

A. J. THORNLEY.
SUPPORT FOR GYMNASIUM APPARATUS.
APPLICATION FILED MAR. 9, 1905.

Fig. 1.

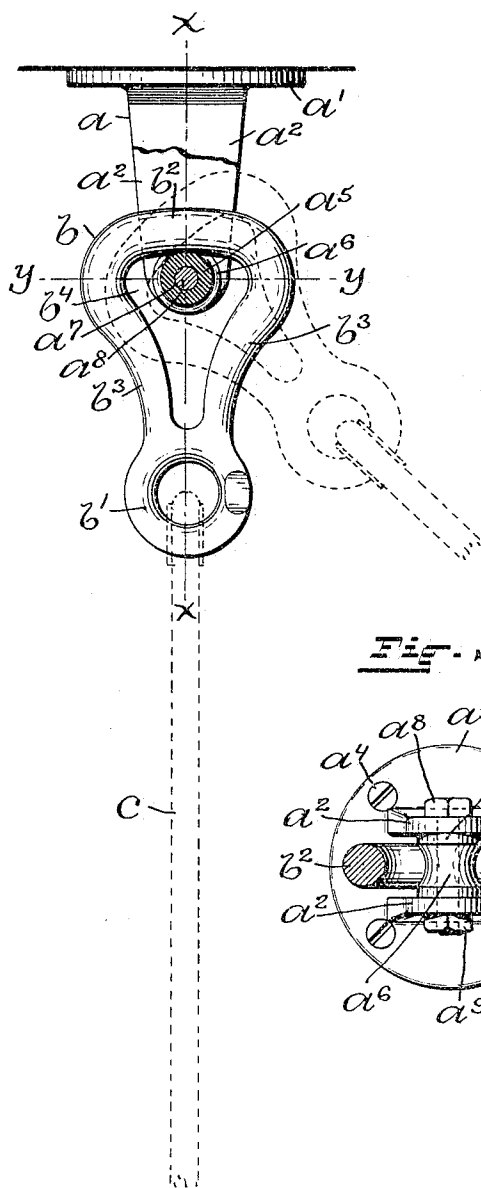


Fig. 2.

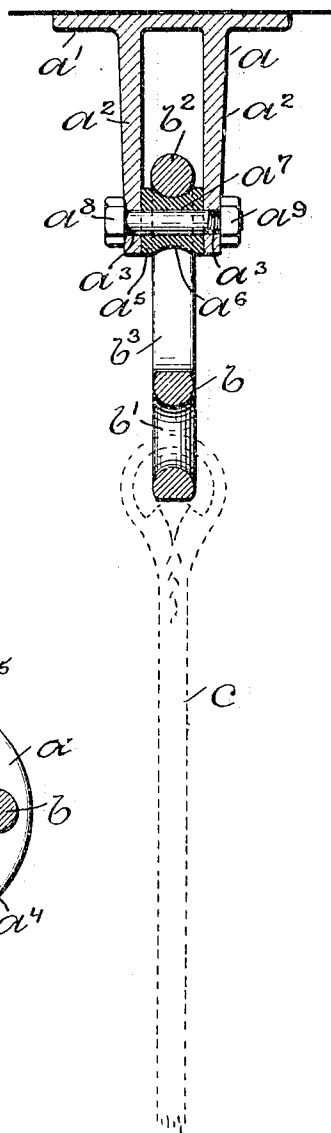
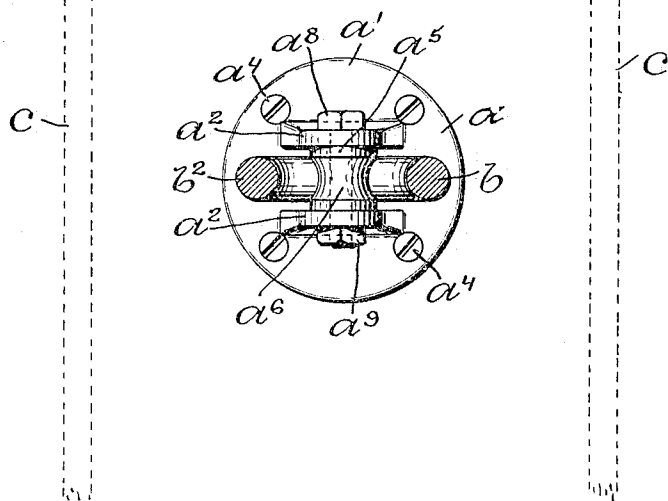


Fig. 3.



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SUPPORT FOR GYMNASIUM APPARATUS.

SPECIFICATION forming part of Letters Patent No. 793,331, dated June 27, 1905.

Application-filed March 9, 1905. Serial No. 249,159.

To all whom it may concern:

Be it known that I, ALBERT J. THORNLEY, a citizen of the United States, residing at Pawtucket, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Supports for Gymnasium Apparatus, of which the following is a specification.

This invention has reference to an improvement in the means for pivotally supporting the ropes of rings, swings, trapeze, or similar exercising apparatus of gymnasiums. Supports for this purpose as heretofore constructed have considerable friction. Consequently they wear out quickly, necessitating frequent inspection of the supports and renewal of the same.

The object of my invention is to improve the construction of pivotal supports for indoor or outdoor gymnasium apparatus, thereby providing a support with the least possible amount of friction, thus reducing the wear on the support to a minimum.

My invention consists in the peculiar and novel construction of a pivotal support for gymnasium apparatus, as will be more fully set forth hereinafter.

Figure 1 is a side view, partly in section, of my improved pivotal support, showing the connecting-link in its normal position in full lines and one position it would assume when in use in broken lines. Fig. 2 is a sectional view of the support, taken on line X X of Fig. 1, showing the means for securing the connecting-link to the fixed part of the support; and Fig. 3 is a transverse sectional view taken on line Y Y of Fig. 1.

In the drawings, *a* indicates the fixed member of my improved pivotal support, *b* the connecting-link of the support, and *c* a rope secured to the connecting-link, as shown in broken lines in Figs. 1 and 2. The rope *c* may be connected at its lower end to a ring or other form of gymnasium apparatus.

The fixed member *a* consists of a circular base-plate *a'*, having the two downwardly-extending arms *a'' a'''*, in the ends of which are the transverse holes *a⁴ a⁵*, all formed in-

tegral, as shown in Fig. 2. This fixed member *a* is secured to the ceiling or to any rigid fixture of the gymnasium by the screws *a¹ a²*, as shown in Fig. 3. A hardened roll *a⁶*, having the annular semicircular groove *a⁶* and the central hole *a⁷*, is rigidly secured between the ends of the arms *a'' a'''* by the bolt *a⁸* through the holes *a³ a⁴* in the end of the arms and the hole *a⁷* in the roll. The roll may be turned to adjust for wear, if required, by loosening the nut *a⁹* on the bolt *a⁸*.

The connecting-link *b* is shaped to form the eye end *b'*, to which the rope *c* is secured, and the segmental end *b²*, connected to the eye end by the side arms *b³ b⁴*, forming a loop, and the opening *b¹*, the greatest width of which is approximately half the circumference of the roll *a⁶*, as shown in Fig. 1. The segmental end *b²* is circular in cross-section, as shown in Fig. 2, and rocks on the top of the roll *a⁶* in the groove *a⁶*.

In the use of my improved pivotal support the end *b²* of the connecting-link *b* rocks on the fixed roll *a⁶*. As the rope *c* swings outward in use the surface contact of the end *b²* of the link on the roll *a⁶* causes the link to assume the position shown in broken lines in Fig. 1, thereby practically eliminating the friction of the connecting-link on the roll and reducing the wear to a minimum.

It is evident that the eye end *b'* of the connecting-link *b* could be constructed in the form of a hook, if desired, without materially affecting the spirit of my invention.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A pivotal support for gymnasium apparatus consisting of a fixed member and a rocking member, means consisting of a roll and bolt for securing the rocking member in the fixed member, and means for securing a rope or similar article to the rocking member, as described.

2. A pivotal support for gymnasium apparatus consisting of a fixed member having downwardly-extending arms, a roll rigidly secured between the ends of the arms, a rocking member adapted to rock on the roll be-

tween the arms, and means for securing a rope or similar article to the lower end of the rocking member, as described.

3. A pivotal support for gymnasium apparatus consisting of a fixed member having two downwardly-extending arms, a roll adjustably secured between the ends of the arms, means for firmly securing the roll in the adjusted position, a rocking member having an eye end and a loop-shaped segmental end adapted to rock on the roll in the fixed member, and means for securing a rope or similar article to the eye end of the rocking member, whereby the friction and wear between the rocking member and the roll is reduced to a minimum, as described.

4. In a pivotal support for gymnasium apparatus, the combination of a fixed member consisting of a base having two downwardly-extending arms, a roll having a semicircular annular groove adjustably secured between the ends of the arms, means for firmly securing the roll in the adjusted position consisting of a bolt passing through holes in the ends of the arms and the roll, means for securing the base of the fixed member to a rigid fixture of the gymnasium, a rocking member having an eye end and a loop-shaped segmental end all formed integral, said segmental end being circular in cross-section and adapted to rock on the roll in the fixed member, and means for

securing a rope or similar article to the eye end of the rocking member, whereby the friction and wear between the rocking member and the fixed member is reduced to a minimum by the rocking action of the rocking member on the roll in the fixed member, as described.

5. In a pivotal support for gymnasium apparatus, the combination of a fixed member a consisting of a base-plate a' having the two downwardly-extending arms a^2 a^2 in the ends of which are the transverse holes a^3 a^3 , the roll a^5 having the annular semicircular groove a^6 and the central hole a^7 secured between the ends of the arms a^2 a^2 by the bolt a^8 , and a rocking member consisting of a connecting-link b shaped to have the eye end b' and the segmental end b^2 connected to the eye end by the side arms b^3 b^3 forming a loop and the opening b^4 , means for securing the base a' of the fixed member a to a rigid fixture of the gymnasium, and means for securing a rope or similar article to the eye end b' of the connecting-link b , as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALBERT J. THORNLEY.

Witnesses:

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ADA E. HAGERTY.