

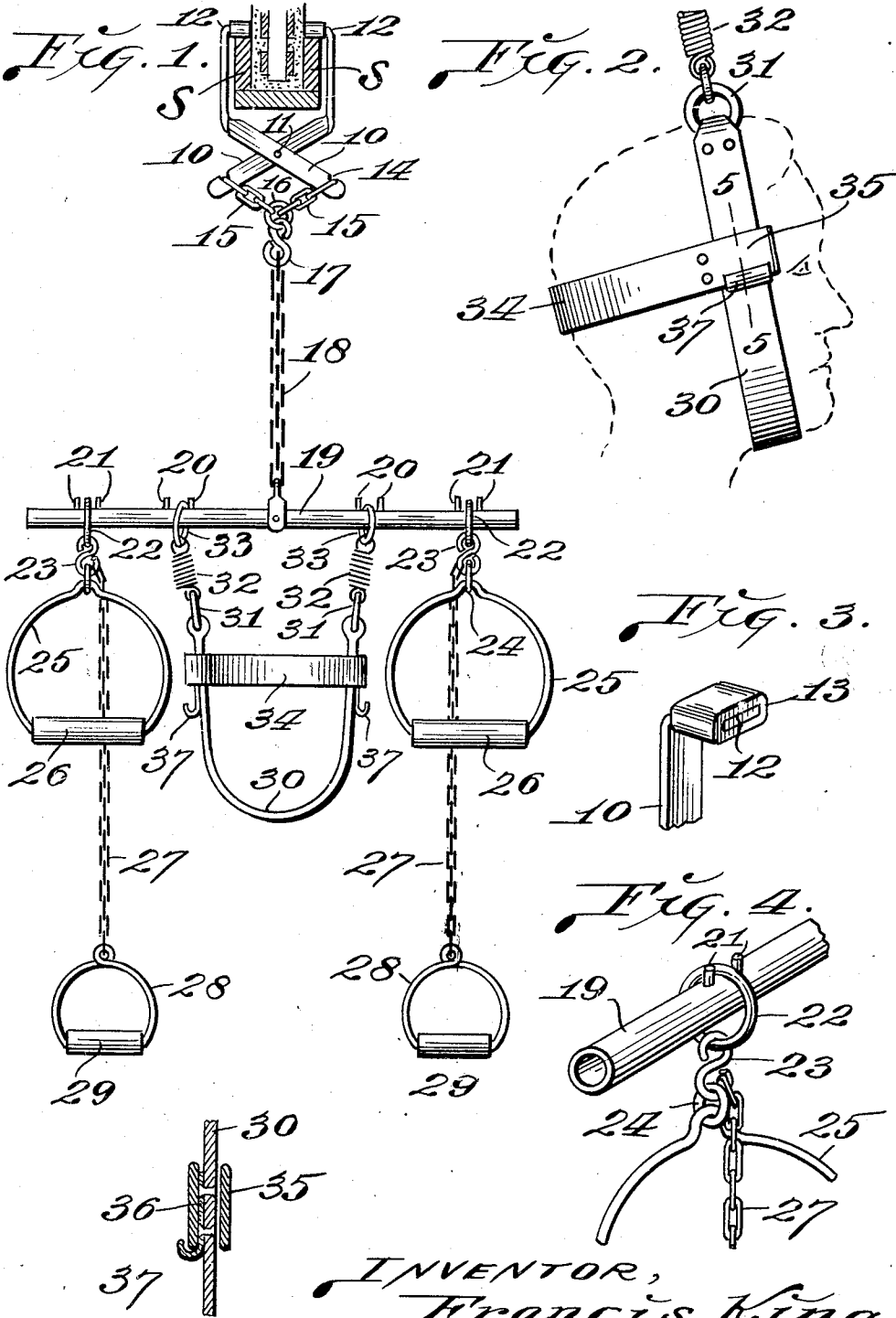
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EXERCISING APPARATUS

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UNITED STATES PATENT OFFICE

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EXERCISING APPARATUS

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My invention relates to an exercising apparatus, and has for its principal object the provision of a relatively simple, inexpensive and easily manipulated device, that may be advantageously used for imparting to practically all portions of the body a highly beneficial form of exercise.

A further object of my invention is to provide an exercising apparatus of the character referred to, that may be conveniently suspended from the top member of a door frame, thereby enabling the user of the apparatus to manipulate the same while positioned in the open space between the upright members of the door frame.

A further object of my invention is to provide an exercising apparatus that is readily adjustable so that it may be conveniently used by persons of different heights, and further to provide an apparatus having a part that is especially designed for exercising the head, neck, and shoulders, of the user.

With the foregoing and other objects in view, my invention consists in certain novel features of construction and arrangement of parts that will hereinafter be more fully described and claimed and illustrated in the accompanying drawing, in which—

Fig. 1 is an elevational view of an exercising apparatus of my improved construction, and showing the same suspended from the head or upper member of a door frame.

Fig. 2 is a side elevational view of that portion of the apparatus that is utilized for supporting the head while the latter and the neck and shoulders are being exercised.

Fig. 3 is a perspective view of the upper end of one of the clamping jaws that engages the head portion of the door frame.

Fig. 4 is a perspective of one end of a bar that supports parts of the exercising apparatus.

Fig. 5 is an enlarged detail section taken on the line 5—5 of Fig. 2.

Referring by numerals to the accompanying drawings, 10 designates a pair of crossed metal bars that are pivotally connected to each other by a pin or bolt 11, and the upper portions of said bars are extended upwardly and thence inwardly to form hooks 12, that

are adapted to engage over the facing strips S, that are arranged on the side faces of the head member of a door frame.

The inwardly projecting portions of the hooks 12, are covered with rubber, or analogous material, to provide cushions 13 that prevent the hooks from marring the facing strips S and the faces of the wall adjacent thereto.

Formed in the upper edges of the lower portions of the members 10 are notches 14, that receive the upper links of a pair of short chains 15, the latter extending inward toward each other and the lower links of said chains being connected to a ring 16.

Engaging ring 16 is the upper loop of an S-shaped hook 17, and depending from the lower loop of this hook is a short chain 18.

The lower end of chain 18 is connected to the central portion of a horizontally disposed bar 19, preferably a metal tube.

Projecting upwardly from the bar 19, at points equidistant from the point where the chain 18 is connected to said bar are pairs of short pins 20, and similar pairs of pins 21 are seated in and project upwardly from said bar at points between said pins 20 and the ends of said bar.

Detachably mounted on the bar 19, between the pairs of pins 21, are rings 22, from which depend S-shaped hooks 23, and connected to the lower portions of said hooks by means of rings 24, are large rings or stirrups 25 of such size as to receive the lower limbs of a person, and carried by the lower portions of said rings or stirrups 25 are cylindrical members 26, preferably of wood, hard rubber, or the like.

Detachably connected to the lower portions of the hooks 23, are the upper ends of chains 27, and connected to the lower ends of these chains are metal rings 28, the lower portions of which are provided with cylindrical handles 29, preferably of wood or hard rubber.

The portion of the apparatus that is designed to receive the head of a person taking exercise, comprises a U-shaped strap 30, preferably formed of fabric, of sufficient size to pass beneath the chin of a person and to extend upwardly on the sides of the head; and

the upper ends of this strap carry rings 31, to which are connected the lower ends of retractile coil spring 32. The outer ends of these springs are connected to rings 33, that are adapted to pass over the ends of the bar 19, and engage between the members of the pairs of pins 20.

The forward ends of a strap 34 that is adapted to pass around the rear portion of a person's head, are formed into loops 35, that encircle the strap 30, and said loops being ranged so that they will slide vertically on the side portions of said strap 30.

In order to prevent the strap 34 from moving too far downwardly on strap 30, thin metal plates 36 are secured in any suitable manner to the outer faces of the upright portions of the strap 30, and the lower ends of said plates terminate in upturned hooks 37, and which latter are adapted to engage the outer portions of the loops 35, thus eliminating the downward movement of said loops and the strap 34.

In addition to serving as stops to limit the downward movement of the strap 34, the plates 36 serve as stays to retain the upright portions of strap 30 in proper opened position while in use, and to prevent said strap from tending to roll up or twist when backward strain are impressed on strap 34.

My improved exercising apparatus may be used in various ways for imparting exercise to different parts of the body, and when the apparatus is set up for use the hooks 12 on the upper ends of the crossed bars 10 engage over the facing strips S of the sides of the heads or top portion of the door frame as illustrated in Fig. 1, and thus all downward pull upon the apparatus tends to cause the hooks on the crossed bars to more firmly engage the head or top member of the door frame and thus retain the apparatus in proper suspended position.

In the event that the person using the apparatus desires to exercise the head, neck, shoulders and arms, the rings 22 carrying the parts 25, 27 and 28 may be removed from the end portions of bar 19, and the strap 30 is then placed beneath the chin with the upper portions of said strap extending upwardly to the sides of the head, and strap 34 is arranged so that it passes around the back of the head. The user now lowers the body so that the head is drawn down slowly, and this downward movement of the head is yieldingly resisted by the coil spring 32.

In order to assist in this exercise of the head, neck and shoulders, the user may manually grasp the end portions of bar 19 and to alternately pull the body upward and then permit the body to lower, with the result that the arms, shoulders, upper portion of the body, and practically all parts of the head and neck are exercised so as to stimulate circulation and bring into play and action va-

rious muscles and nerves with beneficial results.

By grasping the bar 19 with the hands the body may be bent forward and backward or to either side, and simultaneously the body may be rotated so as to twist the neck, and these actions may be readily accomplished due to the fact that the bar is flexibly supported by means of the chain and the head engaging portion of the device is yieldingly suspended from the bar by the springs 32.

When it is desired to reverse the position of the body and permit the head to hang downward, the rings 22 carrying the large rings 25, are applied to the bar between the pairs of pins 21, and the user of the apparatus by grasping the handles 29 of the lower rings 28, may swing the limbs upward and pass the lower portions of the limbs through the large rings 25, and thus hang by the knees from said rings, and which action is highly beneficial in stimulating blood flow and exercising practically all the muscles and organs of the body and lower limbs.

To remove the apparatus from the door frame, it is only necessary to swing the crossed bars 10 upon their axis 11, so as to disengage the hooks from the head portion of the door frame, and when the entire apparatus is packed for storage or transportation it occupies comparatively little space.

Thus it will be seen that I have provided an exercising apparatus that is relatively simple in construction, inexpensive of manufacture, capable of being easily and quickly suspended from an overhead support, such as a head or top bar of a door frame, and which apparatus may be advantageously employed in the exercise of practically all parts of the body.

In some instances it may be found desirable to suspend the bar 19 by means of a pair of the hangers comprising the parts 10 and 18, and where such arrangement is employed, the bar 19 functions or may be used after the manner of an ordinary trapeze.

It will be readily understood that minor changes in the size, form and construction of the various parts of my improved exercising apparatus may be made and substituted for those herein shown and described without departing from the spirit of my invention, the scope of which is set forth in the appended claims.

I claim as my invention:

1. In an exercising apparatus, a pair of pivotally connected crossed bars having their upper ends terminating in hooks, a flexible member depending from said crossed bars, a bar carried by the lower end of said flexible member, and rings detachably connected to and suspended from said bar.

2. In an exercising apparatus, a pair of pivotally connected crossed bars, the upper ends thereof terminating in hooks, a flex-

ible member suspended from the lower portions of said crossed bars, a bar carried by the lower portion of said flexible member, rings suspended from the ends of said bar, flexible members suspended from the end portions of said bar, and rings carried by the lower ends of said flexible members.

3. In an exercising apparatus, a flexible member, means connected to the upper end of said flexible member for suspending the same from an overhead support, a bar carried by the lower portion of said flexible member, and a pair of adjustably associated head-engaging straps yieldingly suspended from said bar.

4. In an exercising apparatus, a flexible member, means connected to the upper end of said flexible member for suspending the same from an overhead support, a bar carried by the lower portion of said flexible member, a pair of adjustably associated head-engaging straps yieldingly suspended from said bar, and pairs of rings detachably connected to and suspended from said bar.

5. In an exercising apparatus, the combination with a suspended bar, of a pair of adjustably associated head-receiving straps, one of which is adapted to pass beneath the chin of the user, the other adapted to pass behind the head of the user, and retractile springs forming a connection between said head-receiving straps and said suspended bar.

6. In an exercising apparatus, a U-shaped strap adapted to pass beneath the chin of the user, a strap adapted to pass behind the head of the user, the ends of which last mentioned strap are mounted for sliding movement on the first mentioned strap, springs connected to the upper ends of said U-shaped strap, and means on said U-shaped strap for limiting the downward sliding movement of the other strap.

7. In an exercising apparatus, a suspended bar, rings detachably mounted on the ends of said bar, larger rings flexibly connected to the first mentioned rings, flexible members depending from said first mentioned rings, and hand rings carried by the lower ends of said flexible members.

8. In an exercising apparatus, an overhead clamp comprising a pair of pivotally connected crossed bars, the upper ends of which terminate in inwardly presented hooks, a flexible member suspended from the lower ends of said crossed bars, a bar carried by the lower portion of said flexible member, and a pair of adjustably associated head-receiving straps yieldingly suspended from said bar.

In testimony whereof I affix my signature.

FRANCIS KING.