No. 694,442. Patented Mar. 4, 1902.

H. SUDER.

COMBINATION APPARATUS FOR HEAVY GYMNASTICS.

(Application filed Dec. 22, 1900.)

(No Model.) 2 Sheets—Sheet 1.

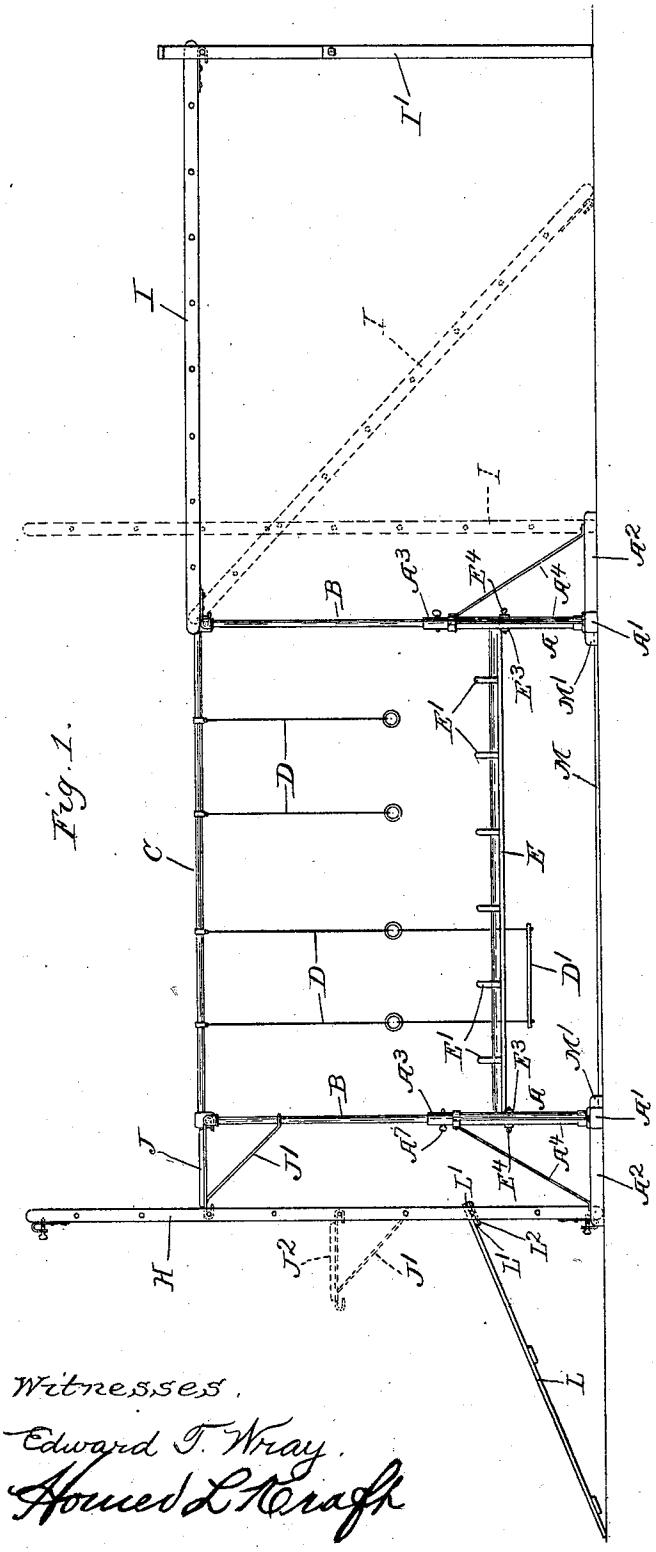


Fig. 1.

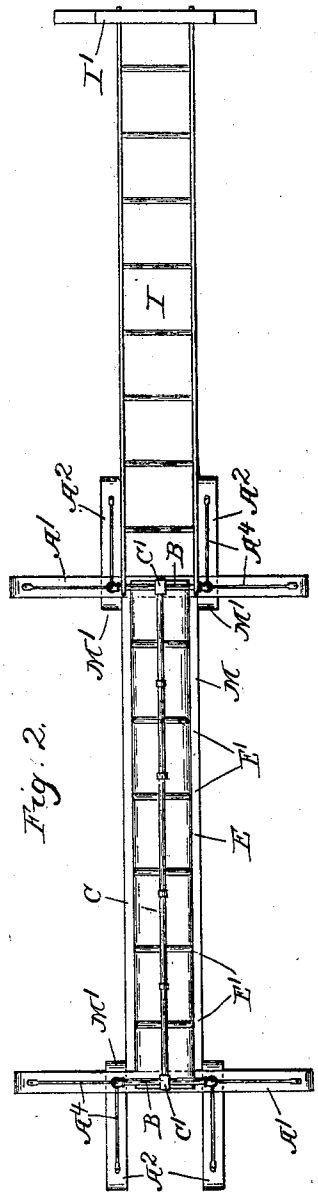


Fig. 2.

Witnesses.
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Fig. 3.

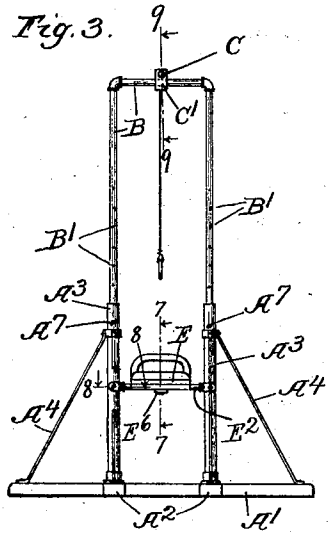


Fig. 4.

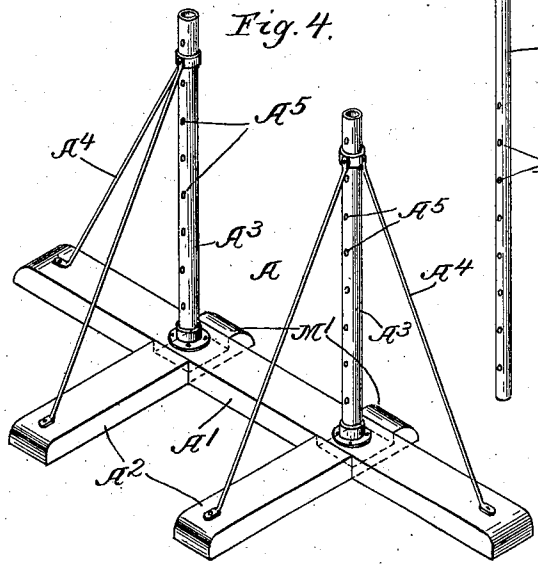


Fig. 5.

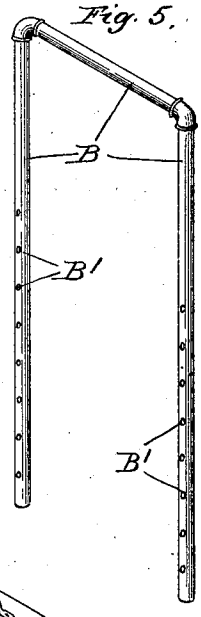


Fig. 7.

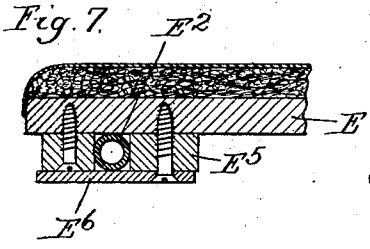


Fig. 6.

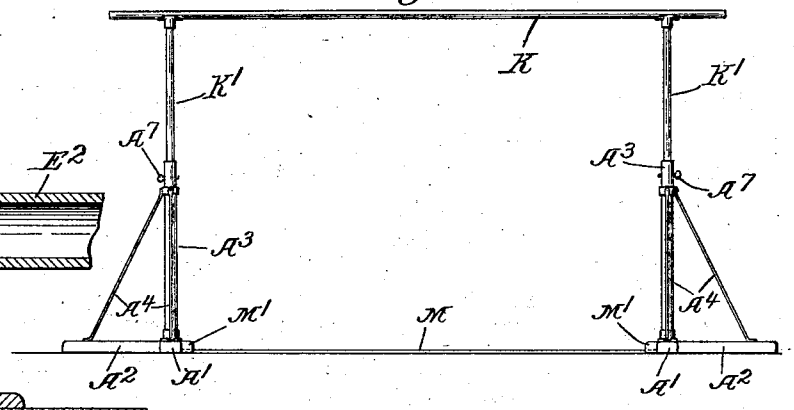
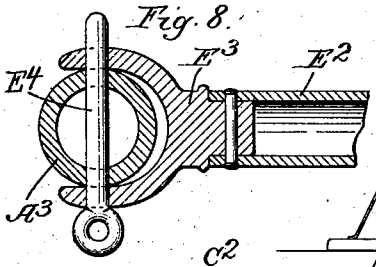


Fig. 8.



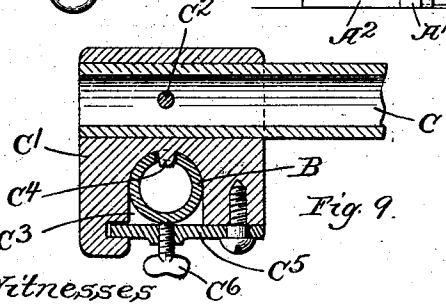
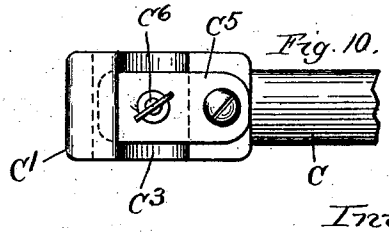


Fig. 9.

Fig. 10.



Witnesses

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UNITED STATES PATENT OFFICE.

HENRY SUDER, OF CHICAGO, ILLINOIS.

COMBINATION APPARATUS FOR HEAVY GYMNASTICS.

SPECIFICATION forming part of Letters Patent No. 694,442, dated March 4, 1902.

Application filed December 22, 1900. Serial No. 40,722. (No model.)

To all whom it may concern:

Be it known that I, HENRY SUDER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Combination Apparatus for Heavy Gymnastics, of which the following is a specification.

My invention relates to an improvement in combination apparatus for heavy gymnastics, and has for its object to provide a new and improved apparatus of this description.

My invention is illustrated in the accompanying drawings, wherein—

Figure 1 is a side elevation of a device embodying my invention, showing all the various parts in position. Fig. 2 is a plan view of Fig. 1. Fig. 3 is an end view of the construction shown in Fig. 1. Fig. 4 is an enlarged perspective view of one of the end supports of the device. Fig. 5 is a view of one of the adjustable end pieces used in connection with the horizontal bar. Fig. 6 is a view of the device, showing the parallel bars in position. Fig. 7 is a section on line 7 7, Fig. 3, parts omitted. Fig. 8 is a section on line 8 8, Fig. 3. Fig. 9 is a section on line 9 9, Fig. 3, through the end of the horizontal bar. Fig. 10 is a view of the end of the horizontal bar shown in Fig. 9 as seen from beneath.

Like letters refer to like parts throughout the several figures.

It is customary in the ordinary gymnasium to have a series of exercising devices of various kinds and located at different points. These devices when so located occupy a large amount of space, and it is this feature which prohibits gymnasiums in such places as the public schools and the like.

One of the objects of my invention is to provide a construction or apparatus which will occupy very little space and which yet embodies, as it were, a number of different exercising apparatus.

I have illustrated in Figs. 1 and 2 of the drawings a combination structure by means of which a large variety of different exercising devices are carried by the same supports or base and are detachably held in place.

I have illustrated in the drawings a combination structure embodying certain features and a variety of exercising apparatus; but it is of course evident that the number of these devices so combined and the nature of these devices may be varied in many particulars.

In the construction illustrated I provide two end supports A, one of which is illustrated in Fig. 4. These supports consist of a base A′, having the projecting parts A^2, there being mounted upon this base the hollow supporting-pieces A^3, provided with the braces A^4, the projecting parts A^2 preferably extended outwardly, so as not to be included between the two supports. As illustrated in Figs. 1 to 3, there is an adjustable end piece B associated with each end support and detachably attached to the hollow supporting-pieces A^3. These adjustable end pieces are held in position in any desired manner. As herein illustrated, they are provided with holes B′, adapted to register with holes A^5 in the hollow supporting-pieces. It will thus be seen when a pin A^7 or the like is thrust through the holes in the two pieces the adjustable end piece will be held in position. The adjustable end pieces are placed in position when it is desired to use the horizontal bar. This horizontal bar C is made of any desired material, but preferably consists of a steel bar provided at its ends with any suitable means for fastening it to the adjustable end pieces. As herein illustrated, each end of this bar is provided with the engaging piece C′. This engaging piece is provided with an opening, through which the end of the bar passes, the bar being held in place by any desired means—such, for example, as the pin C^2. This engaging piece is provided with a groove or the like C^3, into which fits the cross-piece of the adjustable end piece B. Said engaging piece is preferably provided with a pin or the like C^4, which fits into a fold in the adjustable end piece, as shown in Fig. 9. In order to prevent this pin from becoming removed and to aid in holding the parts in position, I provide a pivoted piece or latch C^5, one end of which is pivoted, as shown, the other working in a groove or slot in the engaging piece. This pivoted piece is preferably provided with a thumb-screw C^6, which engages the adjustable end piece, as shown in Fig. 9. It will be seen that this horizontal bar may be raised and lowered until its height is properly adjusted for the persons

using it. When it is desired to use a pair of rings, one or more pair of said rings may be attached to the horizontal bar C, as illustrated in Fig. 1. Said rings are provided with the ordinary supporting-pieces D, which may be ropes or the like, and a means, such as straps and the like, is provided at their ends for removably attaching them to the horizontal bar. These rings may be also provided with the swinging-board attachments D′, as illustrated.

Between the two end supports is a removable padded board E, adapted to be used as a substitute for a horse. It will be understood that this board is removed when the rings and the horizontal bar and the like are being used. This board is provided with a series of pommels E′ and is removably held in place in any desired manner. As herein shown, a cross-piece E^2 at each end of the device is removably connected to the hollow supporting-pieces A^3. As shown in Fig. 8, the cross-pieces E^2 are provided at each end with the fork E^3, between the branches of which is received one of the hollow supporting-pieces A^3. A pin E^4 passes through this fork and the hollow supporting-piece, so as to hold the parts in position. The padded board E is provided at each end with suitable confining devices or cleats E^5, between which are received the cross-pieces E^2, as shown in Fig. 7. A pivoted latch or the like E^6 may be provided adapted to be moved across the space between the cleats when the board is in position, so as to prevent its removal.

The combination structure shown is provided with one or more ladders H and I, which are supported in various ways. The ladder H rests at its lower end upon the projections A^2 of the end support A and is connected to the adjustable end piece by means of the deep jumping-board J. This board hooks over one of the rounds of the ladder at one end and over the cross-piece of the adjustable end piece at the other and is provided with suitable diagonal braces J′, as shown. Another adjustable deep jumping-board J^2 may be attached to the rounds of the ladder and faces outwardly. This board may be moved up and down, so as to adjust it to any given height. The ladder I may be supported in various ways. As shown in full lines in Fig. 1, it is supported at one end on top of one of the adjustable end pieces and at the other end by the removable support I′. This ladder may be moved to a diagonal position or a vertical position, as shown in dotted lines in said figure.

When it is desired to use the parallel-bar attachment, the adjustable end pieces are removed. The parallel bars K are provided with projecting parts K′, which fit into the hollow supporting-pieces A^3. These projecting parts are provided with holes and are held in place by means of the pins A^7. The height of the parallel bars may be adjusted by sliding the projecting parts K′ up and down until the proper holes register with the holes in the hollow supporting-pieces, through which the pins A^7 pass. One or more storming-boards L may be used with this construction. These storming-boards may be used in any desired manner. For example, the adjustable end pieces and the padded board may be removed and the horizontal bar attached to the supports in the position ordinarily occupied by the padded board. This can be done by inserting the cross-pieces E^2 in the grooves in the engaging pieces C′ of the horizontal bar. These cross-pieces and the cross-pieces of the adjustable end pieces are preferably made of the same size, so as to permit this substitution. The board or boards may then be supported in an inclined position, one end being supported by the horizontal bar. Any means of fastening the boards to the bar may be used; but I prefer to provide the ends of the boards with cleats and a latch similar to that shown in Fig. 7. This is illustrated in Fig. 1, where the ends of the boards are provided with cleats L′ and the latch L^2.

In the construction illustrated the ladders H and I act in a measure to brace the adjustable end pieces and the parts associated therewith and all the parts coöperate to form a unitary, rigid, and substantial structure. I prefer to insert between the two end supports a separating-board or the like M, which fits between the short inwardly-projecting ends M′ opposite the laterally-projecting pieces A′. The adjustable end pieces and the hollow supporting-pieces may of course be reversed, so that the adjustable end pieces are hollow instead of the upwardly-projecting supporting-pieces A^3. It is noted that this construction forms a telescoping frame, which allows a great range of adjustability, and hence adaptabilty, to the conditions to be met.

The use and operation of my invention are as follows: When the combination structure is not in use, all the parts may be placed in position, as shown, for example, in Figs. 1 and 2. This of course will not be necessary, but permits the devices to be kept in a small space, and in such event the devices will always be ready for use. When it is desired to use the horizontal bar, the padded board and the rings are removed. This gives a free space for the use of this bar. The ladders and the deep jumping-boards may be left in position during the use of the other apparatus, as they do not interfere with this apparatus and may in fact be used simultaneously. When it is desired to use the rings, they can be strapped in position onto the horizontal bar, as shown, and the adjustable end pieces may be raised or lowered, so as to adjust the rings to the parties using them. When it is desired to use the horse, the padded board E may be placed in position and the horizontal bar can either be left in place or removed. When it is desired to use the parallel bars, the padded board and horizontal bar and ad-

justable end pieces are removed and the projecting parts K′ inserted in the hollow supporting-pieces A^3, as shown in Fig. 6.

It will be seen that by this construction I provide a series of different exercising devices arranged in a single combination structure, the same support being used for all of the various devices. An examination of Figs. 1 and 2, for example, will show the small amount of space necessary for the operation of all these devices, and hence it will be seen that a great variety of exercising devices are placed within the reach of parties who could not afford the space heretofore occupied by such devices.

I claim—

1. The combination in an apparatus for heavy gymnastics of two movable end supports, a separable adjustable piece connected with each of said end supports and adapted to be moved up and down, with relation to said supports, and a detachable cross-piece connecting said adjustable pieces so as to be adjusted in height when the adjustable pieces are moved.

2. An exercising device, comprising two movable bases, an adjustable detachable support connected with each of said bases and adapted to be moved up and down, with relation to said bases, and a detachable cross-piece connected with said supports so as to be adjusted in height without being detached from said supports.

3. An exercising apparatus, comprising two detachable end supports, a movable base for each support, provided with upwardly-projecting supporting-pieces, an adjustable end piece associated with each end support and provided with parts which coöperate with and engage said upwardly-projecting supporting-pieces, and means for adjustably connecting said end pieces to the upwardly-projecting supporting-pieces.

4. A combination apparatus for heavy gymnastics, comprising two end supports, each having a base provided with laterally-projecting parts, two upwardly-projecting supporting-pieces connected with said base, two adjustable end pieces, one associated with each end support, said adjustable end pieces provided with parts which coöperate with and engage said upwardly-projecting supporting-pieces, means for adjustably connecting said adjustable end pieces to the upwardly-projecting supporting-pieces, and a horizontal bar removably attached to said adjustable end pieces.

5. A combination apparatus for heavy gymnastics, comprising two adjustable end supports, each having a base provided with laterally-projecting parts, two upwardly-projecting supporting-pieces connected with said base, two adjustable end pieces, one associated with each end support, said adjustable end pieces provided with parts which coöperate with and engage said upwardly-projecting supporting-pieces, means for adjustably connecting said adjustable end pieces to the upwardly-projecting supporting-pieces, a horizontal bar removably attached to said adjustable end pieces, and a series of rings detachably attached to said horizontal bar whereby the position of said rings may be varied to adjust them to different uses.

6. A combination apparatus for heavy gymnastics, comprising two end supports, each having a base provided with laterally-projecting parts, two upwardly-projecting supporting-pieces connected with said base, two adjustable end pieces, one associated with each end support, said adjustable end pieces provided with parts which coöperate with and engage said upwardly-projecting supporting-pieces, means for adjustably connecting said adjustable end pieces to the upwardly-projecting supporting-pieces, a horizontal bar removably attached to said adjustable end pieces, a series of rings detachably attached to said horizontal bar, and one or more ladders supported at one end by said adjustable end piece or pieces.

7. A combination apparatus for heavy gymnastics, comprising two end supports, each having a base provided with laterally-projecting parts, two upwardly-projecting supporting-pieces connected with each base, a removable cross-piece adjustably attached to the two upwardly-projecting supporting-pieces of each base, and a padded board extending between the end supports and removably connected to said cross-pieces.

8. A combination apparatus for heavy gymnastics, comprising two end supports, each provided with a base having two upwardly-projecting supporting-pieces, an adjustable end piece associated with each end support and having parts which slide along the upwardly-projecting supporting-pieces, so as to form a telescoping frame, and means for fastening said adjustable end piece in any of its various positions.

9. An exercising apparatus comprising two end supports each having two upwardly-projecting parts, an adjustable end piece associated with each part and consisting of a loop, the branches of which are adjustably connected with said projecting parts, a bar removably mounted upon these adjustable end pieces whereby the position of said bar may be adjusted for different uses.

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Witnesses:
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