No. 786,045. PATENTED MAR. 28, 1905.

W. E. & C. A. METZGER.

ROD HOLDER.

APPLICATION FILED SEPT. 27, 1904.

Fig. 1

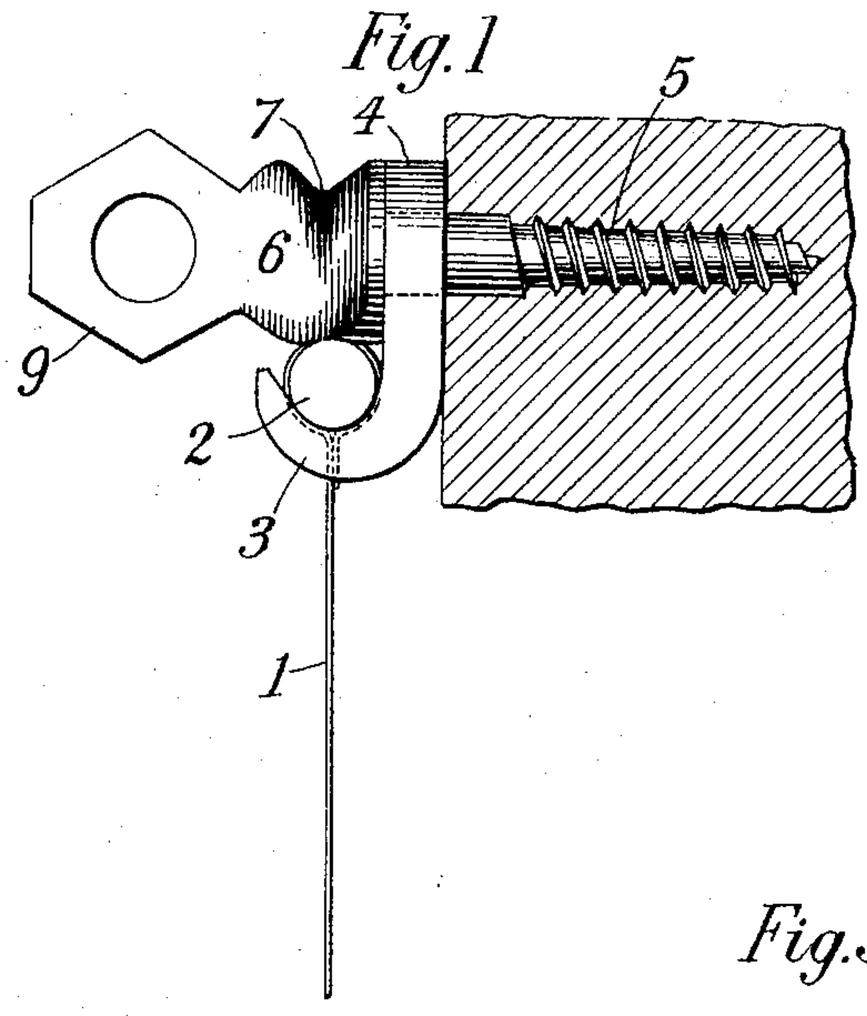


Fig. 2

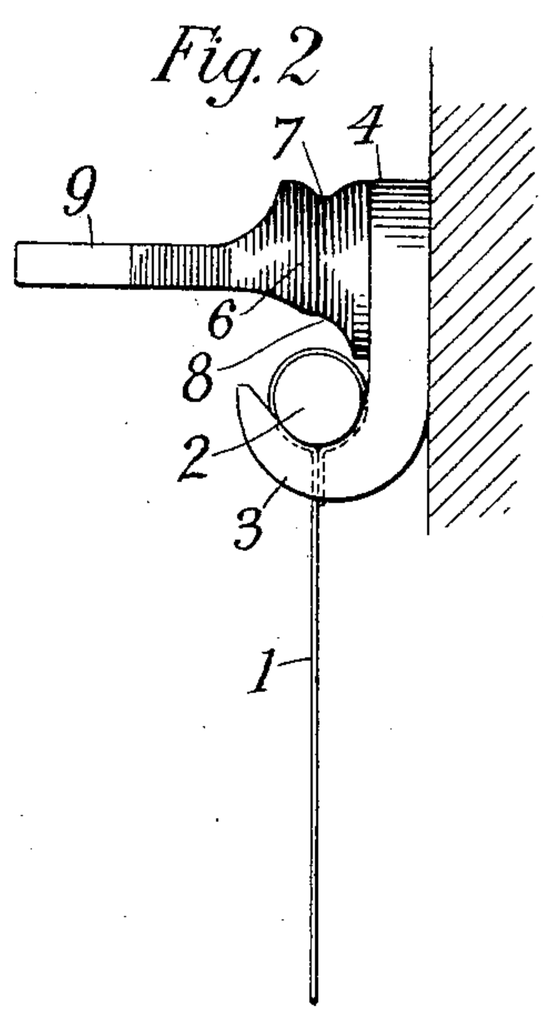


Fig. 3

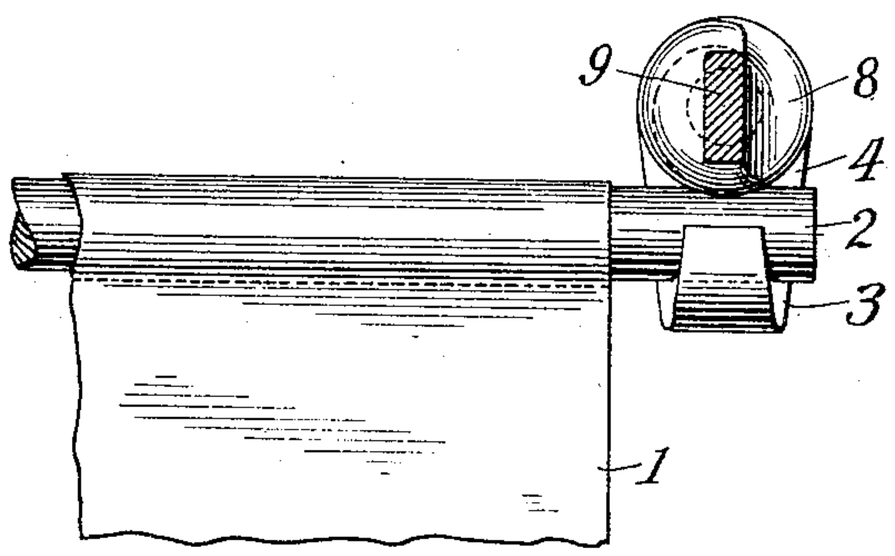


Fig. 4

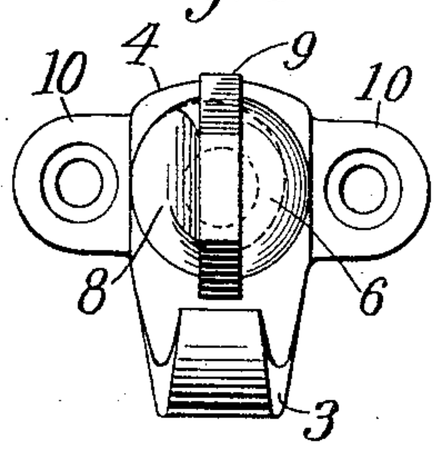
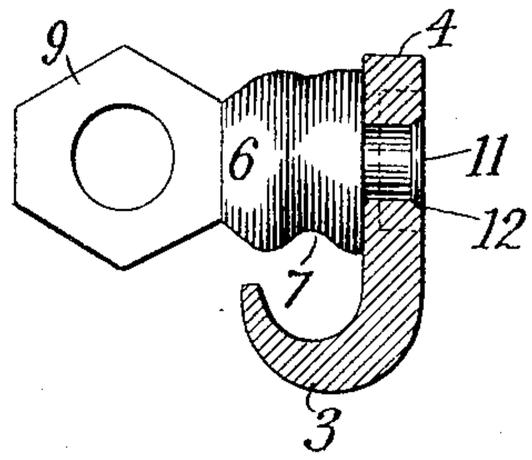


Fig. 5



Witnesses
Raphael Ritter
A. L. Dunham.

Inventors
W. E. Metzger and
C. A. Metzger
by Kerr, Page & Cooper, Attys.

No. 786,045. Patented March 28, 1905.

UNITED STATES PATENT OFFICE.

WILLIAM E. METZGER AND CHARLES A. METZGER, OF RUTLAND, VERMONT.

ROD-HOLDER.

SPECIFICATION forming part of Letters Patent No. 786,045, dated March 28, 1905.

Application filed September 27, 1904. Serial No. 226,156.

To all whom it may concern:

Be it known that we, WILLIAM E. METZGER and CHARLES A. METZGER, citizens of the United States, residing at Rutland, in the county of Rutland and State of Vermont, have invented certain new and useful Improvements in Rod-Holders, of which the following is a specification, reference being had to the drawings accompanying and forming part of the same.

Our invention relates to devices for supporting a rod, particularly the head-rod of an awning or curtain, and has for its chief object to provide a device of such character that the rod will be held securely, yet be at the same time readily removable from the supports by manipulation of the tightening device.

Another object of the invention is to provide such a device which will be simple and strong in construction and inexpensive to manufacture.

The invention consists in the novel features, combinations of elements, and arrangements of parts hereinafter described, and more particularly set forth in the claims.

Referring now to the drawings, Figure 1 is a side view showing the rod firmly held in position. Fig. 2 is a side view showing the clamping device disengaged from the rod, so that the latter may readily be removed. Fig. 3 is an end view with the thumb-piece of the gripping device in section to show the operation of the said device. Fig. 4 is an end view of a modified form; and Fig. 5 is a side view of the same, partly in section.

In Figs. 1, 2, and 3 the awning or curtain is indicated by 1 and is secured in any convenient way to the top or head rod 2, resting in a hook 3. In the shank 4 of the latter is an eye, through which passes a screw 5, entering the wall or other object on which the hook is to be fastened and holding the hook in position thereon. The head of the screw is designated by 6 and has in it a circumferential cam-groove 7. The groove is very shallow at one end, but increases gradually in depth and terminates in a cut-away part of the head, (indicated by 8.) A thumb-piece 9 is provided on the head for the purpose of manipulation.

The operation of the device will be readily understood from the foregoing. The shank of the hook 3 is passed over the screw, and the latter is screwed into the wall or other part of the structure on which the curtain or awning is to be hung. To insert the rod 2, the screw is turned out by means of the thumb-piece until the cut-away part of the head faces the hook, as shown in Fig. 2. The rod may then be laid in place the more readily by reason of the cut-away part of the head being parallel to the thumb-piece, as will be apparent from Fig. 2. The screw is now turned in, thus causing the head to gradually engage the rod in the cam-groove 7 until the rod is firmly gripped between the head and the hook, as shown in Figs. 1 and 3. At the same time the head engages the shank of the hook and carries it against the wall, thus tightening the hook in place simultaneously with the gripping of the rod. By reversing the above operation the rod may easily be removed. Another advantage incident to mounting the hook on the screw in the manner shown is found in the adaptability of the hook for carrying a rod at different angles. Usually the hooks supporting the two ends of the rod will be located in the same horizontal plane, so that the rod will be horizontal; but if the alinement is not accurate or if one hook has been placed higher or lower than the other to hold the rod at an angle to the horizontal the hooks when loosened by turning out the screw to insert the rod will turn readily on the screw and thus accommodate themselves to the angle of the rod. On the other hand, if the hook were not thus movable it would have to be very carefully put up in the first instance, for, if not, it might be found to be at such an angle that when the user came to insert the rod the latter would rest on an edge of the hook. The pressure of the rod might then soon mash down the edge or the latter might form a slight groove in the rod, thereby causing the rod to be loosened in

time. Such wear may be sufficient, with small rods especially, to reduce the diameter of the rod at that point so much that the head will no longer grip it at all. With the device of our invention, however, no such care need be exercised in putting up the hooks, since they accommodate themselves instantly to the angle of the rod. The devices may therefore be placed in position with a minimum amount of labor and time. Furthermore, if after being secured in place the rod should be bent, as by accident, the hook would turn slightly on the screw, and so would not be broken by the sudden strain. If it is desired to make special provision against such strains, the screw may be so adjusted in putting up the device that the friction between the shank and the head and wall will be light enough to permit the hook to turn readily, the friction between the hook-shank and the screw being easily overcome.

If the wall or other object to which the device is to be applied is of such character that it is not desirable to use a single screw of considerable size, the hook may be provided with ears, as 10, Fig. 4, having openings for the insertion of small screws, rivets, or other suitable fastening devices. In such a construction in lieu of the screw 5 the head is provided with a short shank 11, Fig. 5, having suitable means to hold it in the eye of the hook, as the flange 12. In this form of the device the hook is stationary relative to the object on which it is secured, and for that reason it cannot adjust itself with respect to the angle of the rod. However, the rod may be inserted and removed in this construction as readily as in the form first described.

It will of course be obvious that the rod may be used to support other objects than an awning or curtain. It will also be understood that the invention is capable of a variety of embodiments and that it is, therefore, not limited to what is herein specifically shown and described.

What we claim is—

1. A rod-holding device comprising, in combination, a hook having an apertured shank, and a head rotatable relative to the hook, said head having a circumferential cam-groove, whereby a rod may be removably locked in the hook, as set forth.

2. A rod-holding device comprising, in combination, a hook having an apertured shank, a screw extending through said shank and adapted to enter a wall or other object, and a cam-head on said screw, whereby rotation of the screw will lock or release a rod supported by the hook, as set forth.

3. A rod-holding device comprising, in combination, a hook having an apertured shank, a screw extending through said hook and adapted to enter a wall or other object, and a head on the screw having a circumferential cam-groove, whereby rotation of the screw will lock or release a rod supported by the hook, as set forth.

WILLIAM E. METZGER.
CHARLES A. METZGER.

Witnesses:
CHAS. L. HOWE,
MATTIE M. ADAMS.