May 23, 1972 J. G. FENWICK 3,664,617

SIGN MOUNTING SOCKET

Original Filed June 7, 1968

FIG 1

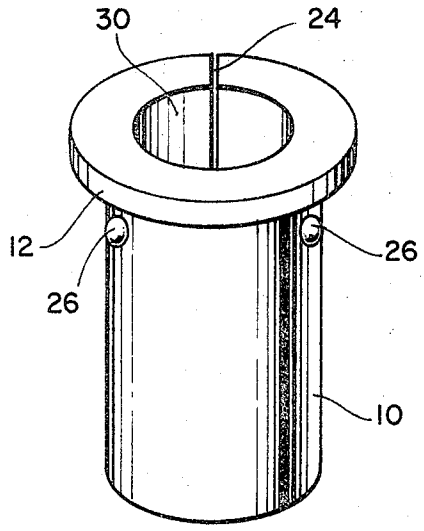


FIG 2

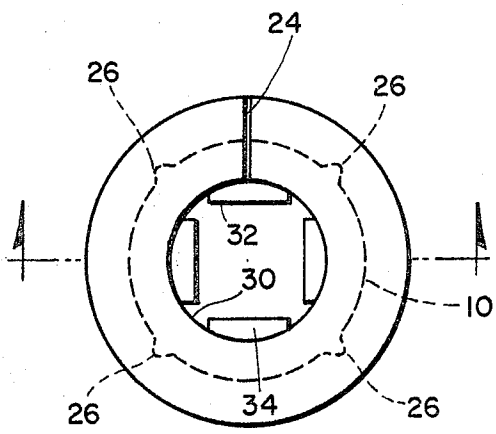
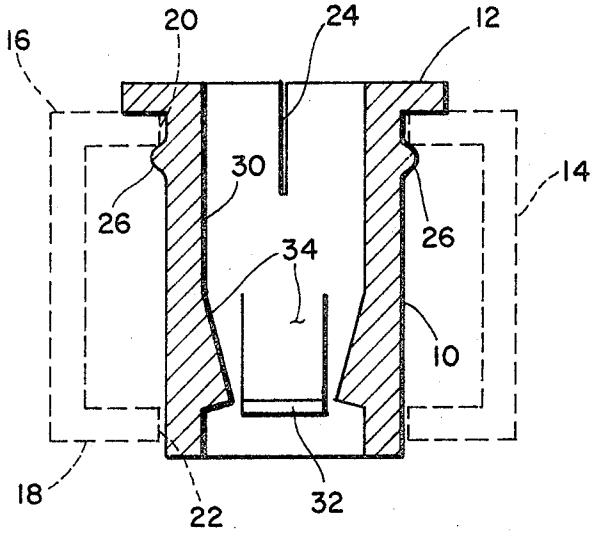


FIG 3



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SIGN MOUNTING SOCKET

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Continuation of application Ser. No. 735,454, June 7, 1968. This application Mar. 9, 1970, Ser. No. 17,029
Int. Cl. E04h 12/22
U.S. Cl. 248—38 1 Claim

ABSTRACT OF THE DISCLOSURE

The invention relates generally to signs used in retail merchandising stores such as department stores, and in particular, to the mounting of such signs on display cases.

It is known to equip display cases and counters with tubular frame members which are formed or adapted to have sockets inserted therein at desired points for receiving small sign carrying poles. This invention is directed to a socket of this type which is provided with a slit to facilitate its insertion and retention in a tubular frame member and has a form of tapered bore for receiving and holding sign posts.

BACKGROUND OF THE INVENTION

This is a continuation of application Ser. No. 735,454, filed June 7, 1968.

This invention relates to signs of the type used in retail merchandising stores and in particular, to mounting sockets for receiving and holding poles upon which such signs are mounted.

Display cases and counters are presently used in retail stores which have tubular frame members which are formed or adapted to have sockets inserted therein at various points for receiving sign carrying poles. Sockets of the types shown in U.S. Pat. 3,296,725 are presently being sold and several types of sign poles are made and sold by different manufacturers.

The sign socket of the present invention is provided with a slot to facilitate its insertion and retention in a tubular frame member and has a unique form of tapered bore which functions to receive and securely hold a sign post having any form of tapered contour at its lower end.

SUMMARY OF THE INVENTION

A main object of the invention is to provide a new and improved sign post mounting socket of the type referred to above which (1) is easily inserted and removed from a tubular frame member, (2) is snugly secure when in its inserted position, (3) is adapted to receive and securely hold sign posts having any form of tapered end portion, and (4) is inexpensive to manufacture.

Other objects of the invention will become apparent from the following specification and appended drawing in which a preferred form of the invention is illustrated.

DESCRIPTION OF THE DRAWING

FIG. 1 is a perspective view of a sign mounting socket embodying the invention;

FIG. 2 is a plan view of the socket shown in FIG. 1; and

FIG. 3 is an elevation sectional view taken on line 3—3 of FIG. 2 except that a form of tubular frame member into which the socket may be inserted is shown with dotted lines.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to FIGS. 1 to 3, the sign mounting socket there shown has two main portions which are a tubular and generally cylindrically shaped body portion **10** and an annular flange **12** which is integrally attached to the upper end of the body portion **10**.

In FIG. 2 there is shown with dotted lines a tubular frame member **14** having a rectangular shaped cross section. The external surface of socket body portion **10** is cylindrically shaped and the upper and lower wall portions **16** and **18** of frame member **14** have vertically aligned circular openings **20** and **22** with diameters slightly larger than the diameter of body portion **10**.

The upper portion of the socket has a longitudinally extending slot **24** which extends through the flange **12** and the upper part of the body portion **10**. The slot **24** may be on the order of 0.15 inch in width.

Beneath and in axially spaced relation to the under side of flange **12** is a ring of four, circumferentially spaced nipple-like protuberances **26**. The spacing between the flange **12** and the ring of protuberances **26** is approximately equal to the thickness of frame wall **16**.

Slot **24** allows the socket to be radially compressed and the insertion and retention of the socket in the frame member **14** is facilitated by this feature. The radial compressing of the socket with a person's fingers permits its insertion, and the subsequent radial expansion of the socket serves to hold it in its inserted position. When in its inserted position the flange **12** and protuberances **26** thereof straddle the circular edge **20** of the frame member wall **16** so that the wall **16** functions as an abutment which resists axial movement or dislodgement of the socket in either axial direction.

Internally the socket has a cylindrically shaped bore **30** with four wedge shaped protuberances **32** extending radially inwardly therefrom at the lower end thereof. The protuberances or wedges **32** are identical to each other and are symmetrically arranged in spaced relation to each other. Each of the wedges **32** has a flat surface **34** which merges with the cylindrical bore surface **30** and is inclined relative to the longitudinal axis of the socket. The wedge surfaces **34** are downwardly converging and in a broad sense form a downwardly converging tapered bore.

Sign posts (not shown) adapted to be used with the illustrated socket would have some form of tapered end portion having a taper angle equal to the effective taper angle presented by the wedges **32** and a shank portion having a diameter or rectangular section which is just slightly smaller than the diameter of the socket bore **30**. In effect, the illustrated socket is universal in nature in that it accommodates several different forms of sign posts.

It should be understood, of course, that the foregoing relates to only a preferred embodiment of the invention and that numerous modifications or alterations may be made therein without departing from the spirit and scope of the invention.

I claim:

1. A sign mounting socket adapted (1) for use with a tubular frame member having a rectangular cross section and at least one pair or aligned circular openings in the upper and lower walls thereof and adapted (2) to receive

a sign post having a tapered end portion, said sign mounting socket comprising a tubularly shaped body portion having a cylindrically shaped outer surface over the entire length of said body portion and a bore having a cylindrically shaped surface portion, said bore being open at both ends of said body portion, an integral annularly shaped flange surrounding one end of said body portion, and a plurality of four circumferentially spaced protuberances extending radially inwardly from said bore surface portion at the opposite end from said flange, said protuberances having flat downwardly converging surfaces for receiving in abutting engagement the tapered end portion of a sign post which is inserted into said bore from the direction of said flange end, and means comprising a plurality of circumferentially spaced nipples adjacent to and

cooperable with said flange for attaching said socket to said tubular frame member.

References Cited

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WILLIAM H. SCHULTZ, Primary Examiner

U.S. Cl. X.R.

248—314