DISPLAY FITTINGS AND STANDS

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The present invention is concerned with display fittings and stands, for example for shop windows, counters, and the like, the object of the invention being to provide a stand or fitting which can be quickly and easily manipulated so as to arrange for the positioning of a shelf or other support at any desired height, and which in its final condition is of a neat attractive appearance.

Thus, by this invention there is provided a display fitting comprising a sleeve for disposal around an upright and formed for engagement with a resilient ring at least partly embracing the upright, so as to be supported in position, said sleeve having, or being adapted for attachment of, means for supporting articles or objects to be displayed.

The idea is that when, say, a shelf is to be positioned on an upright of tubular or rod form, a ring of resilient material can be disposed around the upright at a selected location, and the sleeve then dropped down to bear on and deform the ring into firm gripping engagement with the upright and thereby support the sleeve at the chosen position by a form of automatic wedging action, whereupon the shelf can be placed on the sleeve or parts carried thereby.

Hence, the sleeve may be provided at its lower part with a recess for receiving the supporting ring, part of the sleeve defining this recess being adapted to act in conjunction with the upright to deform the ring and grip it progressively more tightly against the upright. The sleeve may have an annular, chamfered, internal surface at its lower end part for the purpose specified.

Thus, the sleeve may for example be flared at its lower end to provide a skirt, for example of frusto-conical configuration, which envelops and masks the ring when the fitting is assembled.

As will be appreciated, when the sleeve is moved down to engage the ring, the latter eventually lodges in the bottom, or narrower, end of the skirt so that it is then subject to the weight of the shelf-mounting means and, if and when placed on separately, that of the shelf itself. This causes deformation of the ring and enhanced gripping of the upright, and thus the firmer support of the shelf. The sectional shape of the ring can advantageously be selected vis-a-vis the flare or conicity of the skirt so that an optimum lateral gripping effect by the ring on the upright is produced.

Hence, in use it is merely necessary to place the ring around the upright and to push it along the length of the latter until it is locked in an appropriate position, whereafter the sleeve can be slipped over the end of the upright and slid den downwards until it rests on the ring, and causes the enhanced gripping by the latter. The shelf, if applied separately, can then also be slipped over the upright until it rests on its mounting means.

The upright itself may be of any cross sectional shape, uniform along its length, and may be solid or hollow, and in fact the invention is applicable to any unobstructed rectilinear, or rectilinear parts of uprights, already existing in display stands or similar fittings, besides being applicable to those uprights which are specially provided to permit the carrying into effect of the invention.

The slidable sleeve will be of a cross section (circular is preferred for cheapness of production, but any other sections can be used) which conforms to that of the upright. It is a function of the sleeve to provide for a stable and symmetrical positioning of the shelf on the upright so that the fit of the sleeve on the latter will preferably be comparatively close, with only a small tolerance, at least at two spaced positions if not along the whole length of the sleeve.

The ring must have a frictional grip on the upright, so that it will be chosen of a composition suitably cooperating with that of the material of the upright. This latter may be glass, metal, plastic, or of other rigid substance, and the frictional grip is preferably obtained by using a ring of rubber or suchlike elastic material which is of such dimensions that it requires stretching to fit around the upright.

A preferred form of the invention is shown in the accompanying drawings in which:

Figure 1 is a broken top view of one form of the fitting shown mounted on a tubular upright.

Figure 2 is a vertical cross section through the fitting of Figure 1, and

Figure 3 is a perspective view of the same fitting with two of the arms shown detached.

Referring to the construction illustrated in Figs. 1 to 3, the fitting is here in the form of a sleeve 10 having a cylindrical bore dimensioned to fit around a tubular upright, indicated at 11, in the manner of a collar. At its exterior the sleeve 10 has six flat faces of which alternate faces are similarly formed and dimensioned. At its lower end the sleeve is furnished with a recess having a chamfered annular surface and, when located on upright 11, provides a housing 13 for receiving a rubber ring 14 threaded on the upright and gripping the same.

One set of flat outer faces of the sleeve, viz. 15, is formed with a slot or groove 16 which is dovetailed in horizontal section, and is also wedge-shaped in the vertical direction. This portion of the sleeve 11 serves as a stub for detachably receiving an arm 17, which has a flange or plate 18 at its inner end with a rib or projection 19 thereon complementary to and interfitting with the groove 16. Thus, the projection 19 is slipped down into groove 16 to engage the respective arm 17 with the sleeve 10 by a tongue and groove connection.

The outer set of faces, 20, are each apertured at 21, thus providing a window allowing the upright 11 to be seen through the sleeve, in addition to economising material. Each of the flats 20 is also bowed and flared outwards at its lower part as at 22, to provide for the ring housing 13.

The arms 17, which are intended to carry a centrally-apertured shelf 12, each have a strengthening web or bracket 23 secured to the arm 17 and the flange 18 thereof.

As will be apparent, the fitting described can be set up or moved on its upright with speed and readiness. Hence, the rubber ring 14, which will be chosen so that it requires stretching to fit around the upright, will be disposed at the desired horizontal location and the sleeve 10 then slided down the upright until the ring enters housing 13. The weight of the released sleeve acting on ring 14 will then be to deform and press this ring into progressively tighter frictional engagement with the upright, and subsequent loading of the sleeve will serve to increase this grip.

If the fitting is being newly mounted on the upright or the arms 17 are for any other reason detached, then the respective projections 19 thereon can be quickly slipped into their accommodating grooves 16 and so secured in position to radiate from the sleeve 10. The shelf 12 can

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then be threaded on the upright and lowered into the position in which it is supported on arms 17.

As will be understood from the foregoing, the fittings described allow of quick and facile assembly and adjustment at any desired position along the length of an appropriate upright, and this without the provision of unsightly holes, clips, or other such means on the upright itself. The supporting ring is, in effect, hidden within the sleeve.

The sleeve, the radial arms, and the shelf itself may be made of any appropriate materials or combinations of materials, the chosen substance being, in practice, largely dependent on the function which the display stand or fitting is to fulfill, the colour scheme of its surroundings, and the harmony of the general display. Thus these parts may for example be of metal, glass, or plastics, e.g. acrylic resins. In cases, such as those illustrated, where the sleeve is furnished with windows, an attractive effect is obtained if the upright is coloured, or has a pleasing finish. It could, for example, be a glass or transparent tube containing coloured liquid.

It is also to be understood that where large-size shelves are required, extensions for the radial arms, fitting on these latter, could be provided.

1. A display fitting assemblage for use with an upright comprising a resilient deformable ring frictionally retained on the upright at the desired location, a sleeve having an outer face and an inner face fitted around the upright above the ring, the inner face of the sleeve having an internal chamfer adapted to receive said ring, the outer face of the sleeve having dovetail slots disposed annularly in spaced relationship therearound, each slot tapering downwardly from the upper end of the sleeve, a plurality of load bearing arms, each formed at one end with an upwardly tapered rib of dovetail cross-section, each in removable interlocking engagement with one of the said slots, and a support plate with a central bore surrounding the upright and resting on said load bearing arms whereby a load on said plate forces the arms into tighter engagement with the sleeve and causes the sleeve to deform the ring and the fitting thereby to be more tightly gripped on said upright.

2. A display fitting assemblage according to claim 1 wherein the sleeve is provided with apertures for forming windows therein.

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