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H. L. KAUFMANN

1,864,200

PAIL PROTECTOR

Filed Sept. 13, 1930

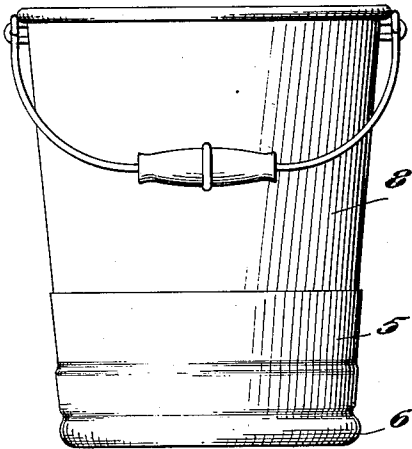


Fig. 1

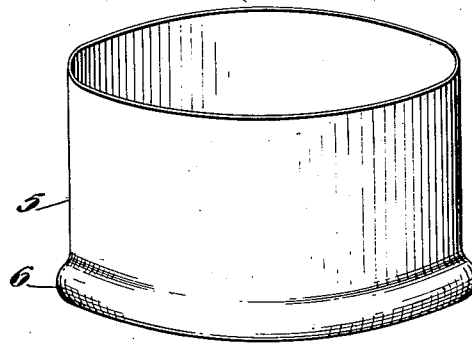


Fig. 2

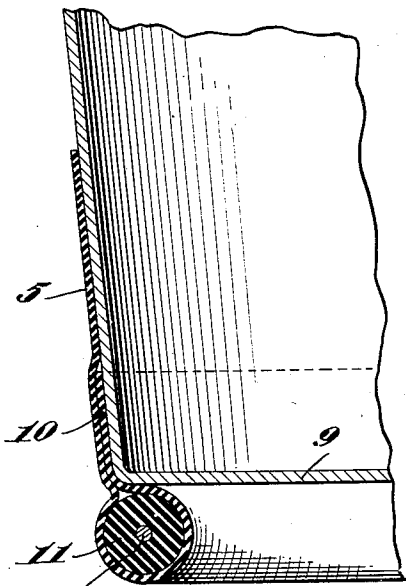


Fig. 3

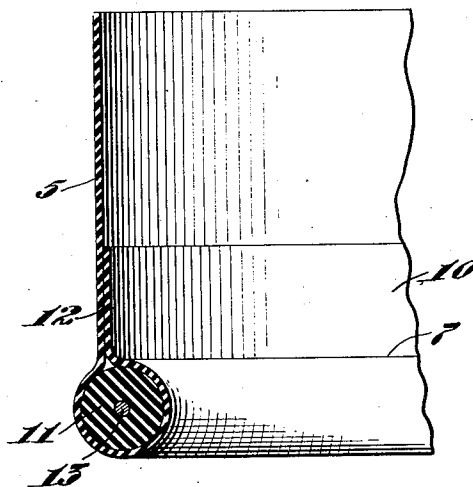


Fig. 4

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PAIL PROTECTOR

Application filed September 13, 1930. Serial No. 481,705.

This invention relates to a cushioning protector for the basis of pails, buckets or other receptacles, and has for its principal object the provision of a simple and economical device of resilient material, which may be removably secured at the bottom portion of an ordinary pail without special fastenings and which serves not only to protect the pail and the floor or platform upon which it rests from being chipped, scratched or marred through mutual contact, but also to deaden the sound and disturbance commonly caused when an unprotected pail is deposited or moved about upon a hard-surfaced floor, table, or other support.

The improved protector is particularly adapted as a cushioning device or silencer upon pails used in the operating rooms of hospitals or under similar conditions where the absence of distracting noises is essential to proper concentration. The article may, however, be employed generally to protect the pail and its supporting surface from damage, and it may be fitted to buckets, cans or other receptacles whose shape and size may vary within wide limits.

A recommended embodiment of the invention is illustrated in the accompanying drawing in association with a round pail having sloping sides, but its application to receptacles of other shapes will be apparent. In the drawing,

Fig. 1 is a side elevation of the pail equipped with the improved protector;

Fig. 2 is a perspective view of the protector; and

Figs. 3 and 4 are enlarged radial sections of portions of the articles shown in Figs. 1 and 2 respectively.

In the particular embodiment chosen for the purpose of illustration, the protector comprises a substantially cylindrical sleeve or body portion 5 of rubber or other resilient material, and a flexible and resilient, ring-like base portion 6 substantially thicker than the sleeve portion to furnish an interior annular ledge or shoulder 7. The sleeve 5 is adapted, upon being expanded, to receive the bottom portion of the pail 8 and, upon contraction, to embrace the pail and hence

secure the protector therein, with the periphery of the pail bottom 9 seating upon the shoulder 7 of the protector.

As shown in Figs. 3 and 4, the thickened base portion 6 of Figs. 1 and 2 may be formed by doubling the lower portion 10 of the sleeve over a rubber base ring or core 11 and cementing the folded margin upon the inner face of the sleeve as at 12. It will be observed that a protector thus formed is open at the bottom, thereby reducing the cost of manufacture, as compared with the expense of producing a protector having a closed bottom, and providing a more sanitary protector, for it is apparent that any liquids, dirt, or other matter, which may pass downwardly between the sleeve and the pail will drop through the open ring instead of collecting at the bottom of the protector.

An article constructed as above described may be readily applied to or removed from the pail, it is durable in use and fulfills its intended purposes without adding appreciably to the weight of the pail or detracting from its normal use or appearance; and it may be constructed at little expense from common materials. For example, the sleeve portion 5 of the protector may be made from a sheet of vulcanized rubber, similar to that used in automobile tires, and the rubber base ring 11 may be produced from a rubber cylinder or tube which may have an axial reinforce 13 of metal, such as is used in making tires for velocipedes, infants' carriages or the like. The ends of the core 11 may be joined in accordance with common practice by connecting the ends of the wire 13, and the lower portion of the sheet may be wrapped around the ring 11 and fastened upon the inner surface of the sleeve by a suitable cement or other securing means.

Owing to the flexibility of the base ring and its sleeve, the protector may easily be shaped to fit the bottom of a polygonal pail, if desired; and its adaptation to other receptacles is obvious. The diameter of the sleeve should ordinarily be less than that of the pail, but in case the pail has sloping sides the sleeve may have the same diameter as the pail base if desired. It will be observed that the sleeve

5 extends a substantial distance upwardly from the base of the pail, thereby protecting the sides of the pail from against kicks or other impacts while the pail is in use or while
8 it is being emptied over the edge of a sink or other receptacle.

It should be understood that the present disclosure is for the purpose of illustration only and that this invention includes all
10 modifications and equivalents which fall within the scope of the appended claims.

I claim:

1. A protector for application to the bottom portion of a pail, comprising a sleeve
15 portion of sheet rubber, and a base ring larger in cross-section than the thickness of the sleeve, the base ring consisting of a rubber core and the lower margin of the sleeve being doubled around the ring and secured to the
20 inner surface of the sleeve.

2. A protector for application to the bottom portion of a pail, comprising a sleeve portion of sheet rubber, and a base ring larger in cross-section than the thickness of the
25 sleeve, the base ring consisting of a rubber core and the lower margin of the sleeve being doubled around the ring and secured to the inner surface of the sleeve, the sleeve portion extending upwardly a substantial distance
30 over the sides of the receptacle thereby to protect the sides from impacts.

3. A protector for application to the bottom of a pail, comprising a sleeve portion of sheet rubber adapted to receive and embrace
35 the bottom of the pail, and a base ring of resilient material of substantially larger cross-section than the sleeve, the base ring being embraced by the lower margin of the sleeve and permanently attached thereto
40 thereby to provide an interior annular ledge constituting a seat for the pail bottom, and the sleeve portion extending upwardly a substantial distance from the base ring to protect the sides of the pail from impacts.

45 Signed by me at Boston, Massachusetts, this 6th day of September, 1930.

HENRY L. KAUFMANN.

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