Jan. 30, 1945. J. L. ENSOR 2,368,459

ATTACHING MEANS FOR TRAPEZE HORIZONTAL BARS AND EXERCISING RINGS

Filed Dec. 14, 1943

Fig. 1.

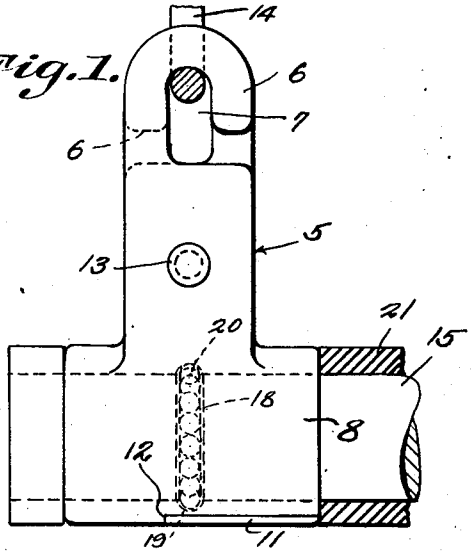


Fig. 2.

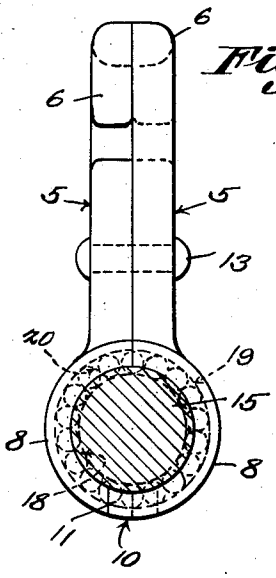


Fig. 3.

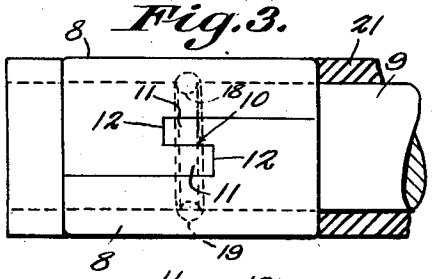
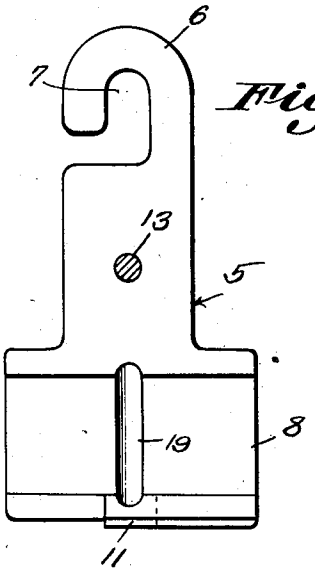


Fig. 4.



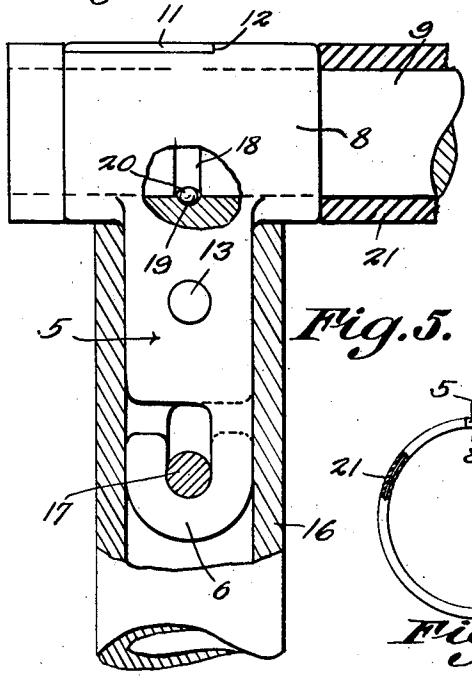


Fig. 5.

Fig. 6.

J. L. Ensor
INVENTOR.

BY C. A. Snow & Co.
ATTORNEYS.

Patented Jan. 30, 1945

2,368,459

UNITED STATES PATENT OFFICE

2,368,459

ATTACHING MEANS FOR TRAPEZE HORIZONTAL BARS AND EXERCISING RINGS

James L. Ensor, Cookeville, Tenn.

Application December 14, 1943, Serial No. 514,268

2 Claims. (Cl. 272—61)

This invention relates to a device designed for securing horizontal bars and exercising rings, to their supports.

The primary object of the invention is to provide a device of this character which will be exceptionally strong and durable, and one wherein the horizontal bar or ring attached thereto, will be securely held to its support, eliminating any possibility of the attaching means releasing the horizontal bar or ring, when the horizontal bar or ring is in use.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claims, is being understood that changes may be made in the construction and arrangement of parts without departing from the spirit of the invention as claimed.

Referring to the drawing

Figure 1 is an elevational view of an attaching device constructed in accordance with the invention, illustrating the device as connected with a horizontal bar of a trapeze.

Figure 2 is an edge elevational view thereof.

Figure 3 is a plan view illustrating the interlocking portions of the sections of the attaching device, at the point of connection with the horizontal bar or ring.

Figure 4 is an elevational view of one of the identical hook sections, of which the attaching device is constructed.

Figure 5 is an elevational view of the attaching device showing a horizontal bar connected therewith, the attaching device being extended into the open end of the vertical supporting post of a horizontal bar.

Figure 6 is an elevational view illustrating an exercising ring equipped with an attaching device constructed in accordance with the invention.

Referring to the drawing in detail, the connecting unit for horizontal bars or exercising rings, includes a pair of identical cooperating plates indicated generally by the reference character 5. Each plate includes a hook portion 6 formed by cutting the plate inwardly from one edge and at right angles to the side edges of the plate, and then extending the cut-out portion in a direction towards the outer end of the hook, in parallel relation with the edges of the plate, as indicated at 7.

Each plate is formed with a semi-tubular portion 8 of a size and shape to fit around the horizontal bar or ring with which the attaching unit is used. The horizontal bar in the present showing is indicated by the reference character 9, and is provided with an annular groove 18 which cooperates with the grooves 19 formed in the plates providing a channel for the balls 20.

The edge of the semi-tubular portion 8 of the unit, is formed with an offset portion indicated at 10 providing a tongue 11 and a recess 12, the tongue of one section of the unit adapted to fit within the recess of the cooperating section, when the sections of the unit are brought together and secured as by means of the rivet 13.

In forming the unit, two identical plates as described, are positioned with their hooks 6 disposed in opposite directions, the hooks having been positioned over a link such as indicated at 14, of a hanging trapeze support. The bar 15 of the trapeze is positioned within the tubular portion of the unit, which is formed by moving the semi-tubular sections of the unit together, the tongues of the plate fitting into the recesses of the opposite plates. This structure, will prevent the weight on the bar 15, spreading the semi-tubular sections to release the bar 15.

As shown by Fig. 5 of the drawing, the attaching unit is used in connection with a horizontal bar 9, which is supported by vertical posts 16, the extensions or hook portions of the unit being extended downwardly into the open ends of the posts 16. The bolt indicated at 17 is extended through the posts 16, and positioned within the hooks of the cooperating plates, as shown by Fig. 5. As shown, the horizontal bar, trapeze bar or ring, will be encased in a tubing 21 constructed of rubber, providing a cushion for the hands of the person using the device.

While I have shown and described the unit as used in connection with horizontal bars and trapeze bars, it is of course understood that the attaching unit may be used as a means for connecting exercising rings to their supporting chains, the hook portions of the unit being hooked into the lowermost links of the supporting chains, while the semi-tubular portions are positioned around the ring.

What is claimed is:

1. A device of the class described, comprising in combination a hollow post, a pair of complemental members, a hook at one end of each member and a semi-tubular member at the opposite end of each member, means for pivotally connecting the members, the hooks of said pivotally connected members being oppositely disposed, said hooks adapted to be extended into said post in

contact therewith, a bolt extending through the hooks and post, securing the hooks within the post, and said semi-tubular members adapted to cooperate in gripping a bar.

2. A device of the class described, comprising a pair of complemental members constructed of sheet metal material, means for pivottally connecting the members at points intermediate their ends, a semi°tubular member formed at one end of each of the pivotally connected members, said semi-tubular members cooperating in providing a tubular bar support, said semi-tubular members having registering grooves in which ball bearings are mounted, a bar extended into the semi-tubular members and having a groove in which the ball bearings operate, whereby said bar may rotate within the semi-tubular members.

JAMES L. ENSOR.