June 26, 1934. R. N. BURNETT 1,964,193

CHAIR SEAT STOP FOR EXERCISING

Filed March 6, 1934

FIG 1

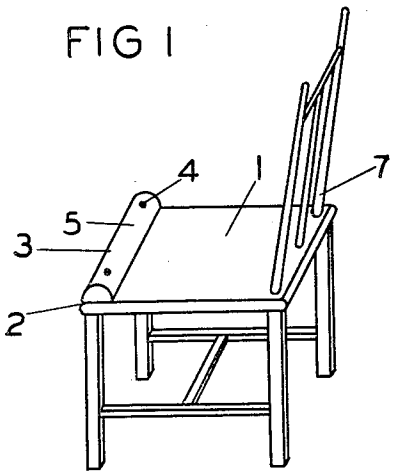



FIG 2

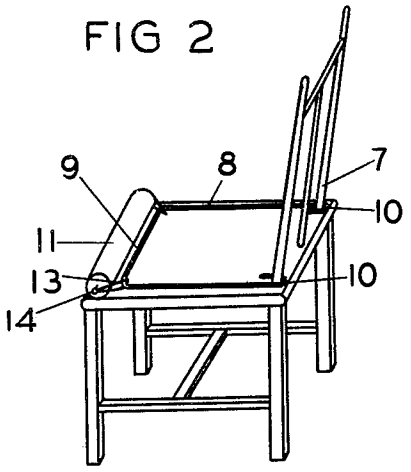



FIG 4

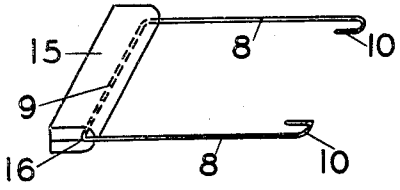



FIG 3

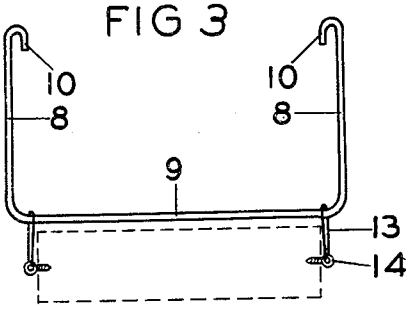



FIG 5

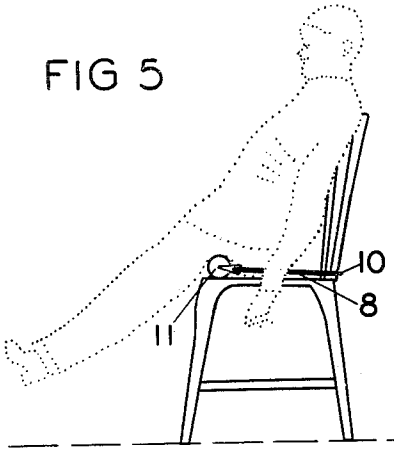
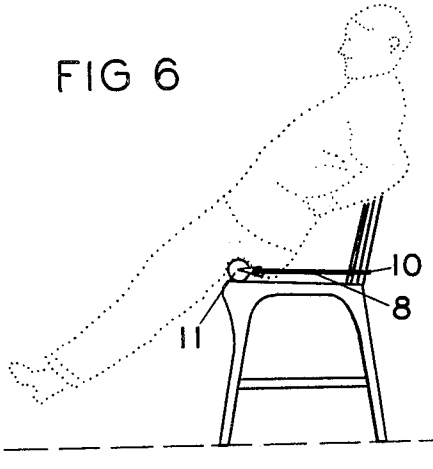



FIG 6




INVENTOR

Robert N. Burnett

Patented June 26, 1934

1,964,193

# UNITED STATES PATENT OFFICE

1,964,193

## CHAIR SEAT STOP FOR EXERCISING

Robert N. Burnett, Flushing, N. Y.

Application March 6, 1934, Serial No. 714,222

3 Claims. (Cl. 272—58)

Various exercising devices now existing involve straining or considerable muscular work. Most of them require the use of the feet for support on the floor and the hands are also used for maintaining one's position while exercising. Use of a chair for exercising has heretofore been difficult. Besides involving a strain there was danger of slipping off from the front edge of the chair, unless one holds on with his hands or keeps his feet on the floor.

The device embodying the present invention consists literally of an obstruction, whose cross sectional shape is the same, from end to end, placed longitudinally at or adjacent to the front edge of the seat of a chair, which obstruction serves as a block, or stop, to prevent a person from slipping off from the front edge, and it furnishes a means for securely holding him on the seat while he is exercising or stretching, while at the same time the feet and hands are entirely free for exercising, as explained later.

My chair seat stop for exercising, hereinafter called chair seat stop, which is attached to a chair which has a back, but preferably without arms, and un-upholstered, has sufficient elevation to prevent a person, who is sitting on the seat, facing the customary way, from slipping off from the front edge, while he is using the chair for exercising, and while his feet, at the same time, are raised off from the floor, and his hands are engaged in exercising. As he stretches out, pushing his shoulder blades against the back of the chair, the chair seat stop prevents him from sliding beyond the line of the obstruction, or stop.

The device embodying the present invention is designed primarily to furnish an easy means for stretching out the abdominal muscles, without straining, for the purpose of facilitating intestinal elimination, and also to improve the circulation of the entire body, but with the need of very little muscular exertion. It should require only a few minutes of stretching each day, and the exercising may be very light, or vigorous, to suit the desires of each person.

This chair seat stop, being placed at or adjacent to the front edge of a seat, so that the human form engages the said stop slightly below the upper joints of the thigh bones of the legs, or not far from the "half way" point between the crown of the head and the soles of the feet, is a means for creating a better balance for the person who is exercising. During the exercising the feet, at all times, are raised above the floor, and stretching is facilitated by counter movements with the hands and arms, which operate simultaneously with the feet and legs and serve as counter weights. For best results the strokes with the hands are mostly in a direction opposite to those of the feet. The exercising is facilitated by contact of the shoulder blades with the back of the chair.

In the accompanying drawing:—

Figure 1 is a perspective view of a chair seat stop, embodying the present invention, attached permanently at or adjacent to the front edge of a chair seat by screws, counter-sunk.

Figure 2 is a perspective of another form of chair seat stop, embodying the present invention, consisting of a roller-shaped body of suitable diameter, which is removably attachable. It engages a bent wire framework, hereinafter called a detachable holder, by means of coils of pliant wire fastened to screw eyes placed at or near the axial center at the ends of said chair seat stop, the detachable holder, in turn, being fastened by means of its own hooked ends to the back supports of a chair.

Figure 3 is an enlarged horizontal sectional view of the detachable holder shown in Figure 2, with supplemental coils of pliant wire, and which is embodied in this invention.

Figure 4 is a perspective view of a chair seat stop made with a flexible body, which consists of a flat pad, folded once, lengthwise, which, in a few seconds, may be removably engaged with the base of the detachable holder, and the latter attached to the chair, without the need of the coils of wire.

Figures 5 and 6 show front elevation views of a chair equipped with the chair seat stop with the roller shaped body and detachable holder shown in Figure 2, and their use by a man who is exercising.

Figure 1 represents a perspective view of the chair seat stop 3, embodying the present invention, permanently attached to a common chair such as is found in many kitchens. The upper surface of the chair seat is indicated by the numeral 1 and front edge of same by numeral 2. Placed longitudinally along the top of the seat and adjacent to the front edge, is a chair seat stop whose cross sectional shape is the same from end to end. This cross section may be of various forms, but in Figure 1 it is a half round, whose flat, or diametric side, engages the surface of the seat. The material of the stop may be of any convenient kind which will offer sufficient resistance to prevent the person, who is facing the customary way, while using the chair for exercising and stretching, from slipping off from the

front edge of the seat. This chair seat stop 3, made of wood, is fastened at or adjacent to the front edge of said seat by means of ordinary screws 4, counter-sunk and piercing the top surface of the seat. For best results the height of the chair seat stop 3, at its crest 5, should be one inch to one and one half inches, and for the comfort of the person using the chair, the edge of the chair seat stop which is nearest to the back supports 7 of the chair should slant, as indicated by the half round shown in Figure 1. A strongly built chair is recommended, preferably one of the Windsor type, with sloping back, and reenforced.

In the form of the invention shown in Figure 2 the chair seat stop 11 is cylindrical in shape, one inch to one and one half inches in diameter, and it is placed longitudinally, so that the end of the horizontal radius lies in the vertical plane of the front edge of the seat, or practically the same position as in Figure 1, but this chair seat stop is not permanently fastened to the surface of the seat. It is removably attached, being held at a constant distance from the back supports 7 of the chair by a detachable holder designated by numerals 8, 9 and 10, which will presently be described, and which engages said back supports 7 by the convex hooked end 10, said chair seat stop being attached directly to the detachable holder by coils of pliant wire 13 drawn through screw eyes 14 placed at the axial points of the ends of said chair seat stop or fastened by said coils of wire in any other convenient way, and being looped once around either end of the base 9 of the detachable holder to form a complete circuit, which is tightly closed by uniting the loose ends of the said wire to form a ring. The detachable holder, an enlarged drawing of which is shown in Figure 3, comprises a stiff wire of a minimum gauge of $\frac{3}{16}$ inch, which is bent in one horizontal plane and with a shape having fundamentally three sides, two of which are parallel to each other and extend in the same direction, beginning at opposite ends, respectively, of the third side 9, or base, and at right angles to same, the detached ends of the parallel sides, at a specified equal distance, from their starting points, being bent in curved lines towards each other and changing their directions so as to form convex-shaped hooks 10, which lie entirely within the original lines of direction of the aforesaid two sides; said detachable holder being of such linear proportions that the said hooked ends may be removably attached to and around the back supports of said chair at or near the seat, and the third side, or base, may be contiguously engaged with the said chair seat stop end for end, by any convenient means, or by coils of pliant wire 13, as above indicated. When a person sits on the chair for exercising, the upper parts of his legs and his body press upon and against the chair seat stop 11 and hold it firmly in contact with the surface of the seat, while the hooks 10 of the detachable holder furnish means to anchor the chair seat stop at a constant distance from the back supports 7 of said chair. A detachable holder of this description, supplemented by the two coils of pliant wire, may be used for attaching any form of chair seat stop to a chair for exercising purposes, and since the detachable holder may be unhooked from the chair back in several seconds, the chair is available for other purposes.

The detachable holder may be conveniently used without the coils of wire for attaching various forms of chair seat stops, one of the simplest and best being a flexible pad 15, folded once, lengthwise, to make a total thickness of one and one half inches, as shown in Figure 4. The pad is engaged along the line of the crease 16, by the base of the detachable holder, which is inserted between the open lips of the pad as far as said crease. The pad is literally "hung" on the base, like clothes on a line, and the said pad, thus hung, is then laid along the front edge of the chair seat, while the hooks of the detachable holder are engaged with the back supports 7 of the chair. When a person sits down to exercise pressure of the legs holds the pad firmly on the detachable holder base 9 without the use of wire coils.

*Operation*

Figures 5 and 6 of the drawing shows the actual operations of a chair equipped with a chair seat stop of the cylindrical form indicated in Figure 2, and embodying the present invention. The person using this device at first sits down naturally on the chair, facing the customary way, with shoulders against the back supports and contacting the chair seat stop 11 slightly below the upper joints of the thigh bones of the legs. Figure 5 shows a man with hands hanging down by his sides, with feet raised well above the floor, ready to begin exercising. He simultaneously thrusts out his feet, which should be held closely together, pushes with his shoulder blades against the back of the chair and moderately elevates his chest. During this operation, and as he stretches, he pushes against the chair seat stop 11, which holds him securely on the seat. As the feet are thrust out, he can undertake a variety of movements with the hands and arms, which furnish a means of increased exercise and also counterbalance the feet. The simplest movement consists in thrusting the hands and arms back vigorously and as far as possible, until they are vertically up and down, on a line with the shoulders—this motion occurring simultaneously with the strokes of the feet, and where vigorously done, the human form becomes nearly straight. Figure 6 shows another position, with the man stretched at full length. The various counter swings with the feet and hands may be repeated a number of times, but three minutes' exercise should suffice.

Having thus described the invention, what is claimed as new is:—

1. A strip, which has a uniform cross sectional shape, and a means for securing the same longitudinally along the front upper edge of a chair seat.

2. A strip, which may be of any shape, each unit of which has a uniform cross sectional shape, and a means for securing the same removably along the front upper edge of a chair seat, comprising a stiff wire frame carrying two ring-shaped coils of pliant wire, said coils of wire serving as links to engage the ends of the strip with the front side of said wire frame.

3. A strip, each unit of which has a uniform cross sectional shape, and a means for securing the same removably along the front upper edge of a chair seat, comprising a detachable stiff wire frame, shaped in one horizontal plane, like a flattened U whose loose ends curve inwardly to form short convex-shaped hooks; said stiff wire frame being of such linear proportions that the hooked ends may be removably secured to the back supports of the chair near the seat, and the front of the stiff wire frame may be securely engaged to the said strip by two coils of pliant wire.

ROBERT N. BURNETT.