment of the invention is shown in the accompanying sheet of drawings, in which:

Fig. 1 is a face view of the plate with the cover member applied thereto, the latter being partly broken away.

2

Fig. 2 is a somewhat enlarged sectional view of part of the plate.

The rigid base plate comprises a flat central portion *a* surrounding which is formed in the face of the plate a groove *c* and on the rear of the plate a projection *b*. Surrounding the groove *c* is an annulus *d* which is nearly but not quite flat, the face of the annulus having a slight upward slope from the outer periphery of the groove to the margin of the plate. The marginal portion of the plate has an upstanding flange *e* which from its base is bent obliquely inward, thence upward and thence curved outward and inward, thereby forming an exterior circumferential groove *f*, a circumferential bead *h* and an interior circumferential groove *i*.

The level of the central portion *a* should not be substantially below the level of the inner edge of the surrounding sloping annulus *d*, and, to with more certainty insure the retention of the covering plate, should be distinctly above the level of the inner edge of the sloping annulus, although preferably below the level of the outer edge therof.

It is found that a base plate constructed as described will satisfactorily retain, during its short use period, a flat disc covering element *k* of an area corresponding to that included within the upstanding edge flange *e*.

The base plate has another advantage over the base plate of my prior patent in that it is of more rigid construction and retains its shape under the long and severe usage to which it is naturally subjected.

The annulus *d* of the base plate is provided with a plurality of orifices *g* (preferably three) formed at regularly spaced arcuate distances, to enable the ready displacement of the cover element *k* by finger pressure applied to the areas of the cover element underlying the orifices.

What I claim and desire to protect by Letters Patent is:

A utility plate, especially adapted to receive and retain a temporary flat flexible cover element, having a substantially flat circular central portion and which beyond said central portion is in cross-section curved outward and downward and thence upward to form an annular groove of relatively shallow depth and substantially greater width than depth, and an outer annulus surrounding said groove, said annulus having only a slight upward slope from the

groove to the edge of the plate, the level of the central flat portion not being below the level of the inner edge of the outer annulus but being below the level of the outer edge of said annulus, and an upstanding edge flange surrounding the annulus, said flange extending inward and upward from the outer edge of said annulus to form an interior circumferential groove, thence upward, and thence successively outward, downward and inward to form an exterior circumferential bead the said annulus having one or more openings to facilitate removal from the plate of a cover applied thereto.

HENRY HILL COLLINS.

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