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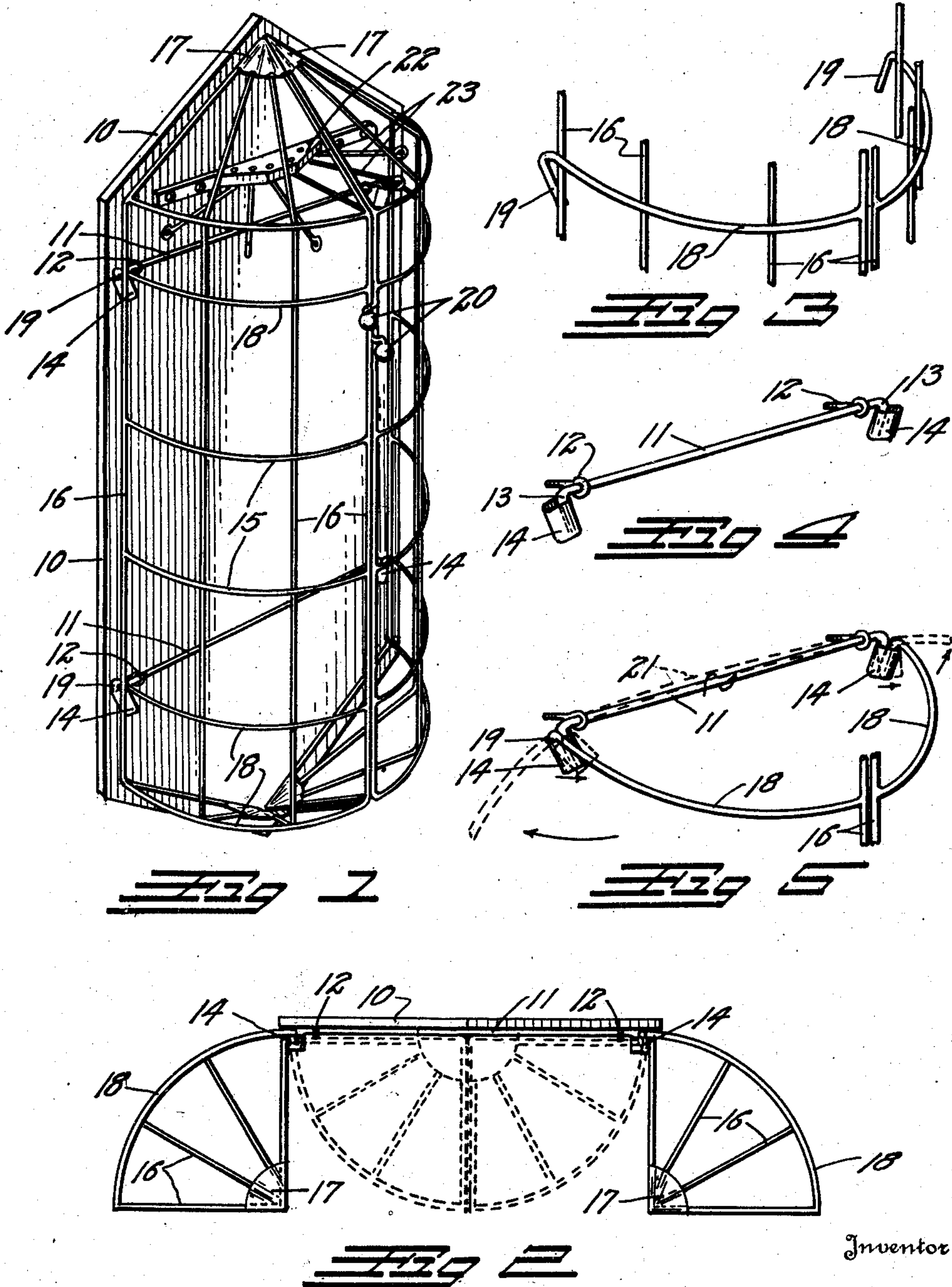
O. S. CASE

1,777,911

WALL RACK OR CABINET

Filed Dec. 10, 1928

2 Sheets-Sheet 1



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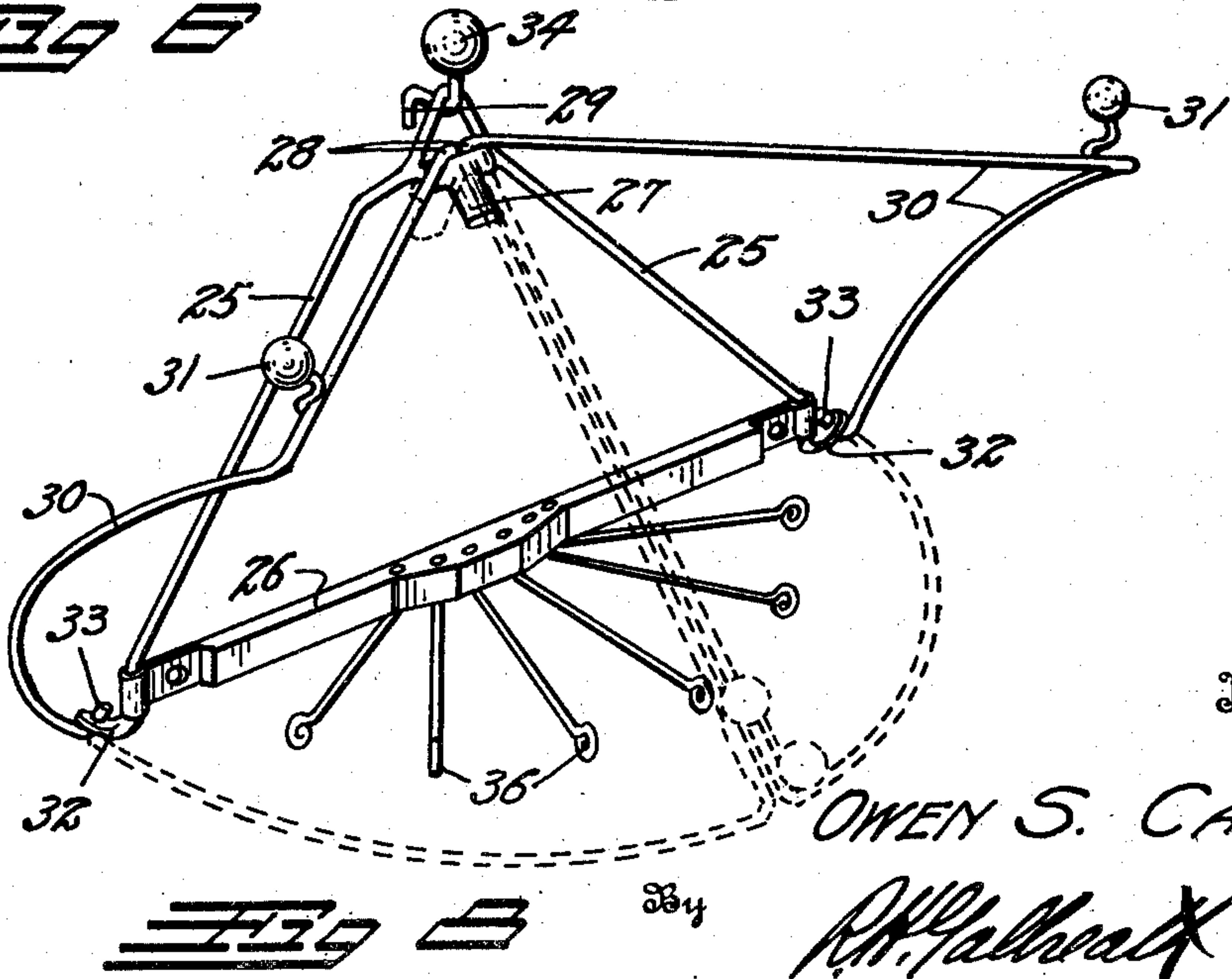
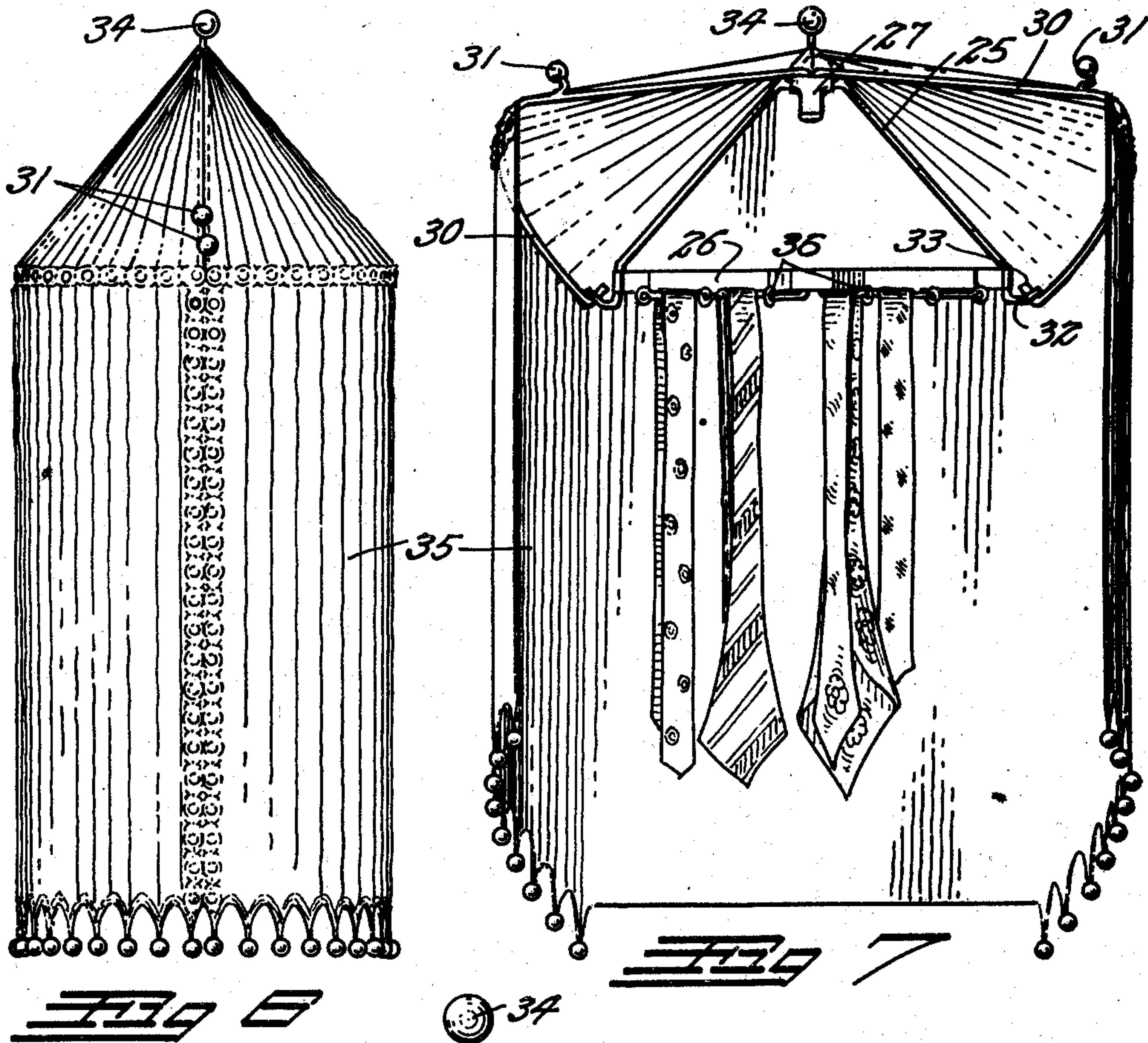
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## UNITED STATES PATENT OFFICE

OWEN S. CASE, OF WALDEN, COLORADO

WALL RACK OR CABINET

Application filed December 10, 1928. Serial No. 324,835.

This invention relates to a rack or cabinet adapted to be hung upon a wall. The rack is more particularly adaptable to be placed upon the market as a wire frame arranged to be covered with any suitable cloth material and ornamentation by the purchaser. The rack may be used for a variety of different purposes such as a necktie rack, wardrobe cabinet, cosmetic case, telephone shield, etc.

The principal object of the invention is to provide a supporting frame for a rack of this character which will have two hinged doors arranged to open and close simultaneously and be maintained in either the open or closed positions.

Another object of the invention is to provide a simple and efficient hinge construction which will snap the doors open and snap the doors closed without the use of auxiliary springs, etc., and which will allow the doors to be easily and quickly removed for covering or replacement.

A further object of the invention is to provide detachable hinges which will firmly hold the doors in position and prevent them from becoming accidentally dislodged.

A still further object of the invention is to provide a necktie rack which will hold a plurality of neckties in such a way that they will be protected from dust and dirt and so that they will not become crumpled and mussed.

In the drawing:

Fig. 1 is a perspective view of one form of my invention, illustrating the rack in the closed position. In this view, the cloth or ornamental covering has been omitted to illustrate the supporting frame.

Fig. 2 is a plan view of the form of Fig. 1, illustrating it in the closed position, in broken line, and in the open position, in solid line.

Fig. 3 is a fragmentary detail view illustrating the hinge hooks with which the doors are provided.

Fig. 4 is a detail view illustrating the hinge bar which receives the hinge hooks of the doors.

Fig. 5 is a detail view illustrating the ac-

tion of the hinge bar and hooks as the doors are swung to the open position.

Fig. 6 is a front view of a simplified form of the invention, with the cloth or fabric covering in place, as it appears in the closed position.

Fig. 7 is a similar view illustrating the rack of Fig. 6, in the open position.

Fig. 8 is a detail perspective view illustrating the supporting frame of the form of Fig. 6, in both the open and closed positions, the closed position being indicated in broken line.

The first form of the invention comprises a rigid back 10, which may be of solid board such as illustrated in Fig. 1, or a rigid frame of wires similar to the remainder of the device. Two laterally extending hinge bars 11 are secured to the back 10 by means of eyelets 12 or other suitable bearing devices. Each of the hinge bars 11 terminates in angularly turned ends 13 to which are secured hinge sockets or sleeves 14. The ends 13 are bent at slightly more than a right angle so that they extend downwardly and inwardly, as illustrated in Fig. 5.

A pair of hinged doors are provided, each consisting of a series of bent horizontal bars 15 and 18 joined by a series of vertical bars 16. The top and bottom of the rack may be closed if desired by turning the vertical bars 16 inwardly and securing them in a conical point by means of terminal plates 17. The horizontal bars 18 terminate at bent extremities which form hinge pins 19. The doors are provided with convenient handles 20 by means of which they may be opened and closed.

It is desired to call particular attention to the unique hinge construction which clamps the doors in both the open and closed positions and also causes them to operate simultaneously. The action of the hinges is dependent upon the angle at which the hinge pins 19 project. The hinge pins 19 are positioned so as to extend downwardly from the bars 18 and slightly inward toward the center line of the back 10. The doors are secured in place by slipping the hinge pins 19 into the hinge sleeves 14.



If a door is swung outwardly, as indicated by the arrows in Fig. 5, its hinge pin 19 will describe small horizontal arcs, first, moving inwardly so as to force the two opposite sleeves 14 inwardly and flex the hinge bars 11 upwardly, as indicated in broken line at 21, Fig. 5. As the top of the arc or dead center of the inward swing of the pins 19 is passed, the hinge bars will again straighten and force the pins outwardly causing the doors to spring open. Since any movement of either door is immediately communicated to the hinge bars 11 the movement of the opposite door will always be in unison or simultaneous therewith. The doors are therefore, held open and closed by the inherent elasticity of the hinge bars 11. To either open or close the doors the hinge bars must be flexed.

The bars 15, 16, and 18 may be covered with silk and ornamental braid or with parchment to conform to any desired descriptive scheme according to the taste of the user.

The rack may be used for many purposes, for instance, it can be secured to the wall adjacent to a dresser or dressing table and employed as a cosmetic case. For this use shelves would be secured to the back 10 at desired intervals to support the cosmetics. It will also serve to conceal a telephone which can be supported upon a shelf supported by and projecting from the back 10. Another use for the device is as a necktie rack. For this use a supporting member 22 is secured to the back 10 carrying a plurality of hinged, radially-extending arms 23, from which the neckties can be hung. Many other uses will suggest themselves, all of which are within the contemplation of the invention.

In Figs. 6, 7, and 8, I have illustrated a simplified form of the invention which lends its self to loose, hanging draping. This form of the invention composes an inverted V-shaped supporting frame 25, separated at its bottom by a cross member 26. A double hinge sleeve 27 is pivoted to swing freely between the sides of the supporting frame 25.

Door members 30 are each formed from a single bent wire which terminate at their upper extremities in angularly projecting hinge pins 28, which extend into the hinge sleeve 27, and at their other extremities in pivot ends 33 which extend into pivot openings in feet 32 formed on the lower extremities of the frame 25.

The action of the hinge is somewhat similar to that of the previously described form, that is, as the doors are opened or closed the hinge pins 28 tend to swing inwardly or towards each other. They are prevented from so doing, however, by being held in the common hinge sleeve 27. As a result, the door members 30 are flexed or sprung until the "dead center" is passed when they will again resume their normal positions and force the door members simultaneously to either

the open or closed positions depending upon the direction of the initial movement.

The frame 25 may be provided with a hook 29, by means of which it may be hung from any suitable supporting surface such as a wall. Suitable handles 31 may be provided for operating the door members and the device can carry any desired ornamentation such as indicated at 34.

If it is desired to use this form of the invention for a necktie rack, to which it is admirably adapted, radially-extending, pivoted hangers 36 may be carried from the cross member 26, as illustrated, to support the neckties.

In its completed form the frame 25 and the door members 30 are covered with ornamental silk or other covering as illustrated at 35. The door members 30, as illustrated, form a semi-circle when closed. It is desired to be understood that this shape is simply illustrative. An infinite variety of shapes and designs are possible with the invention. The bars can be shaped to form any desired angular or curved figure.

The door members can be quickly removed by simply unhooking the pivot ends 33 and sliding the hinge pins 28 from the hinge sleeve 27 and the tie hangers can be folded flat against the cross member 26 so that the device can be packed in a small neat package for marketing.

While a specific form of the improvement has been described and illustrated herein, it is desired to be understood that the same may be varied, within the scope of the appended claims, without departing from the spirit of the invention.

Having thus described the invention, what I claim and desire secured by Letters Patent is:—

1. A wall rack comprising: a substantially flat back member; rotatable hinge bars extending across said back member; sleeves carried on the extremities of said hinge bars; doors adapted to coact with each other and close over said back member; and hinge pins carried by said doors so as to be received in said sleeves, said sleeves projecting in a common plane and being inclined toward each other so that movement of said doors will cause rotation of said hinge bars.

2. A wall rack comprising: a substantially flat back member; rotatable hinge bars extending across said back member; sleeves carried on the extremities of said hinge bars; doors adapted to coact with each other and close over said back member; and hinge pins carried by said doors so as to be received in said sleeves, said sleeves projecting in a common plane and being inclined toward each other so that movement of said doors will cause rotation of said hinge bars, said hinge pins being bent downwardly and inwardly so as to cause the sleeves at the opposite extrem-



ities of a hinge bar to be forced inwardly to flex said hinge bar as said doors are opened or closed.

3. Means for causing a pair of co-acting  
5 doors to move in unison comprising a hinge bar, rotatably supported and extending between said doors; a socket depending from each extremity of said hinge bar, said sockets extending inwardly to form an acute angle  
10 with said hinge bar; and a rigid hinge pin carried by each of said doors, said pins extending into said sockets at an angle common therewith so that rotation of either door will be transmitted, through rotation of said hinge  
15 bar, to the other door.

4. A wall rack comprising: a rigid, plane back member; doors shaped extending outwardly from said back member and inwardly to a contact with each other to form a closed  
20 container with said back member; means for hinging and causing said doors to move in unison, said means comprising angularly projecting hinge pins formed on said doors; angularly projecting sockets adapted to receive said hinge pins; a rotatable shaft connecting said sockets so as to cause opposite  
25 hinge pins to move simultaneously; and means for rotatably supporting said shaft upon said back member.

5. A wall rack comprising: a rigid, plane back member; doors shaped extending outwardly from said back member and inwardly to a contact with each other to form a closed container with said back member; means for  
35 hinging and causing said doors to move in unison, said means comprising angularly projecting hinge pins formed on said doors; angularly projecting sockets adapted to receive said pins; a shaft connecting said  
40 sockets so as to cause opposite hinge pins to move simultaneously, said hinge pins projecting inwardly so that they swing toward each other as said doors are moved so as to cause a flexure of said shaft; and means for rotatably supporting said shaft on said back mem-  
45 ber.