R. J. STEELE.

HANGER.

APPLICATION FILED SEPT. 20, 1916.

1,230,440.

Patented June 19, 1917.

Fig. 1

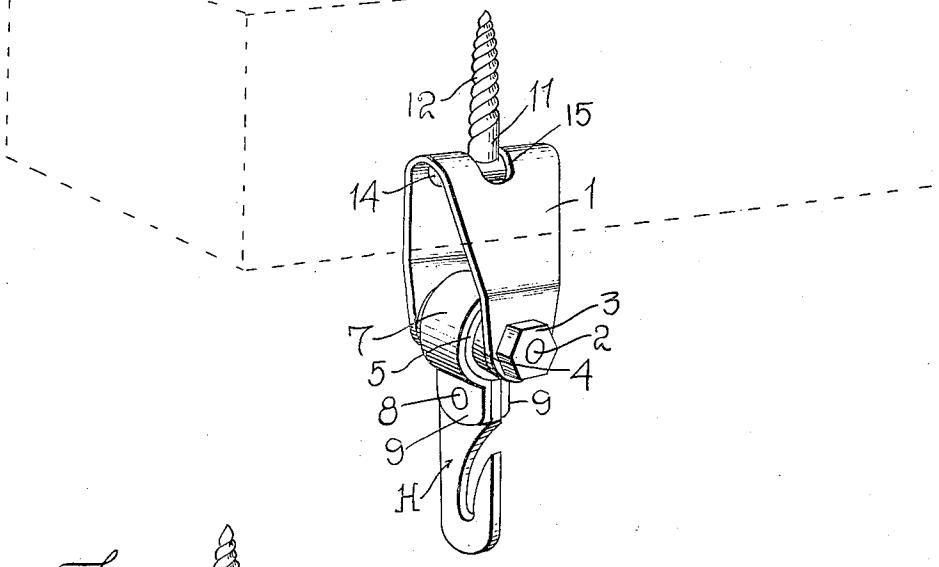


Fig. 2

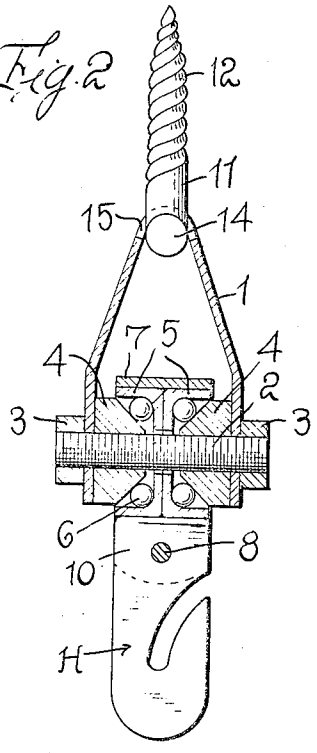
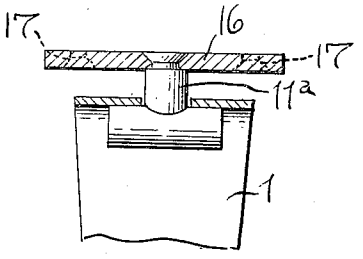


Fig. 3



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HANGER.

1,230,440. Specification of Letters Patent. Patented June 19, 1917.

Application filed September 20, 1916. Serial No. 121,282.

To all whom it may concern:

Be it known that I, ROBERT J. STEELE, a citizen of the United States, residing at Newport News, in the county of Warwick and State of Virginia, have invented certain new and useful Improvements in Hangers, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain improvements in hangers and has relation more particularly to a device of this general character especially designed and adapted for use in connection with hammocks, swings or other oscillating bodies; and it is an object of the invention to provide a novel and improved device of this general character which assures a maximum of durability with a minimum of friction at the point where the greatest wear would otherwise occur.

Furthermore it is an object of the invention to provide a novel and improved device of this general character comprising two relatively movable members, the connection between said members being such as to permit the same to have relative movement with a minimum of friction and without noise, while one of said members is provided with means whereby the same may be supported for swinging movement in a direction angular to the direction of the relative movements of the sections.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved hanger whereby certain important advantages are attained and the device is rendered simpler, less expensive and otherwise more convenient and advantageous for use, all as will be hereinafter more fully set forth.

The novel features of the invention will hereinafter be definitely claimed.

In order that my invention may be the better understood, I will now proceed to describe the same with reference to the accompanying drawings, wherein—

Figure 1 is a view in perspective of a hanger constructed in accordance with an embodiment of my invention, a coacting support being indicated by dotted lines;

Fig. 2 is a view partly in elevation and partly in section of my improved hanger as herein embodied; and

Fig. 3 is a fragmentary view partly in section and partly in elevation illustrating a slightly modified form of the invention.

As disclosed in the accompanying drawings, 1 denotes a metallic strap bent intermediate its length to afford a substantially U-shaped frame and disposed through said frame is the threaded bolt or shaft 2 with which coact the nuts or burs 3.

Also threaded upon the shaft 2 are the cones 4 which coöperate in a conventional manner with the ball races or cups 5 loosely mounted upon the shaft or bolt 2.

6 denote anti-friction members herein disclosed as spherical bodies disposed in said raceways or cups 5 and with which the cones 4 are directly engageable for a purpose which is believed to be clearly apparent to those skilled in the art to which my invention appertains.

The cups 5 are in imposed relation and reversely directed as is believed to be clearly disclosed in Fig. 2 and whereby a materially broad periphery is afforded and with which coacts the metallic clamping strap 7 which is held in frictional engagement with said cups 5 through the medium of the rivet 8 disposed through the ears 9 arranged at the free extremities of said strap 7.

Also disposed between said ears 9 is the shank or butt portion 10 of the hook member H and through which the rivet 8 is also directed and whereby said hook member H is effectively held between the ears 9. It is to be noted that the upper or outer end of the shank 10 is substantially straight in cross section and contacts with the periphery of the cups 5 so that swinging movement of the hook member H about the rivet 8 is effectively prevented.

11 denotes a shank provided with the screw threads 12 whereby the same may be effectively engaged with a beam or other support and said shank 11 is also provided with the cross head 14. The cross head 14 contacts with the inner face of the curved portion of the member or frame 1 and said curved portion is provided with an elongated slot 15 disposed in the same general direction as the shaft or bolt 2 and through which the shank 11 extends.

As is particularly shown in Figs. 1 and 2, it is to be noted that the slot 15 is of a length greater than the diameter of the shank 11 so that the member or frame 1 is capable of limited swinging movement upon the cross

head 14. It is also to be noted that the shank 11 is of a length greater than the distance between the curved portion of the member or frame 1 and the clamp 7 so that the shank 11 will not become separated from the frame or member 1 in order that the members are at all times maintained in assembled relation and the possibility of one of the parts, and particularly the shank 11, becoming separated and lost is eliminated.

It will be understood that the shank 11 is disposed through the slot 15 before the elongated member or frame 1 is operatively engaged with the shaft or bolt 2 and it will be further noted that the free end portions of the member or frame 1 are effectively clamped between the nuts or burs 3 and the cones 4, as is particularly illustrated in Fig. 2.

As illustrated in Fig. 3 of the drawings, the shank 11^a coacting with the frame 1, shown in fragment, has its outer end portion affixed to the plate 16 which plate is adapted to be secured in any conventional manner to a support and preferably through the medium of screws disposed through suitable openings in the plate as indicated by dotted lines at 17.

From the foregoing description, it is thought to be obvious that a hanger constructed in accordance with my invention is of an extremely simple and comparatively inexpensive nature and is particularly well adapted for use by reason of the convenience and facility with which it may be assembled, and it will also be obvious that my invention is susceptible of some change and modification without material departure from the principles and spirit thereof and for this reason I do not wish to be understood as limiting myself to the precise arrangement and formation of the several parts herein shown in carrying out my invention in practice, except as hereinafter claimed.

I claim:

1. As a new article of manufacture, a hanger consisting of a substantially U-shaped frame, a shaft disposed through the free extremities of said frame, cones mounted upon said shaft between the outer ends of the frame, reversely disposed cups surrounding the shaft and affording raceways, anti-friction members mounted in said cups and contacting with the cones, a clamping strap disposed around the periphery of the cups and terminating in ears, a hook member having a shank extending between the ears of the clamping strap, and securing means passing through said straps and shank of the hook member.

2. As a new article of manufacture, a hanger consisting of a substantially U-shaped frame, a shaft disposed through the free extremities of said frame, cones mounted upon said shaft between the outer ends of the frame, reversely disposed cups surrounding the shaft and affording raceways, anti-friction members mounted in said cups and contacting with the cones, a clamping strap disposed around the periphery of the cups and terminating in ears, a hook member having a shank extending between the ears of the clamping strap, and securing means passing through said straps and shank of the hook member, the outer end of the shank of the hook member being straight and contacting with the periphery afforded by the cups.

3. As a new article of manufacture, a hanger comprising a substantially U-shaped frame, a shaft supported by the free end portions of said frame, the base of the frame being provided with a slot disposed longitudinally of the shaft, a hook member mounted for rocking movement upon the shaft, and a shank disposed through the slot of the frame, the outer end portion of said shank being provided with securing means and the inner end of said shank being provided with a cross head extending transversely of the slot of the frame and of a length in excess of the width of said slot, said shank being of a length in excess of the distance between the bend of the frame and the connected portion of the hook member.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

ROBERT J. STEELE.

Witnesses:
W. E. LAWSON,
W. C. TUCKER.