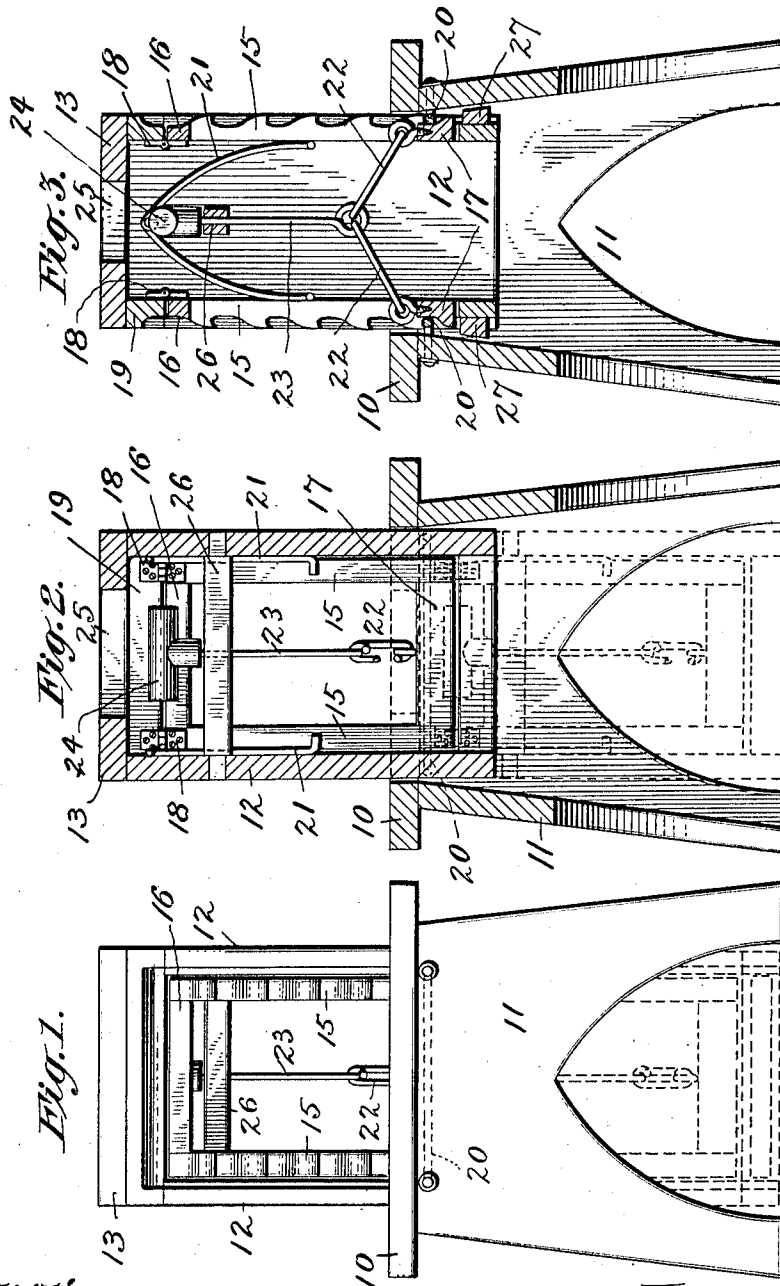


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CHAIR STOOL.
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CHAIR-STOOL.

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To all whom it may concern:

Be it known that I, FRANCIS CADWALADER HALL, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented a Chair-Stool, of which the following is a specification.

The object of my invention is to provide an article of furniture in the nature of a chair or stool the height of whose seat portion may be adjusted to meet various requirements in that regard, and which, while perfectly suited to act as a seat may be put to other uses, and more particularly my object is to provide such an article that will possess the important requirements of simplicity of construction, facility of manipulation to produce the desired adjustments, and above all having the stability and strength under all conditions of adjustment that are demanded in the case of an article intended for the use of persons so that there may be no danger of hurt or injury to the user, and to this end my invention consists in the article of furniture constructed substantially as hereinafter specified and claimed.

In the accompanying drawings—Figure 1 is a side elevation of a chair or stool embodying my invention with the seat-carrying member adjusted to full height, but shown in dotted lines in its lowest position; Fig. 2 a vertical section of the same in a plane parallel with the side shown in Fig. 1; and Fig. 3 a vertical section at right angles to the plane of Fig. 2.

The embodiment of my invention illustrated in the drawings, generally described, comprehends a base member which is in the form of the ordinary stool having a general form of a frustum of a pyramid, and consisting of a top 10 and four downwardly outwardly diverging legs 11, and a seat-carrying member consisting of a rectangular box-like frame 12, and a seat 13 attached to the top of the frame, which seat-carrying member is capable of vertical movement through an opening in the base top 10 so that the seat-carrying member may be lowered within the base member so as to be wholly contained therein, as shown in dotted lines in Figs. 1 and 2, with the top of the seat 13 flush with the top 10 of the base so that the general appearance is that of an ordinary stool which may be sat upon or stood upon, and is in a com-

pact form for convenient transportation or handling.

At each of the four corners of the box-like seat-supporting member 12, there is a vertically extending ratchet bar 15, and said ratchet bars 15 are connected together in pairs at the top by a cross bar 16, and at the bottom by a cross bar 17, so that a pair of ratchet bars thus connected forms a rectangular frame, and I pivot or hinge the frame thus formed at the top by a pair of hinges 18 whose upper leaves are attached to a cross bar 19 immediately below the seat 13.

Within the base member, a short distance below the top 10 thereof, are inward projections situated to be engaged by the teeth of the rack bars 15, and a very simple and efficient form of such tooth-engaging projection consists of a rod 20 for each pair of connected ratchet bars 15, said rod being bent at right angles at its ends to form substantial supporting and attaching means with the legs 11. The ratchet bars are yieldingly pressed outward so that the teeth thereof will engage with the rods 20 by means of a pair of inverted U-shaped springs 21 that are attached to opposite sides of the seat-supporting member 12 so that they have free ends that bear against corresponding ratchet bars 15 of both ratchet bar frames.

Pivotaly connected to the bottom cross bar 20 of each ratchet bar frame, is one end of an inwardly projecting upwardly inclined link 22 whose other end is pivotaly connected to the lower end of a vertical rod 23, which, a short distance below the seat 13 has a handle forming cross bar 24 accessible through a hand hole 25 in the seat 13, so that by passing the fingers of the hand through the hole 25, one may reach the handle 24 and lifting thereon the lower end of the ratchet bars 15, by reason of the link connection between the rod 23 and the lower cross bars 20, will be drawn inward and disengaged from the supporting rods 20, so that the seat 13 is free to be lowered if it is in a raised position, such as is shown in full lines in the drawings. When the seat 13 is to be lifted, the ratchet teeth, by reason of their inclination, will tend to slip over the supporting rods 20 in consequence of an upward pull upon the handle 24, and the lifting effect upon the rod 23 will facilitate this operation, for it will partially, if not

wholly, draw the ratchet bars 15 inward from contact with the supporting rods 20. The ratchet operating rod 23 is supported and guided in its vertical movements just below the handle 24 by being passed through a cross bar 26 that extends between the opposite sides of the seat supporting member 12. To prevent the unintentional or accidental complete removal of the seat 13 from the base member, the seat-supporting frame 12 has at its lower end on opposite sides, projections in the form of strips 27 adapted to engage the underside of the rods 20.

By the location of the ratchet bars 15 at widely separated points, it will be seen that the support of the seat 13 in its elevated position is so extended that even when the seat is lifted to a considerable height the structure is very stable and strong and able to support the weight of a person whether sitting upon the seat 13 or standing thereon. By extending the top 10 of the base member 11 so that its horizontal dimensions are greater than the horizontal dimensions of the seat 13, it will be seen that a ledge is provided that is useful as a step when it is desired to stand upon the seat 13 when it is in a raised or elevated position.

It will be evident that my invention may be embodied in structures differing in form and arrangement of parts from that which I illustrate in the drawings, as one embodiment of my invention, and the scope of my claims is to be determined in the light of this statement.

Having thus described my invention what I claim is—

1. In an article of furniture of the class described, the combination of a base member, a seat-carrying member vertically movable through an opening in the base member, oppositely disposed ratchet bars connected in pairs, a pivotal connection between each pair of connected ratchet bars and the seat-

carrying frame from which said ratchet bars extend downwardly, projections on the base members to coöperate with the teeth of the ratchet bars, means to disengage the ratchet bars from said projections comprising a handle accessible through an opening in the seat, and operative connections between said handle and the ratchet bars.

2. In an article of furniture of the class described, a base member, a seat carrying member vertically movable through an opening in the base member, oppositely disposed toothed rack bars pivoted at their upper ends to the seat carrying member, projections on the base member with which the toothed bars may engage, spring members between the toothed bars, holding them normally in engagement with the projections on the base member, an opening in the seat, a handle disposed within said opening, and links connecting said handle with the rack bars, whereby the rack bars may be disengaged from the projections upon the base member.

3. In an article of furniture of the class described, a base member, a seat carrying member vertically movable through an opening in the base member, a pair of toothed rack bars pivotally connected at their upper ends to opposite sides of the seat carrying member, means connecting each pair of rack bars so that they move in unison, projections upon the base member with which said rack bars may engage, means acting between opposite pairs of rack-bars to hold them normally in engagement with said projections, and means connecting opposite pairs of rack bars whereby they may be disengaged from said projections.

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Witnesses:

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