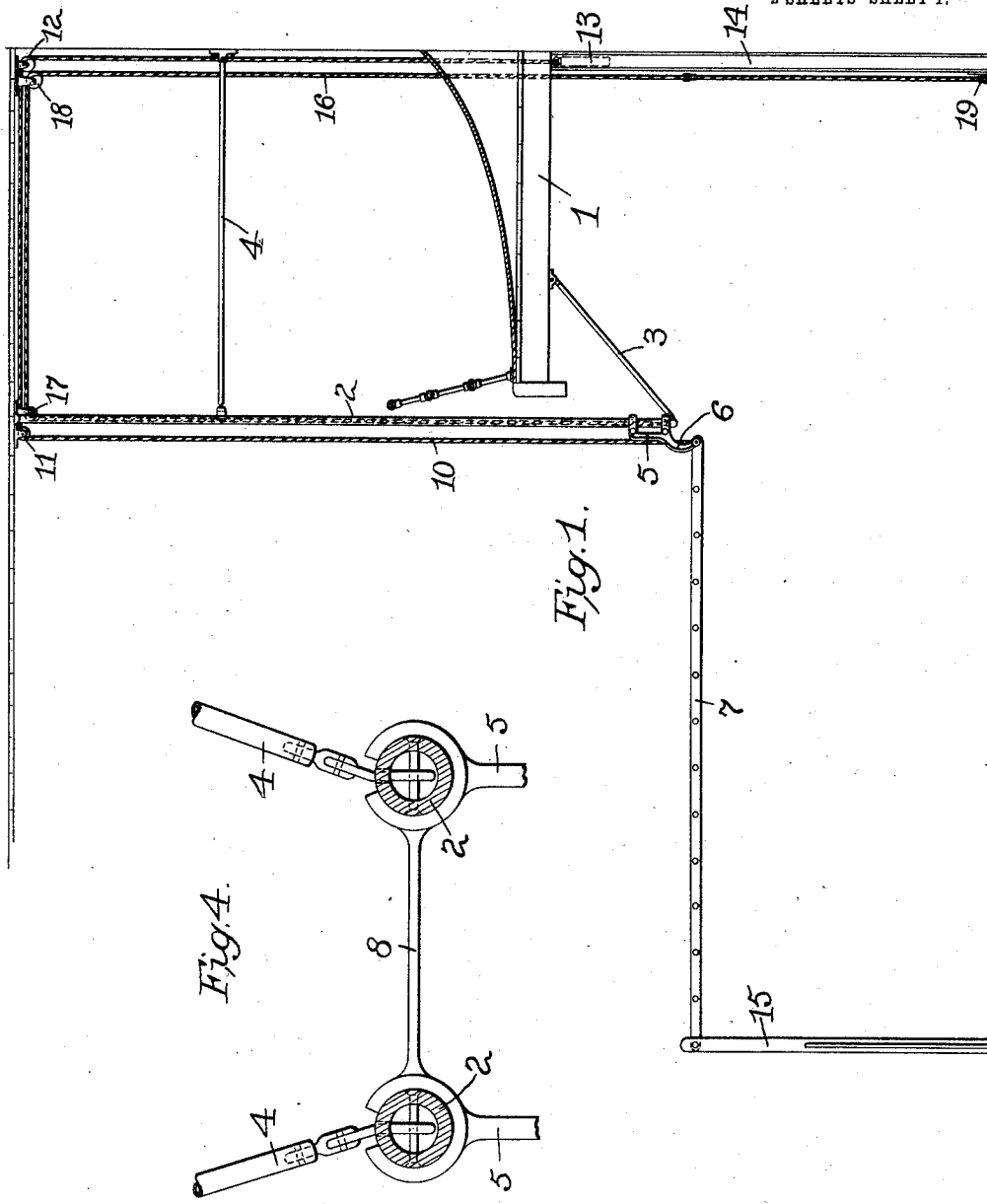


M. B. REACH.
GYMNASIUM APPARATUS.
APPLICATION FILED MAY 29, 1911.

1,015,208.

Patented Jan. 16, 1912.

2 SHEETS—SHEET 1.



Attest:
Cwa R. Tolson
Bent M. Stahl,

Inventor:
Milton B. Reach,
by Spear, Middleton, Dunsen & Spear
Attys.

2 SHEETS—SHEET 2.

UNITED STATES PATENT OFFICE.

MILTON B. REACH, OF SPRINGFIELD, MASSACHUSETTS, ASSIGNOR TO A. G. SPALDING & BROS. MANF'G. CO., A CORPORATION OF MASSACHUSETTS.

GYMNASIUM APPARATUS.

1,015,208.

Specification of Letters Patent.

Patented Jan. 16, 1912.

Application filed May 29, 1911. Serial No. 630,000.

To all whom it may concern:

Be it known that I, MILTON B. REACH, citizen of the United States, residing at Springfield, Massachusetts, have invented certain new and useful Improvements in Gymnasium Apparatus, of which the following is a specification.

My invention relates to exercising apparatus and particularly to such apparatus as includes an exercising ladder for gymnasiums, and one object of my invention is to provide an apparatus which may be conveniently used in combination with a gallery in the gymnasium so as to occupy, when stored or hoisted, substantially no more space or floor surface than that covered by the gallery, and yet when the apparatus is in place for use sufficient floor space for its proper use and that of the persons exercising thereon will be afforded by the space below the ladder and that below the gallery adjacent which the ladder is located.

The invention consists in the features and combination and arrangement of parts hereinafter described and particularly pointed out in the claims.

In the accompanying drawings Figure 1 is a side elevation of an apparatus embodying my invention; Fig. 2 is a front view of part of the gallery of a gymnasium with my improvement; Fig. 3 is a plan view of Fig. 2; Fig. 4 is a detail plan view showing in section the pendant supports, the carrier mounted thereon, and the braces connected with the pendant supports.

In these drawings, 1 is the gallery of the gymnasium with which my invention is adapted to be combined or associated. From the ceiling of the room containing this gallery pendants 2 extend closely adjacent to the front edge of the gallery, said pendants being rigidly secured to the ceiling, and their lower ends extending at some distance below the gallery. These lower ends are braced by rods 3, the upper ends of which are attached to the under side of the gallery, the said rods extending upwardly and outwardly in respect to the pendant rods or supports, it being understood that there is a pair of these pendants. These pendants are further braced by rods 4 connected therewith at points above the gallery and extending over the said gallery and outwardly in relation to the pendants at an angle to the plane in which the pendants are located, as

shown in Fig. 3, their ends being suitably secured to the wall of the building. On these pendants a carrier 5 is slidable vertically, said carrier comprising a bracket, one for each pendant, and having a pair of arms embracing the same, and a depending arm 6 having a cross rod upon which the inner end of the ladder 7 is pivotally mounted, the said brackets being also connected by cross rods at 8 and 9.

A rope 10 is connected with the end of the ladder or with the bracket and extends up parallel with the pendants and about a pulley 11 supported on the ceiling and thence over to near the wall passing about another pulley 12 suitably supported and thence downwardly, and having, at its lower end, a counter balance weight 13 moving in a suitable box or guide 14. This weight counter balances the weight of the ladder. This ladder is supported at its outer end upon a standard 15 when in a horizontal position, but said ladder may be thrown into any desired inclined position by raising the carrier, for which purpose a hoisting rope 16, is connected with the carrier and extends up between the pendants over a pulley 17 suitably supported at the upper end of the pendant, as, for instance, from the ceiling, and from here the rope extends toward the side wall and about a guide pulley 18, extending thence downwardly about a guide wheel or pulley 19 at the floor, from which point the said rope extends upwardly and is provided at its end with a suitable clamp which engages the main portion of the rope, but which may be adjusted along the rope to vary the height of the ladder, the said clamp being adapted to guide the rope at any point to which it may be adjusted, and thus hold the hoisting rope to maintain the ladder at the desired height.

In the use of the apparatus, a person exercising will have the use of the floor space directly beneath the ladder, and also the floor space at the end of the ladder and below the gallery. When the ladder is hoisted out of the way, it will lie in position vertically, and directly adjacent the plane of the front edge of the gallery, occupying practically no more space than is occupied or covered by the gallery so far as the floor surface is concerned.

It will be seen from Fig. 4 that the parts of the carrier which embrace the pendant

supports do not entirely surround the said supports, but leave a space which will permit the carrier to pass by the upper brace rods 4.

5 I claim as my invention:

1. In combination in gymnasium apparatus, a vertically movable carriage, a ladder pivotally connected at one end to the carriage, means for raising the carriage and
10 supports depending from the ceiling to a point suitable for head room below and on which pendant supports the carriage slides, substantially as described.

2. In combination the pendant supports,
15 a carriage mounted on said pendant supports, brace rods connected with the pendant supports intermediate of their height, said carriage having members embracing the pendant supports, said members having
20 openings to pass the brace rods, and an exercising device connected with the carriage, substantially as described.

3. In combination in gymnasium apparatus, a vertically movable carriage, a lad-

der pivotally connected at one end to the carriage, means for raising the carriage and supports depending from the ceiling to a point suitable for head room below and on which pendant supports the carriage slides, said carriage having a portion reaching
25 below the lower end of the depending supports and to which portion the pivotal connection of the ladder is made, substantially as described.

4. In gymnasium apparatus a ladder, a support therefor at one end extending up from the floor, a support for the other end of the ladder depending from the ceiling and terminating at the ladder, leaving a free space at this end of the ladder and means
35 for hoisting the ladder along the pendant support, substantially as described.

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

MILTON B. REACH.

Witnesses:

BEATRICE BARTLETT,
C. P. FINIGAN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."