

Nov. 5, 1929.

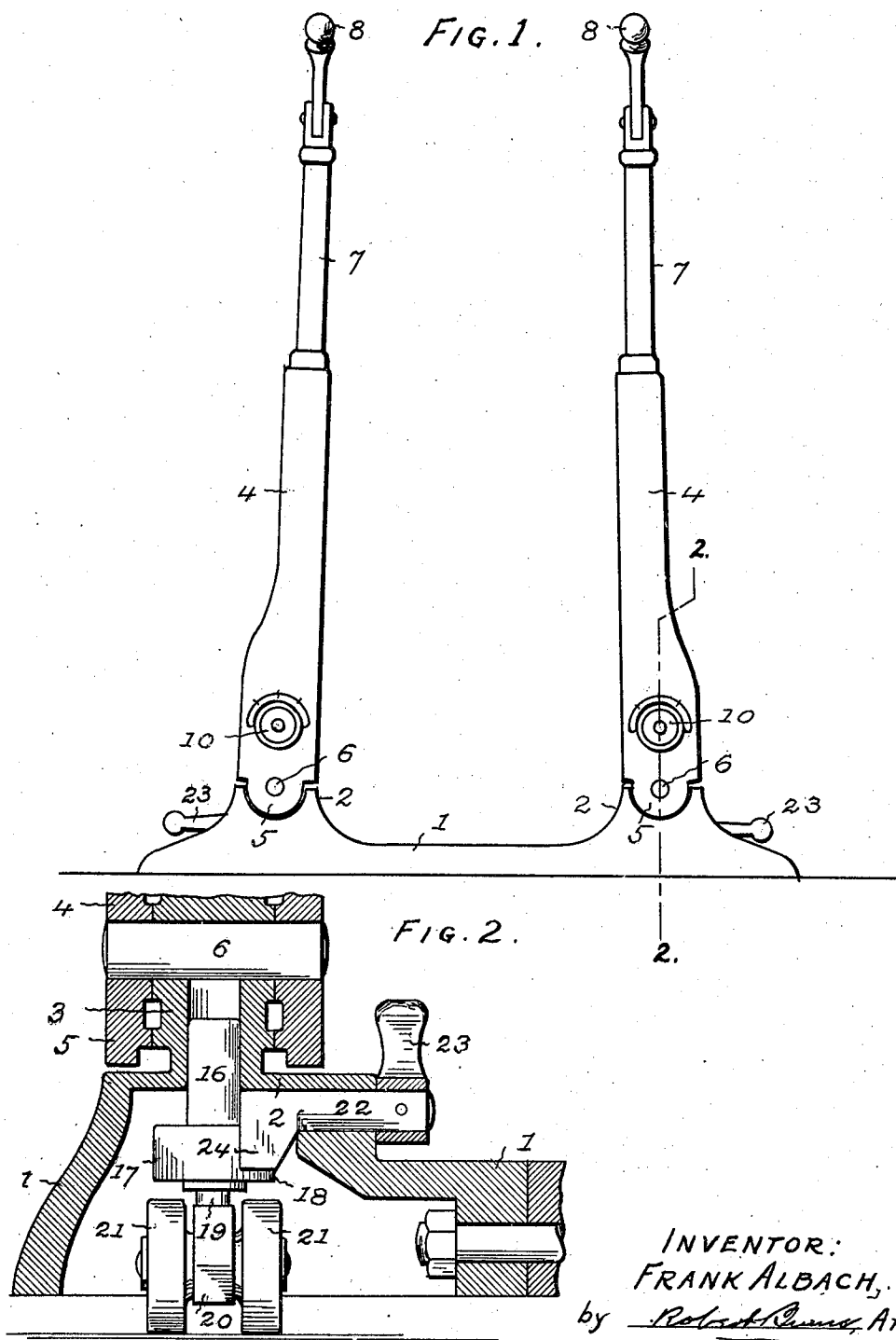
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1,734,664

GYMNASIUM PARALLEL BAR

Filed Aug. 10, 1928

2 Sheets-Sheet 1



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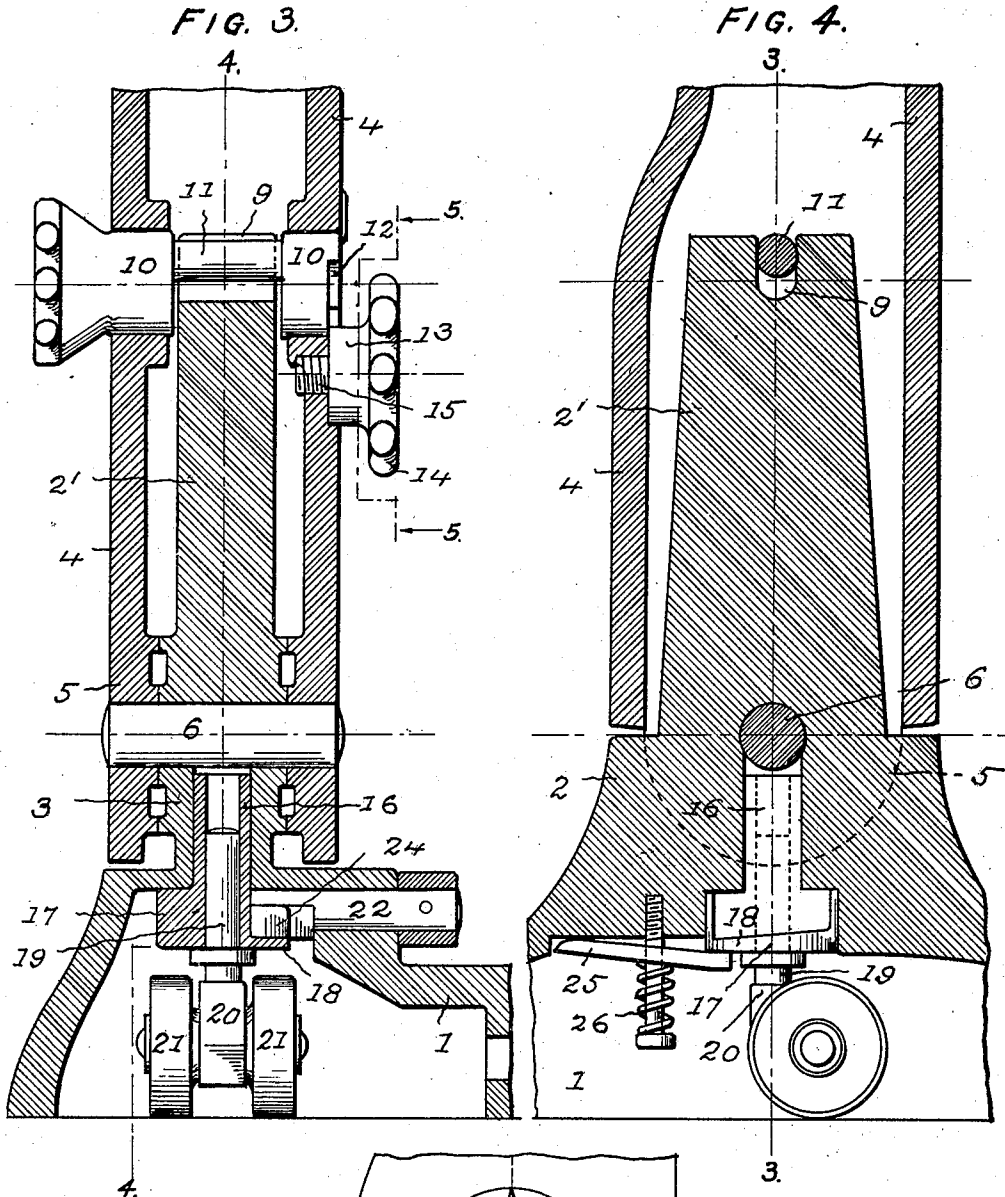
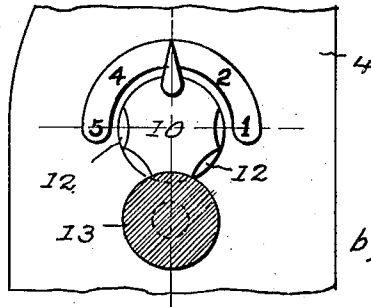


FIG. 5.



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GYMNASIUM PARALLEL BAR

Application filed August 10, 1928. Serial No. 298,796.

This invention relates to that type of gymnasium exercising apparatus known as parallel bars, and more especially to the semi-portable type of the same which is the subject matter of Letters Patent No. 1,111,268, dated September 22, 1914, to the Fred Medart Manufacturing Co., as assignees of Philip S. Medart, and this improvement has for its object:

To provide a structural formation and combination of parts whereby the complementary pair of parallel bars or rails are capable of adjustment to and from each other, and are held to the required adjustment in a positive and substantial manner, the construction by means of which such results are attained, also providing at the respective corners of the floor base for the adjusting mechanism of the series of casters by which a portable nature is imparted to the apparatus, when required, all as will hereinafter more fully appear.

In the accompanying drawing.

Fig. 1, is an end elevation of gymnasium parallel bars, showing the general arrangement of parts in this invention.

Fig. 2, is an enlarged fragmentary vertical section on line 2—2 Fig. 1, illustrating a caster unit of the apparatus in an active position.

Fig. 3, is a companion vertical section to Fig. 2, and on line 3—3 Fig. 4, illustrating the lateral adjusting means of a parallel bar; and the aforesaid caster unit in an inactive position.

Fig. 4, is a detail transverse section on line 4—4 Fig. 3.

Fig. 5, is an enlarged detail elevation of the locking means for the revoluble crank member by which an adjustment of a parallel bar in a vertical plane is effected.

Like reference numerals indicate like parts in the different views.

The floor member or base 1 of the apparatus is of the usual open center rectangular formation, having lateral extensions at its corners

to afford stability against lateral stresses in actual use. At its four corners the base 1 is provided with upright standards or extensions 2 which in connection with adjoining under cavities in the base 1 are adapted to provide supports and enclosures for the hereinafter described plurality of caster units.

At the upper ends each standard 2 is formed with an orificed hinge knuckle 3 for the pivotal attachment of a tubular housing or column 4, which at its lower end is formed with a pair of orificed hinge knuckles 5, adapted to span the aforesaid knuckle 3 of the standard 2 and be pivotally connected therewith by a pivot pin or pintle 6.

A plurality of the tubular columns 4 above referred to are provided and are individual to the plurality of the aforesaid standard 2. Each column 4 is adapted to receive a post or stem 7 that has fixed attachment at its upper end to an end portion of one of a pair of parallel bars 8 usual to the present type of apparatus. The lower portion of each post or stem 7 has sliding movement in its tubular column 4 and is adjustably attached therein by any usual and suitable fastening means in the usual operation of setting the pair of horizontal bars 4 at the desired elevation above the floor.

As in the above mentioned Medart Patent No. 1,111,268 each of the aforesaid standards 4 is formed with a vertical extension 2' formed in turn with a vertically arranged elongated slot 9 near its upper end.

In aligned relation with said elongated slot 9 in the standard extension 2', the associated column 4 is formed with journal orifices for the bearing hubs 10, of a centrally arranged eccentric or crank pin 11 that has operative engagement in the aforesaid elongated slot 9 of the extension 2' of a standard 2. The arrangement is such that with a turning adjustment of said hubs 10 and crank pin 11 a lateral adjustment will be imparted to the tubular column 4, to regulate the dis-

tance between the pair of horizontal bars 8 of the apparatus, in that said bars 8 are wholly supported by the series of columns 4.

In this improvement one of the bearing hubs 10 aforesaid is formed with a series of concave recesses 12 in an outer portion of its perimeter, and in connection with such construction, manually actuated means is provided to lock said hub 10 and crank pin 11 at the required adjustment and prevent any accidental movement therefrom in either direction. Such locking means consists of a cylindrical hub 13 having an operating handle 14 at its outer end, and at its inner end a screw threaded shank 15 adapted for engagement in a screw threaded orifice formed in a tubular column 4 in operative relation to aforesaid peripherally notched wearing hub 10 of the crank pin 11, so that with a turning movement of said screw threaded shank 15 in a column 4, a portion of the circular perimeter of the hub 13 will move into engagement in the nearest concave recess 12 of the crank pin hub 10 to lock the same from turning movement in either direction.

The corner caster units heretofore referred to, have the same general construction and arrangement as in the aforesaid Medart Patent No. 1,111,268, and in detail each caster unit will have a construction as follows:

In a vertical orifice in the lower portion of a standard 2 aforesaid, a tubular bushing 16 is slidably mounted and at its lower end is formed with an enlarged head 17, one side of which is cut away to provide an abutment flange 18 at the lower end of said hub for the purpose hereinafter set forth.

In the vertical bore of said tubular bushing 16, the upright journal stem 19 of an offset caster frame 20 is revolvably arranged to permit of the usual swivel movement of the caster frame in a horizontal plane in actual use. Adjacent to its offset end the caster frame 20, carries the usual pair of caster wheels on rollers 21, as shown.

In this invention, a horizontally arranged rock shaft 22 is journaled in an orifice radial to the axis of the tubular bushing 16 of a caster unit, and formed in the lower portion of a standard 2. The outer end of said shaft 22 is provided with an operating handle or lever 23, and at its inner end carries a crank arm 24, adapted for bearing engagement against the upper surface of the aforesaid flange 18 of the hub 17 of the caster bushing 16, and so that with said crank arm 24 in its normal position shown in Fig. 3, the caster unit will be raised into an inactive position by an associated lever 25 and spring 26, within the under recess of the base 1. With a quarter turn of the rock shaft 22, the crank arm 24 is brought into the position shown in Fig. 2, to force the caster unit into its active position, supporting the apparatus a distance above the

floor, to facilitate movement from place to place.

I claim as my invention:—

1. In an exercising apparatus of the type described, the combination of a base having a recessed bottom and a corner standard formed with a vertical journal orifice, a tubular bushing fitting said orifice and provided near its lower end with a side bearing flange, a caster unit mounted in said bushing, a shaft journaled horizontally in the aforesaid standard and having at its outer end an operating hand lever and at its inner end a crank arm for engagement with the aforesaid flange of the tubular bushing to impart a downward adjustment to said bushing and the caster unit in relation to the standard and base of the apparatus.

2. In an exercising apparatus of the type described, the combination of a base having a recessed bottom and a corner standard formed with a vertical journal orifice, a tubular bushing fitting said orifice and having at its lower end an enlarged head formed in turn with a side flange at its lower end, a caster unit mounted in said bushing, a shaft journaled horizontally in the aforesaid standard and having at its outer end an operating hand lever and at its inner end a crank arm for engagement with the flange of the bushing head aforesaid to impart downward adjustment to said bushing and caster unit in relation to the base and standard of the apparatus.

3. In an exercising apparatus of the type described, the combination of a floor base having a series of corner standards, tubular columns individual to said standards and adapted to fit over the same, each column having pivotal connection at its lower end with its standard, adjusting means between the upper ends of the standards and the columns, each adjusting means comprising a revoluble hub journaled in a column and having an eccentrically arranged pin, each standard being formed with an elongated slot for operative engagement with an aforesaid eccentrically arranged pin, means for locking each revoluble hub at an adjusted position with each locking means comprising a series of concave recesses formed in the perimeter of a revoluble hub, and a cylindrical hub adjustably mounted on a column, and adapted to have peripheral engagement in a peripheral recess aforesaid of a revoluble hub.

4. In an exercising apparatus of the type described, the combination of a floor base having a series of corner standards, tubular columns individual to said standards and adapted to fit over the same, each column having pivotal connection at its lower end with its standard, adjusting means between the upper ends of the standards and the columns, each adjusting means comprising a revoluble hub journaled in a column and having an eccentrically arranged pin, each standard be-

ing formed with an elongated slot for operative engagement with an aforesaid eccentrically arranged pin, means for locking each revoluble hub at an adjusted position with
5 each locking means comprising a series of concave recesses formed in the perimeter of a revoluble hub, and a cylindrical hub having screw threaded engagement with a column aforesaid, so that in a manual adjustment in
10 one direction said cylindrical hub will be brought into peripheral engagement with a concave recess of an aforesaid revoluble hub.

In testimony whereof I hereunto affix my signature.

FRANK ALBACH.