July 14, 1931. J. H. BOYE 1,814,282

CURTAIN FIXTURE

Original Filed May 22, 1930

Fig. 1

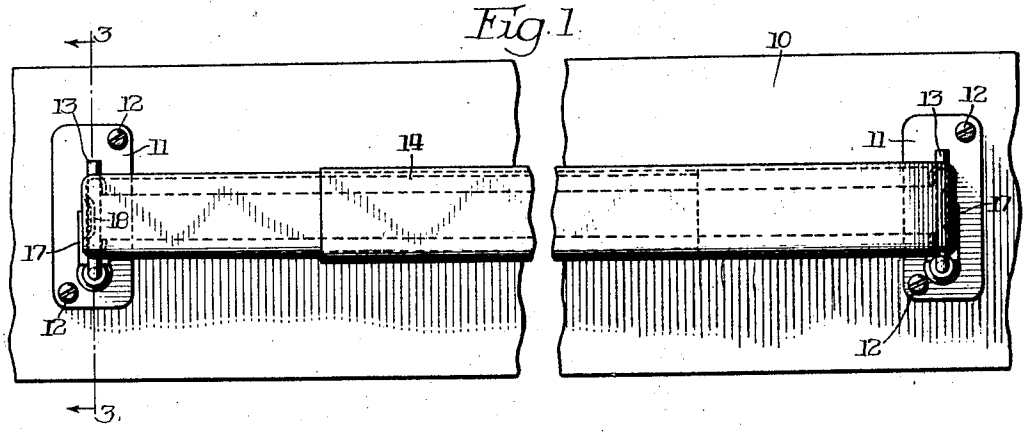


Fig. 2

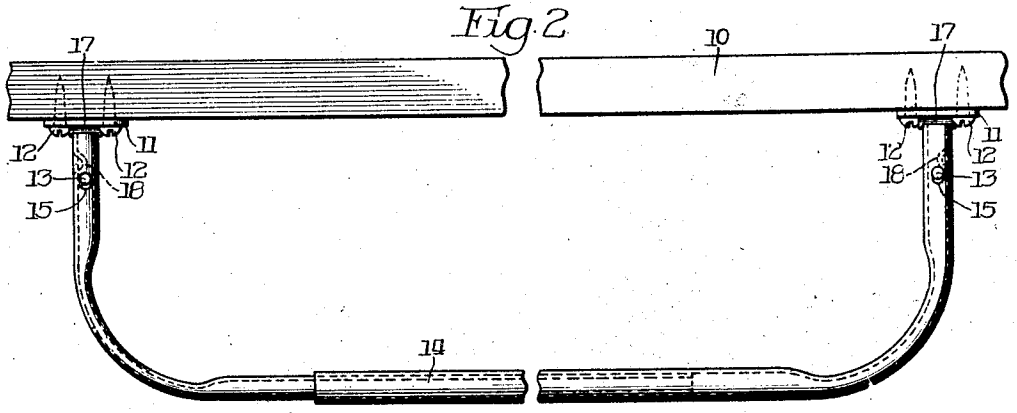


Fig. 3

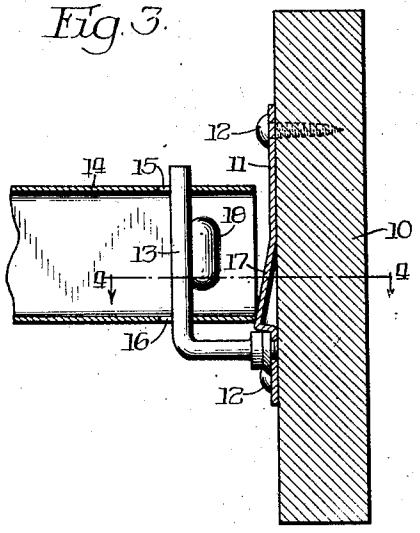
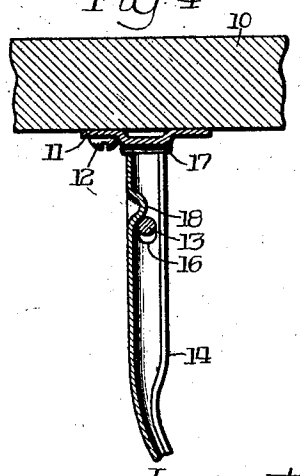


Fig. 4



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UNITED STATES PATENT OFFICE

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CURTAIN FIXTURE

Original application filed May 22, 1930, Serial No. 454,597. Divided and this application filed December 19, 1930. Serial No. 503,407.

This invention relates to curtain fixtures of what are known as the "hook-on" type.

One well known, simple, inexpensive and extensively used form of curtain fixture of the "hook-on" type consists of a pair of brackets each formed with a base plate for attachment to the window frame and an L-shaped hook mounted on the base plate, and a hollow curtain rod formed with elbow ends, the top and bottom walls of the elbow ends having registering holes that are engaged by the upright limbs of the hooks. Ordinary factory methods and machinery employed in the manufacture of such curtain fixtures do not permit accurate and exact fitting of the cooperating parts of the bracket and rod. In manufacturing practice, to facilitate easy threading of the rod ends on the hooks, it is customary to form the holes in the rod ends of somewhat larger diameter than the hooks. Again, since the hooks of different brackets vary slightly in the extent of their projection from the bracket base plates, it is practically impossible to locate the holes in the rod ends at such exact distances from the vertical end walls of the rod that said end walls will abut squarely against the bracket base plates when the rod ends are entered on the hooks. In other words, there is always more or less clearance between the hooks and the holes engaged thereby, and between the end walls of the rod and the bracket plates. The result of this is that the rod, when mounted on the hooks, is not held in a true horizontal position, but droops or sags more or less under its weight and that of the curtain, since the rod is supported by the bearing of the rear portion of the edge of the upper hole against the upper portion of the hook and the bearing of the front portion of the edge of the lower hole against the lower portion of the hook. This gives to the curtain fixture a sloppy and untidy appearance.

In an application heretofore filed by me on the 22nd day of May, 1930, Serial 454,597, I have disclosed and claimed a novel structure of curtain rod supporting bracket designed to obviate the defect above noted and maintain the rod, when mounted on its brackets, in a true horizontal position.

Another annoyance quite frequently experienced in connection with the mounting of these "hook-on" curtain rods and the mounting of the curtains on the rods is this. In applying the rod to the hooks, the rod must be held substantially horizontal, in order to pass the upper hole in the rod over the upper end of the hook. If the rod is allowed to sag downwardly, the upper end of the hook will strike the top wall of the rod more or less at one side of the upper hole, and the two will fail to register. Also, in mounting and adjusting the curtain on the rod one end of the latter will frequently be thrown upwardly sufficiently to clear the tip of the hook, and the rod must then be tilted upwardly sufficiently to bring the upper hole again into register with the tip of the hook.

The present application constitutes a division of my former application, above identified, and has for its object to provide a novel and improved construction of rod which will cure the above noted defect, and which, as the ends of the rod are carried down onto the hooks of the brackets, will insure registration of the tips of the hooks with the upper holes in the rod.

The invention, in one simple and improved embodiment thereof, is illustrated in the accompanying drawings, in which—

Fig. 1 is a front elevation broken out, of my improved "hook-on" curtain fixture.

Fig. 2 is a top plan view of the same.

Fig. 3 is an enlarged vertical section on the line 3—3 of Fig. 1.

Fig. 4 is a horizontal section on the line 4—4 of Fig. 3.

Referring to the drawings, 10 designates a portion of a window frame, on which the improved curtain fixture is mounted.

Each of the rod supporting brackets, which are identical, consists of a base plate 11 attached to the frame 10 as by screws 12, and an L-shaped hook 13 securely mounted in the lower portion of the base plate 11. The curtain rod, herein shown as of the sectional telescoping flat hollow type is designated as an entirety by 14. In the top and bottom walls of the elbow end portions of the rod are formed holes 15 and 16, respectively. As

above stated, it is common manufacturing practice to make these holes somewhat larger than the diameter of the hook 13 in order to facilitate the easy mounting of the rod on the hooks. By reference to Fig. 3 it will be observed that the length of the rod end between the inner edge portions of the holes 15 and 16 and the end wall of the rod is somewhat shorter than the distance between the vertical limbs of the hooks and the base plate, which, as above stated, is also customary manufacturing practice.

On the lower portion of the base plate I form a downwardly and forwardly inclined protuberance, preferably taking the form of a wedge 17. This may be conveniently formed by a swaging operation, as indicated in the drawings, but may be otherwise provided within the purview of the invention. This wedge 17 extends downwardly on the bracket base plate to approximately the base or shank of the hook 13, as clearly shown in Fig. 3.

When the rod end is entered on the hook, the wedge 17 acts, through relative sliding contact with the lower portion of the rod, to force and lock the hook engaging portion of the bottom wall of the rod against the hook, and manifestly the said wedge also cooperates with the lower portion of the rod end to block said lower portion against movement toward the base plate which would otherwise be caused by the drooping or sagging of the rod and the clearance of the lower hole 16. In other words, the section of the bottom wall of the rod lying between the member 17 and the hook 13 is wedged between said parts; and, since the corresponding section of the top wall of the rod abuts against the upper portion of the hook under the weight of the rod, the rod is securely maintained in a true horizontal position.

Describing now that feature which forms the subject matter of the present invention and which facilitates the threading of the rod on the hook, 18 is an internal transversely extending guide rib on the vertical wall of the rod. This rib is simply and cheaply formed by an inward swaging of the vertical wall by means of a suitable die. By reference to Figs. 3 and 4 it will be seen that the outer longitudinal edge of the guide rib 18 is substantially in line with the rear edge portions of the holes 15 and 16. In consequence of this, as soon as the lower hole 16 has been passed down over the tip of the hook, said tip is slidingly engaged with the outer edge of the guide rib 18, and, by the latter, is guided through the upper hole 15. The presence of this rib, therefore, renders it unnecessary to hold the curtain rod in exact horizontal position when entering it on the hooks in order to make it register with the latter. Moreover, if the rod end be accidentally displaced upwardly sufficiently to disengage the upper hole 15 from the hook, the rod will at once settle back into engagement with the hook owing to the presence of the guide rib 18.

From the foregoing it will be seen that by means of the above described improvements, I have obviated the faults and defects hereinabove noted in this well known type of "hook-on" curtain fixture, and have provided a construction such that the easy mounting of the rod is facilitated and the rod, when mounted on its brackets, is securely supported in true horizontal position.

I claim:

1. A hollow curtain rod adapted for cooperation with a bracket having an L-shaped hook, said rod being formed with registering holes in its top and bottom walls adapted to be engaged by the upright limb of said hook, and with an internal guide member on a side wall of the rod serving, through relative sliding engagement with said upright limb as the rod is entered on the hook, to guide the tip of the hook through the hole in the top wall of the rod.

2. A hollow curtain rod adapted for cooperation with a bracket having an L-shaped hook, said rod being formed with registering holes in its top and bottom walls adapted to be engaged by the upright limb of said hook, and with an internal transversely disposed rib on a side wall of the rod, the outer edge of said rib being substantially in line with the rear portion of the edge of the upper hole of the rod, and said rib serving, through relative sliding engagement of its outer edge with said upright limb as the rod is entered on the hook, to guide the tip of the hook through the hole in the top wall of the rod.

JAMES H. BOYE.