Nov. 23, 1948. H. HIPPLER 2,454,698

HOOK GUARD

Filed March 18, 1947

Fig. 1.

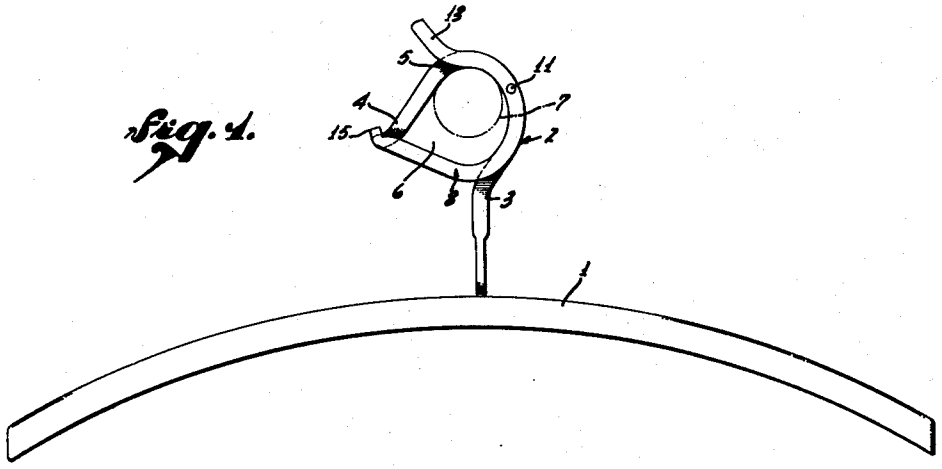


Fig. 2.

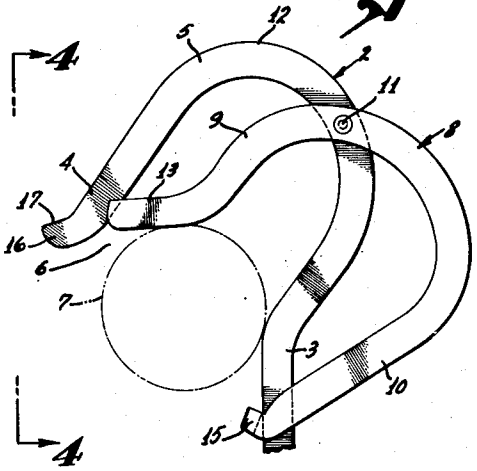


Fig. 3.

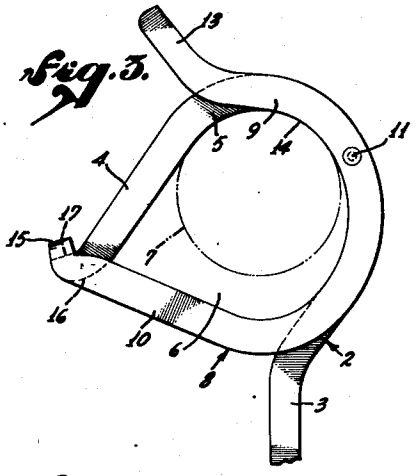


Fig. 4.

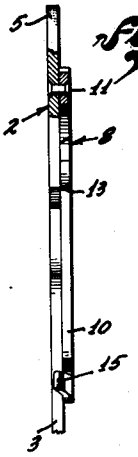


Fig. 5.

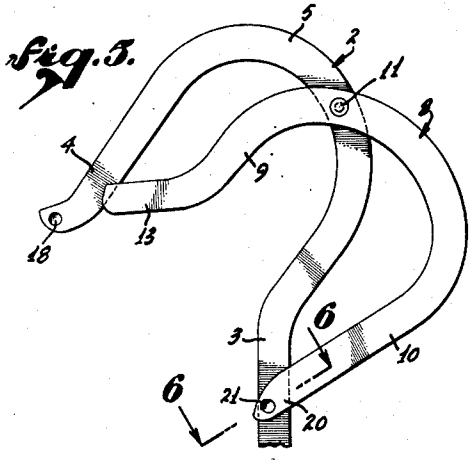
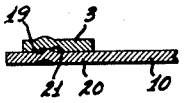


Fig. 6.



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HOOK GUARD

Hans Hippler, North Hollywood, Calif.

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4 Claims. (Cl. 223—85)

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The invention relates to a guard for a hook. While the invention will be described with particular reference to a hook for a garment hanger, the guard of this invention may be employed in connection with hooks used for other purposes.

As applied to a garment hanger hook, an object of the invention is to close the gap in the hook when the hook is hung on a pole so that the hanger will not fall off from the pole when the garment hanger swings, due to removing the garment from the hanger. A further object is to prevent the hook of one hanger from catching on the hook of an adjoining hanger. A further object is to accomplish the above objects, and automatically open or close the gap in the hook by the usual act of either hanging the hanger on the pole or removing it from the pole. A still further object is to latch the guard in either its open or closed position and to operate the latch in the course of either hanging the hook on the pole or removing it therefrom.

More generally stated, an object of the invention is to provide an operating member in the entrance path into the hook and another operating member in the exit path from the hook for automatically operating a guard to open or close the gap of the hook, without regard to whether the thing which enters or leaves such path is usual pole, or some other object.

For further details of the invention, reference may be made to the drawings wherein Fig. 1 is a side view in elevation of a hook guard according to the present invention, as applied to a garment hanger shown in position on a pole illustrated in section, the guard being in closed position.

Fig. 2 is an enlarged side view, with the guard in open position, and with the yoke broken away.

Fig. 3 is an enlarged side view with the guard closed.

Fig. 4 is a side view in elevation of the device in Fig. 2, the view being taken on line 4—4 thereof looking in the direction of the arrows, with the parts adjoining the pivot shown in section.

Figs. 1 to 4 illustrate one form of latch, another form being shown in Figs. 5 and 6.

Fig. 5 is a view corresponding to Fig. 2, with a modified form of latch.

Fig. 6 is an enlarged sectional view on line 6—6 of Fig. 5 looking in the direction of the arrows.

Referring in detail to the drawings, the yoke 1 of a garment hanger has a flat hook 2. The hook 2 has a shank 3, a point 4, a crown 5 and

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a gap 6. The hook 2 is adapted to rest on a pole 7. Mounted on the hook 2 is a guard 8.

As shown in Fig. 2, the guard 8 is a substantially U shaped member. Both the hook 2 and the guard 8 are preferably flat metal and may be stamped from a sheet of aluminum or the like. The guard 8 has an upper leg 9 and a lower leg 10. The upper leg 9 is pivotally connected to the hook 2 as indicated at 11 at a point on the shank side of the apex 12 of the crown of the hook. The outer end of the upper leg 9 flares outwardly as indicated at 13 so that when the guard 8 is open as shown in Fig. 2, the end 13 intercepts the entrance to the hook and provides a cam like operating member which is operated by pole 7 when the hanger is put on the pole 7, to pivot the guard 8 and bring its lower leg 10 across the gap 6 as shown in Fig. 3. The end 13 and leg 9 gradually swing out of the entrance path into the hook as the hook descends on the pole 7 until the leg 9 overlies and conforms to the crown 5 of the hook as indicated at 14 in Fig. 3, the portion 14 having a curvature which conforms to the overlying portion of the hook 2.

As the pole 7 makes its exit from the hook, due to the simple act of lifting the hanger off from the pole 7, the lower leg 10 is operated by the pole 7 to swing the guard 8 in the reverse direction and open the gap 6 in the hook, thereby bringing the guard 8 to the position shown in Fig. 2 where it is again ready to automatically operate when the hook 2 is hung on the pole 7.

In order to impositively retain or latch the guard 8 in its two operating positions shown in Figs. 2 and 3, as shown in those figures the outer end of lower leg 10 has an inturned lug or catch 15 which catches on the left side of the flat shank 3 to limit the opening movement of guard 8. When the pole 7 acts on the upper leg 9, 13 to swing the guard 8 to the position shown in Fig. 3, the catch 15 slides over the outer end 16 of the hook, the leg 10 and point 4 being flexible enough to permit the lug 15 to ride over the face of the hook point 16. The hook 15 seats or catches on the face 17 at the upper side of the hook to impositively retain the guard 8 closed, that is, a firm push upward on the hook 2 or on yoke 1 when removing the hanger, is sufficient to cause hook 15 to unlatch from its catch face 17.

In the modification shown in Figs. 5 to 6, the point 4 of the hook 2 is provided with a hemispherical recess 18 and a similar recess 19, as shown in Fig. 6, is provided in the shank 3 of the

hook. The outer end 20 of the lower leg 10 of the guard 8 is provided with a cooperating similar projection 21 which catches in recess 18 to frictionally hold the guard 8 closed and at other times in recess 19 to frictionally hold the guard 8 open.

It will be apparent, therefore, that the upper leg portion 9, 13 of the guard 8 intercept the path into the hook and serve to operate the lower leg 10 to close the gap 6 in the hook, and that the member 10 is operated by the object leaving the hook, to open the gap 6 in the hook and move the upper leg 9, 13 from a position where leg portion 9 conforms to the crown 5 without intercepting the entrance to the hook, to a position shown in Fig. 2 where the upper leg 9, 13 does intercept the hook entrance. It is also apparent that the latch 3, 15 in Fig. 2, and the corresponding latch 19, 21 in Fig. 6 is unlatched and also that the latch 15, 17 and the corresponding latch 21, 18 are fastened when the guard 8 is moved to close the gap as shown in Fig. 3. When the hook 2 is taken from the pole, assuming either that the pole is almost as large in diameter as the entrance into the hook, as shown in Fig. 2, or assuming that the shank of the hook is kept against the pole as the hook is removed, the pole 7 on leaving the hook bears against the inner surface of lower leg 10 and finally against the catch 15 at the end of leg 10 to move the guard open to the position shown in Fig. 2, and thereby, the lower leg 10 is acted on by the pole to unlock the latch 15, 17 in Fig. 2 or 21, 18 in Fig. 5, and also lock the latch 19, 21 in Fig. 5 and cause the catch 15 to engage the side of shank 3 to limit the opening movement of the guard 8.

When the guard 8 is closed as shown in Fig. 3, the lower leg 10 of the guard closes the gap 6 in the hook 2 to prevent the hook 2 from accidentally dropping off from the pole 7 when a garment is removed from the hangar 1. Also, as the hook 2 and its guard 8 present a substantially complete enclosure when the guard is closed, this prevents the point 4 of the hook from interlocking with the hook of an adjacent hanger.

The showing in Figs. 2 to 4 represent in full size a hook and guard which have been constructed of aluminum sheet, of the thickness shown in Fig.

and such material has sufficient inherent flexibility for the latch purposes above described. Both the hook 2 and the guard 8, in being made of flat sheet metal, will pivot with their adjacent faces in sliding contact as will be apparent from Fig. 4.

Various modifications may be made in the invention without departing from the spirit of the following claims:

I claim:

1. A garment hanger hook having a crown, a point and a shank, a guard therefor comprising a substantially U shaped member having a crown and upper and lower legs, a pivotal connection between the upper leg of said member and said hook at the shank side of the apex of the crown of said hook, said member being movable to one position where said upper leg conforms to the crown of said hook with said lower leg obstructing the gap of said hook, said member being movable to another position where the pole entrance to said member between said legs overlaps the pole entrance to said hook, and means operative upon movement of said member to said one position for retaining same in said position.

2. A garment hanger hook according to claim 1, said upper leg having an outwardly extending end portion in the gap of said hook when said member is in said other position.

3. A garment hanger hook according to claim 1 and means for retaining said member at said other position.

4. A garment hanger hook according to claim 1 wherein said retaining means comprises a projection on the lower leg of said member and a cooperating recess on the end of said hook.

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The following references are of record in the file of this patent:

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