Dec. 4, 1956 T. O. LEE 2,772,787

BOTTLE RACK

Filed Feb. 12, 1954

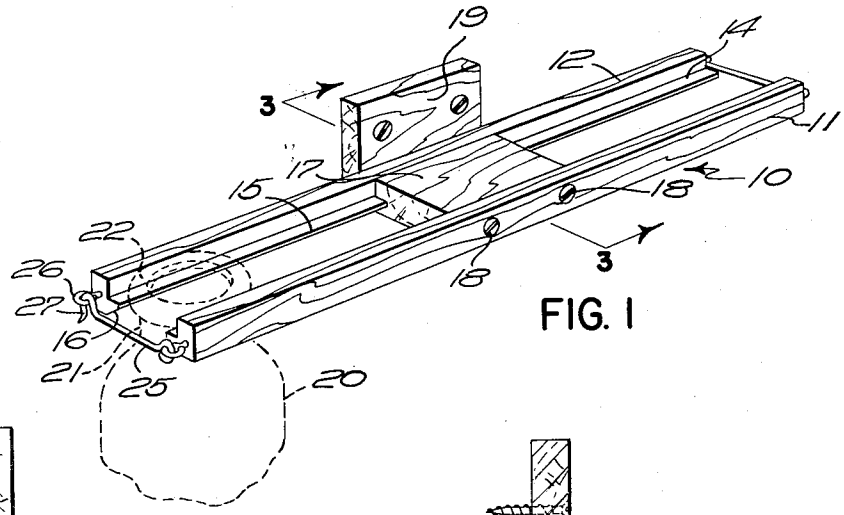


FIG. 1

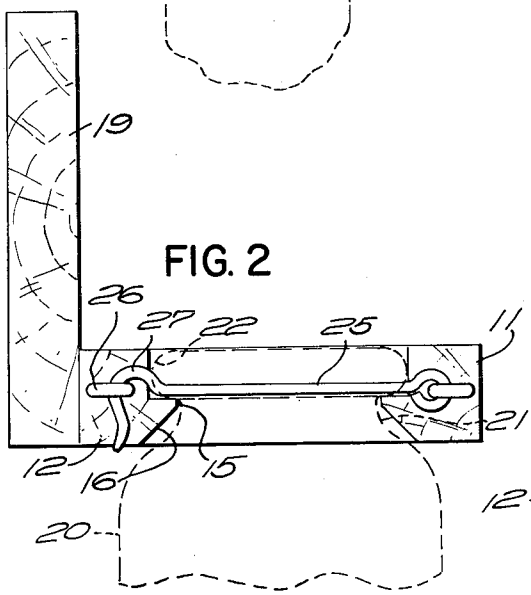


FIG. 2

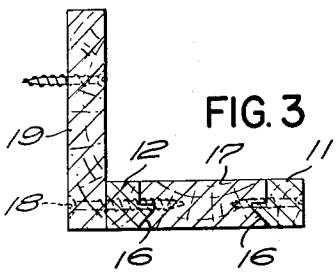


FIG. 3

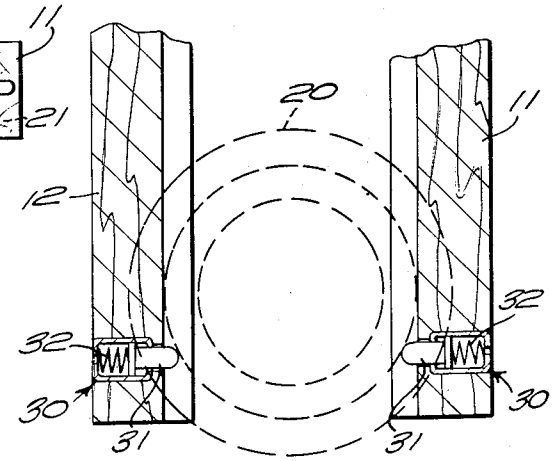


FIG. 4

INVENTOR.

THOMAS O. LEE

BY

Barlow & Barlow

ATTORNEYS

United States Patent Office

2,772,787

Patented Dec. 4, 1956

2,772,787

BOTTLE RACK

Thomas O. Lee, Rumford, R. I.

Application February 12, 1954, Serial No. 409,941

1 Claim. (Cl. 211—75)

This invention relates to a bottle rack and more particularly the type of bottle rack which is adapted to conveniently support bottled merchandise or empty bottles thereof.

The placing of empty milk bottles and/or filled milk bottles on the back steps of the home poses a difficult problem, since it is very easy to tip over bottles thus stored or otherwise molest them. Should bottles become broken at such a location, they pose an additional danger in that broken glass will be strewn about in the vicinity of the steps.

The principal object of the invention, therefore, is to provide an improved rack for supporting bottles to effectively prevent molestation by animals or spilling and also one which will permit the bottles to be conveniently removed when a person desires to do so.

Another object of my invention is to provide a bottle holder that is simple in construction and operation and economical to manufacture.

With these and other objects in view, the invention consists of certain novel features of construction as will be more fully described and particularly pointed out in the appended claims.

In the accompanying drawings:

Figure 1 is a perspective view of the bottle rack of my invention;

Figure 2 is an end view of the bottle rack;

Figure 3 is a sectional view taken on lines 3—3 of Figure 1; and

Figure 4 is a partial sectional view of two arms of the bottle rack illustrating a modified form of retainer means for the end of the rack.

Referring to the drawings, I provide a frame generally designated **10** which is provided with a pair of bottle-engaging arms **11** and **12**. Each of the arms is identical in construction and is provided with a cut-out channel **14** that forms a lip **15**, the under side thereof being tapered as at **16**. The two arms **11** and **12** are held in spaced relationship with a spacer block **17** which is preferably a separate piece of material cut out in such a shape that its edges will generally mate with the channel section **14** and beveled section **16** of the arms **11** and **12**. This spacer block **17** is suitably fastened to the arms **11** and **12** by means of screws **18**. Should it be desired, however, the arms **11** and **12** and spacer block **17** may be made integral, that is, out of one piece of material, although it has been found desirable to prefabricate these parts individually and thus save considerable material. To mount a bottle rack upon a wall or other vertical support, a mounting piece **19** is fastened as by screws **18** to the outside edge of the arm **12** and generally in the center thereof to provide a balanced structure. This mounting reduces the moment arm of the cantilever structure and yet retains maximum capacity of storage.

As illustrated in Figures 1, 2, and 4, my invention is shown as securing a number of milk bottles **20** within the frame. Bottles of this type are constructed with large bases and have narrow neck portions **21** which terminate in enlarged rims **22**. It is therefore essential that the distance between the lips **15** of the arms **11** and **12** be

slightly greater than the outside diameter of the neck portion **21** of the bottle and less than the outside diameter of the rim portion **22**. Spacer block **17** is thus constructed to meet these minimum requirements. Additionally, the structure of a bottle of this type is such that generally it flares away rather rapidly from the narrow neck portion **21** and thus the portion **16** of the arms **11** and **12** must be angled away in order to take care of that particular part of the structure of the milk bottle.

Various means may be utilized to retain the bottles placed between the arms **11** and **12** in the rack structure. As shown in Figures 1 and 2, these means take the form of a hook fastener having a shank **25** adapted to swing across the portion between the ends of the arms **11** and **12**, the hook end **27** of the shank being adapted to engage a keeper **26**. Alternately should it be desired, spring button locks **30**, as shown in Figure 4, may be provided in each of the arms **11** and **12** or in one arm alone near the end of the arm. Pressure upon the button portion **31** of these spring locks forces them inwardly against the pressure of spring **32** and thus serves to release the bottle from engagement with the arms **11** and **12**.

When the rack is mounted on a vertical surface by means of the supporting bracket **19**, containers may be placed upon the upper surface of the arms **11** and **12**. This upper surface serves as a shelf either with or without bottles inserted in the rack, inasmuch as the channel portion **14** of each of the arms has been dimensioned so as to accept the entire rim portion **22** of the milk bottle **20**. Referring particularly to Figure 2 in the drawings, it will be seen that the top of the milk bottle **20** is flush with the top of each of the arms **11** and **12**. With the top of the bottle held in this position, an effective continuous surface is presented on the top of the rack which lends itself to support other objects. The rack thus may have dual use, that of supporting milk bottles or other bottle containers, and additionally as a rack for other articles.

While I have illustrated and described my invention as comprehending the use of milk bottles, it is to be understood that other bottles and receptacles may be secured thereby merely by a change of dimensions to accept the other style of bottle. For example, soda bottles may be supported in the same manner, the neck and top rim construction being very similar to the construction of a milk bottle.

Various other forms and modifications in construction and materials may be resorted to without departing from the spirit of the invention or scope of the appended claim.

I claim:

A bottle holder comprising a pair of uniformly spaced arms, a lip along the length of each arm extending inwardly toward the other arm, a spacer block midway of the length of said arms and secured to said arms to provide an H-shaped frame with open ends to receive a bottle neck between the arms from either side of said block, a bracket secured to the outer edge of one arm at the location of said block for supporting the holder and leaving the ends open for positioning bottles therein from either side.

References Cited in the file of this patent

UNITED STATES PATENTS

945,170	Jones	Jan. 4, 1910
1,054,408	Hammes	Feb. 25, 1913
1,493,264	Hennessy	May 6, 1924
1,785,232	Sims	Dec. 16, 1930
2,017,944	Braley	Oct. 22, 1935
2,512,502	Paschell	June 20, 1950

FOREIGN PATENTS

52,491	Denmark	Dec. 14, 1936