

A. J. THORNLEY.
GYMNASIUM HORSE.
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941,665.

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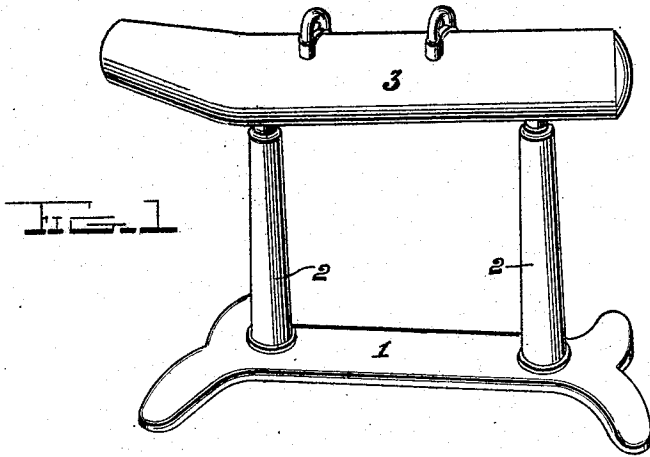


Fig. 5

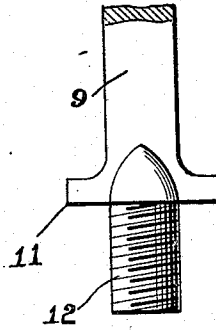


Fig. 2

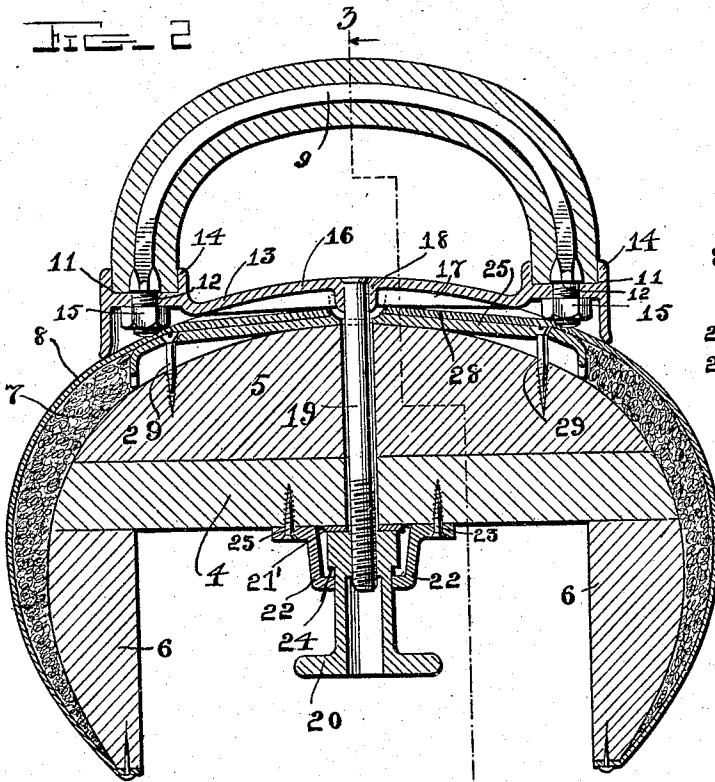
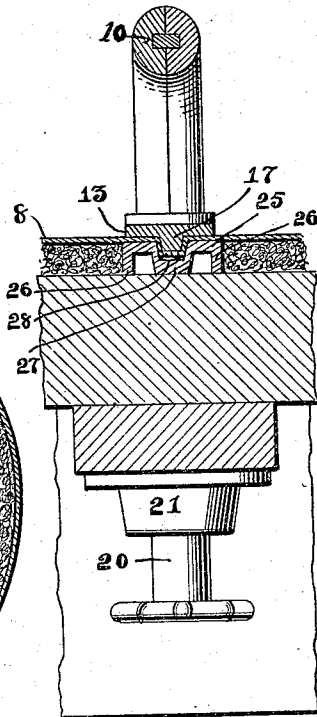


Fig. 3



Witnesses

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GYMNASIUM-HORSE.

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Specification of Letters Patent.

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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 Gymnasium-Horses, of which the following is a specification.

This invention pertains to improvements in gymnasium horses, and relates more particularly to the construction and mode of securement of the handles, and has for its object the provision of a novel, simplified, and improved form of handle connections for a horse of this type, wherein the handles may be easily and rigidly united, and which will effectually withstand the rough usage to which devices of this general type and purpose are commonly subjected.

In the drawings:—Figure 1 is a perspective view of a gymnasium horse, provided with my improved type of handles, Fig. 2 is a transverse sectional view on an enlarged scale, taken on a line through the handles, Fig. 3 is a fragmentary longitudinal section, taken on line 3 3 of Fig. 2, and looking in the direction of the arrows, Fig. 4 is a detail side elevation of one of the shoes, and Fig. 5 is a portion of the lower end of one of the cores.

The horse, as is common in the art, includes a base 1, a pair of vertical legs or uprights 2, and a body 3 supported by said legs or uprights. Body 3 includes a horizontal base board 4, which has a crown member 5 secured to its upper face and on its lower face at each side thereof has suitably secured a depending side strip 6. As clearly depicted in Fig. 2 of the drawings, the side strips 6, base board 4 and crown member 5 are given a curved contour as is usual, the whole receiving padding 7, which is secured in place by a leather covering or facing 8.

Each handle, or pommel, is composed of a curved core 9 of the form illustrated in Fig. 2, and a pair of opposite semi-circular members which are suitably united so as to have rigid relation and which are formed with registering grooves 10 to receive the core 9. Each end of core 9 is formed with a shoulder 11, and a threaded extension 12, the extension 12 being passed through openings provided therefor in the cross piece 13, which serves as a means of connecting the

ends of the handle and as a medium of support therefor.

The cross piece 13 is formed at each of its ends with an upwardly-projecting rim 14, which conformably receives the handle ends, the latter seating on the upper face of the cross piece. To secure the handle in its relation as just set forth with respect to the cross piece 13, nuts 15 are employed which engage the threaded extensions 12, and which bind the shoulders 11 to their seats, furnished by the cross piece. Depending from the arched center 16 of the cross piece there is a solid rib 17, which has its sides tapering inwardly toward the bottom face of the rib, as shown in Fig. 3. The arched center 16 of the cross piece is formed with a central downwardly-extending boss 18, which receives the head of a bolt 19, the same being countersunk in the top face of the arched center 16, shown in Fig. 2. The bolt 19 passes through openings formed in the crown member 5 and the base board 4 and at its lower end is engaged by a hand operated nut 20. A wear washer 21 is disposed between the nut 20 and the under face of the base board 4. The nut 20 is held against lateral play in any direction by means of a bearing sleeve 21, which is composed of a pair of opposite flanged parts 22, suitably held in rigid relation to the base board 4 by means of screws 23. The inner end of head of the nut 20 is shouldered as at 24, whereby same is maintained in its relation to the base board, as illustrated in Fig. 2, and against any tendency toward downward movement should same be disengaged from the bolt 19. On the top face of the crown 5, there is disposed a shoe 25, curved longitudinally as illustrated in Fig. 4 to conformably engage with the crown 5 as shown. Shoe 25, is preferably formed hollow as illustrated in Fig. 3.

The shoe embodies side ribs 26 and a central rib 27, the latter formed with a longitudinal recess 28 which conformably receives the inclined rib 17 of the connecting member or cross piece 13, whereby when pressure is brought to bear on member 17, there will be a wedging action effected in obvious manner. The leather facing or cover 8 at the points of location of the handles is depressed into the recess 28 and clamped between the shoe 25 and member 13, as depicted in Fig. 3. To retain the shoe 25 in

its relation to the crown 5, screws or similar fastenings 29 are employed, being applied as shown in Fig. 2.

It will be noted that a single bolt and nut serve to form the connecting means between each handle and the horse body, and that by mere screwing up of the nut on the bolt the handle end connecting member is caused to sink into the groove or recess of the shoe and thus securely hold the handle against any movement.

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

1. In a gymnasium horse, in combination with the body, a shoe on the body formed with a longitudinal recess, a curved handle, threaded extensions carried by the handle ends, a connecting member to which said threaded extensions are secured, a rib on said member received in said shoe recess, and means extending through said shoe and member to secure said parts to the body.

2. In a gymnasium horse, in combination with the body, a shoe secured thereto, a handle of curved form, a connecting member secured to the handle ends, a bolt engaging said member and passed through said body, and a nut on said bolt whereby said connecting member may be drawn into engagement with said shoe.

3. In a gymnasium horse, in combination with the body, a curved handle, a connecting member secured to the handle ends, and means centrally secured to said member whereby the same is secured to the body.

4. In a gymnasium horse, in combination with the body, a curved handle, a recessed shoe on the body, a connecting member secured to the handle ends, means carried by said member to project in said recess of the shoe, and a single bolt secured centrally of the length of said member to secure same to said body.

5. In a gymnasium horse, in combination with the body, a shoe secured to said body and formed with a longitudinal recess, a curved handle formed of two recessed sections, a core engaging in said recesses of said sections, and provided with shoulders and threaded extensions, a connecting member on the top face of which said shoulders and the handle ends seat, said extensions projecting through openings provided therefor in said connecting member, nuts on said extensions abutting the under face of said

connecting member, a rib on said connecting member which extends in said recess of the shoe, a bolt secured to said connecting member central of the length thereof and extending through said body, a hand nut on the lower end of said bolt abutting the under face of the body, a shoulder on the nut and a two part bearing sleeve secured to said body and inclosing the upper part of said nut whereby said sleeve may engage the nut shoulder to permit downward movement of the nut.

6. In a gymnasium horse, in combination with the body, a shoe on the body, a curved handle, a connecting member secured to the ends of the handle, means carried by the shoe and connecting member whereby same may be interlocked, and means to draw the connecting member into engagement with the shoe.

7. In a gymnasium horse, in combination with the body, a shoe on the body, a curved handle, means connecting the ends of the handle, and means connected to said means central of the length thereof to draw said connecting means into engagement with the shoe.

8. In a gymnasium horse in combination with the body, a curved handle, a member which is secured to the ends of the handle, and means secured to said member central of the length thereof whereby said member may be drawn into engagement with the body.

9. In a gymnasium horse, in combination with the body, a curved handle, a member secured to the ends of said handle, a bolt secured to said member central of the length thereof, and a nut on the bolt which abuts the under face of the body to permit said member being drawn into engagement with the body.

10. In a gymnasium horse, in combination with the body, a curved handle composed of two parts each formed with a recess which registers with one another, a core engaged in said recesses, a member to which the core ends are secured, and means to secure said member to the body.

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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J. A. MILLER.