May 26, 1931. C. T. CHRISTENSEN 1,806,610

FURNITURE

Filed July 26, 1928 2 Sheets-Sheet 1

Fig. 2

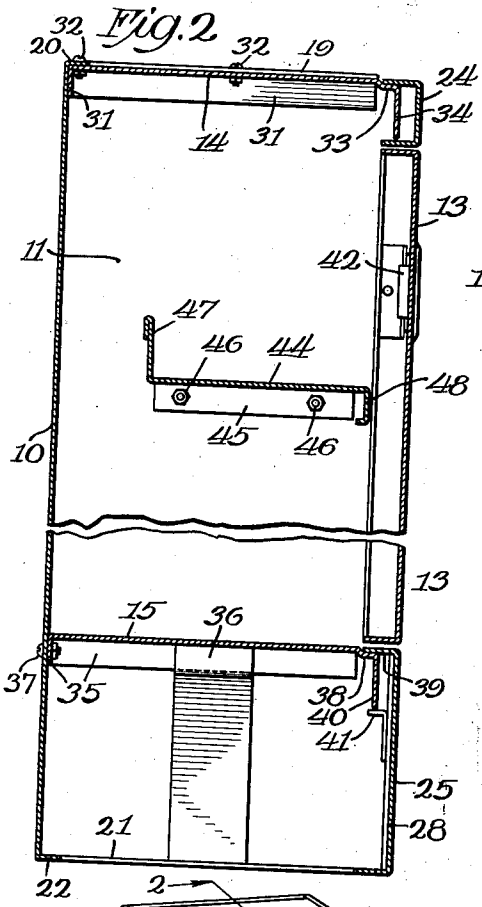


Fig. 3

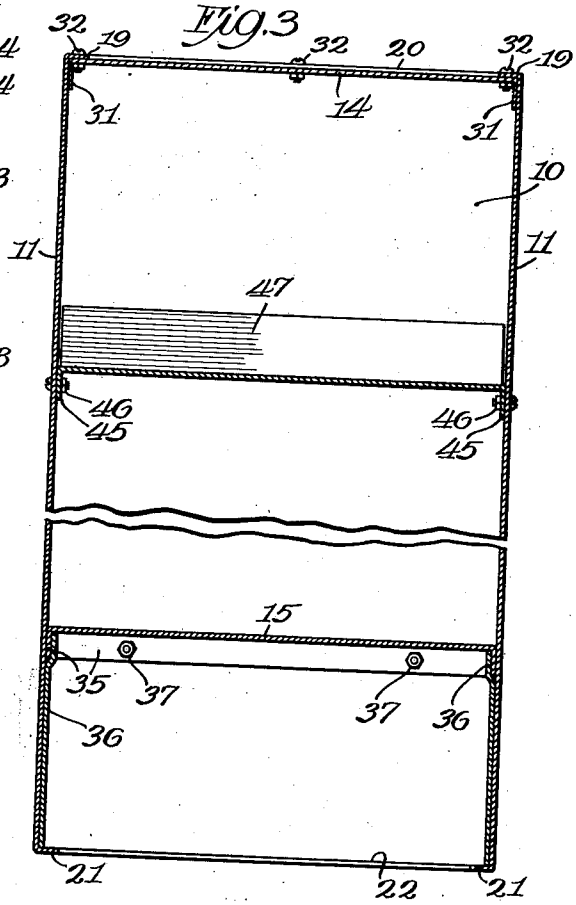


Fig. 1

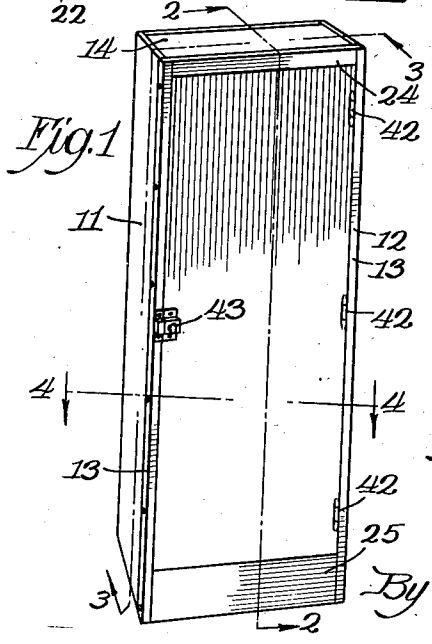
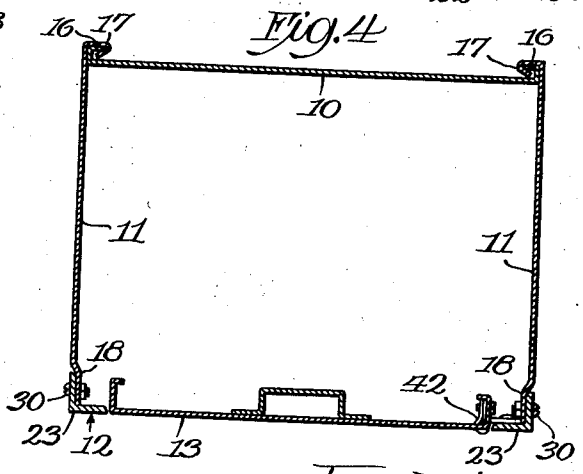


Fig. 4



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FURNITURE

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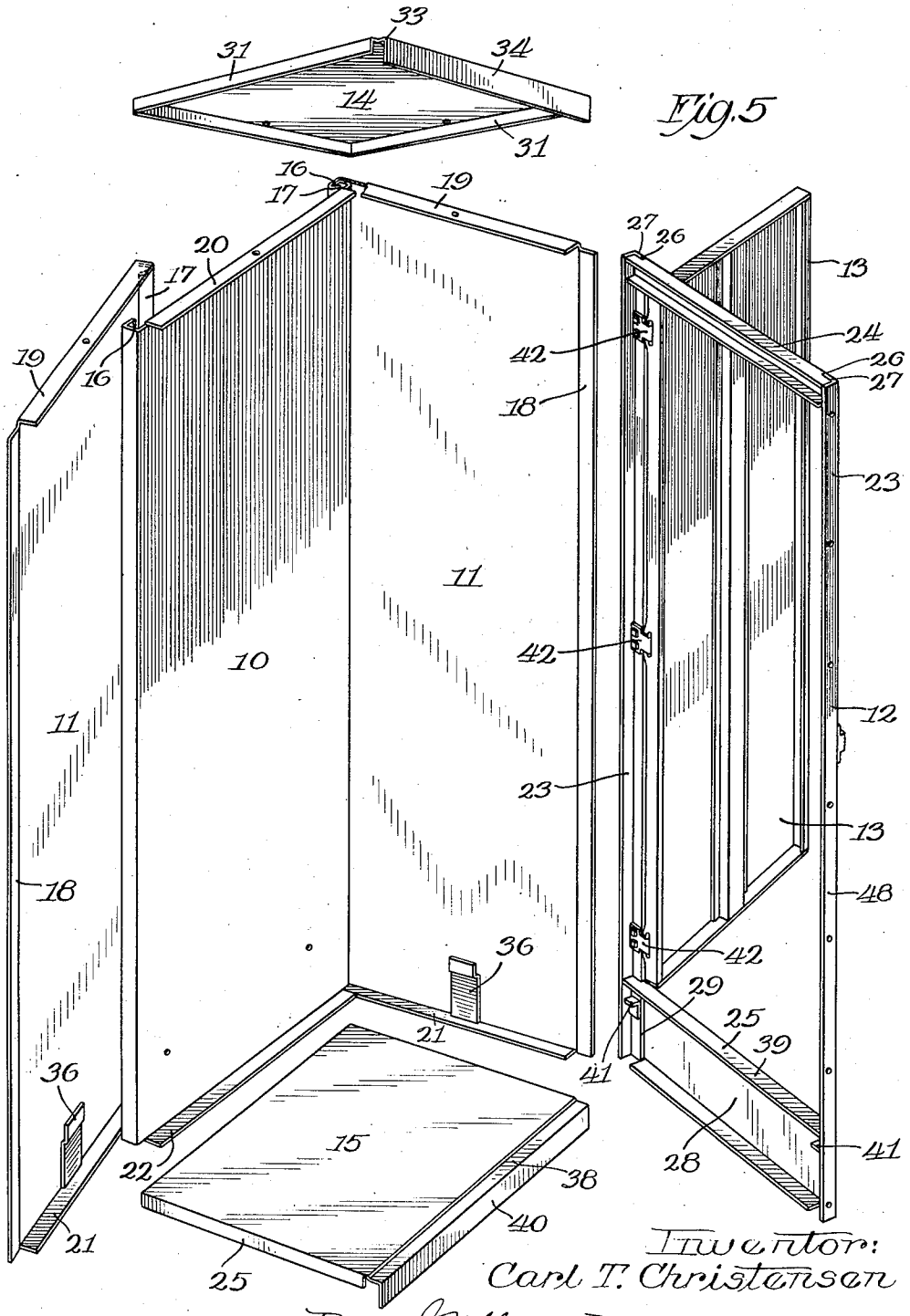


Fig. 5

Inventor:
Carl T. Christensen
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Patented May 26, 1931 1,806,610

UNITED STATES PATENT OFFICE

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FURNITURE

Application filed July 26, 1928. Serial No. 295,457.

This invention relates to metallic furniture and has for its principal object to provide furniture of such simple construction that it can be readily assembled by unskilled persons thereby permitting the constituent elements to be packed compactly for shipping and set up at the place of use.

Further objects and advantages of the invention will become apparent as the description is read in connection with the accompanying drawings in which

Fig. 1 is a perspective view of a piece of furniture made according to the invention and particularly useful as a storage place for brooms and the like;

Figs. 2, 3 and 4, are sectional views taken on the lines 2—2, 3—3 and 4—4 respectively, of Fig. 1; and

Fig. 5 is a perspective view illustrating the preferred method of assembling the constituent elements.

This particular embodiment of the invention is composed of a back 10, sides 11, a front frame 12, carrying a door 13, a top 14 and a bottom 15.

The back is formed from a sheet of metal, preferably steel, and is bent adjacent to each of its upright edges, first at a right angle rearwardly and then at a right angle inwardly, to form a flange 16, spaced from the rear surface of the back and substantially parallel thereto.

Each side portion is also formed of a similar sheet and adjacent its rear edge is bent first at right angles inwardly, and then at an acute angle forwardly and outwardly, to form a flange 17, adapted to enclose the flange 16 and form a detachable hinge connection with it.

Adjacent to the front edge of each side piece it is offset inwardly, as indicated at 18. And both the sides and the back are provided at the top with flanges 19 and 20 respectively and at the bottom with flanges 21 and 22 respectively, all turned inwardly with respect to the enclosure.

The front frame is composed of two upright angles 23 connected by a channel 24 at the top and a channel 25 at the bottom. The channel 24 is of commercial stock and its web is cut away at 26 to provide a seat for the flange 27 of the angles 23, to which it is welded. The channel 25 is formed from sheet metal with its web 28 offset inwardly at 29 to provide a seat for the flange 27 of the angles 23 to which it is secured by welding or riveting.

The flanges 48 of the angles 23 telescope with the offset portions 18 of the sides and are secured thereto by bolts or rivets 30.

The top 14 has a flange 31 at the sides and the rear to rest against the sides 11 and the back 10, beneath the flanges 19 and 20, and it is perforated to receive similar bolts 32. At the front the top is offset at 33 to provide a seat for the top flange of the channel 24 and is provided with a depending flange 34 adapted to rest on the bottom flange of the channel 24.

The bottom 15 is provided with flanges 35 at the sides and the rear, the two side flanges interlocking with offset clips 36 attached to the inner faces of the sides 11, and the rear flange 35 being secured to the back by bolts 37. Adjacent to the front edge, the bottom is offset at 38 to provide a seat for the flange 39 of the channel 25 and has a depending flange 40 adapted to rest on brackets 41, welded to the angles 23.

The door 13 is mounted on the front frame by hinges 42, and is held in closed position by a latch 43.

In assembling, the back 10 is laid on supports with the flanges 16 underneath. The sides 11 are brought to a plane substantially parallel to the back and the flanges 17 are interlocked with the flanges 16, after which the sides are swung upwardly to a position at right angles with the back in which the flanges 17 enclose the flanges 16 and limit further swinging movement to the sides.

The top is then placed underneath the flanges 19 and 20 and three bolts 32 inserted to make it fast.

The bottom 15 is inserted between the sides 11 and forced downwardly until the flanges 35 interlock with the clips 36 when two bolts 37 are put through the rear flange 35 and the back.

The front frame 12, with the door 13

mounted, is then set upon the sub-assembly, the angles 23 telescoping with the flanges 18, the channel 24 receiving the flange 34 on the top, and the channel 25 with the brackets 41 receiving the flange 40 on the bottom. Several bolts, preferably six in number, are then inserted through the angles 23 and the offset portions 11.

In this simple manner the constituent elements of the cupboard, or other piece of furniture, are readily assembled into a rigid and strong construction, capable of enduring a long period of service.

The several pieces are easily decorated and protected by lacquer, or other paints, and may be finished in colors to suit the decorative scheme of the room in which they are to be used.

In this particular embodiment, intended for use as a broom closet, the bottom 15 is somewhat elevated with respect to the floor, and adjacent to the top a shelf 44 is provided. It consists of a sheet of metal having side flanges 45 secured to the sides by bolts 46, and a rear flange 47, providing clearance for broom handles adjacent to the back and preventing things placed on the shelf from falling over at the rear. The front end of the shelf is turned downwardly at 48 to give it a finished appearance.

Obviously the interior of the structure may be provided with shelves, partitions and the like, to suit any particular requirements.

The door is preferably mounted in the front frame at the factory and these two pieces, together with the remaining constituents as separate elements, make a small compact package that can be readily shipped at low freight or express rates, and either the user or the retailer can readily set up the furniture at small cost.

Heretofore a closet such as illustrated included some forty bolts whereas the present arrangement is made strong and rigid with seventeen bolts, exclusive of those used in the shelving.

I claim as my invention:

1. In metallic furniture, a back member comprising a single sheet having its vertical edges bent rearwardly and then inwardly to form a flange spaced from the plane of said back member, side members each comprising a single sheet engaging the rearwardly bent portion of said back and having its adjacent edge in flat contact with the outer face of said flange and having its free edge bent around the edge of said flange to form an interlocking connection capable of being assembled to form a rigid joint by a lateral and then a turning movement of said side member relative to said back member.

2. In metallic furniture, a back having backwardly and inwardly turned flanges at its upright edges, sides each having a flange extending laterally inward, then forward and then outward, and cooperating with the flanges of the back to hingedly secure the back and sides together, said flanges being engageable by a lateral and a turning movement, a front frame secured to the front edges of the sides and a door hinged to the frame.

3. In metallic furniture, a back and sides, each composed of a single sheet, a top and bottom each composed of a single sheet secured to the sides and the back, the front edges of the top and bottom being offset downwardly and provided with depending flanges, a front frame comprising upper and lower channels receiving the flanges and cooperating with the offset portions, the depending flange of the top resting on the bottom flange of the upper channel.

4. In metallic furniture, a back member of a single sheet of metal having its vertical edges bent first rearwardly to form an abutment and then laterally inwardly, side members each comprising a single sheet of metal having one of its edges bent inwardly and then return bent whereby the cooperating flanges of the back and sides may be interengaged by a relative lateral movement and locked together by a turning movement, said side members engaging said abutments when swung to a position approximately at right angles to said back member.

5. A metallic cabinet comprising a back and sides, said back having its vertical edges bent to form flanges extending inwardly in opposite directions and spaced from the plane of said back, side members having their side edges bent to extend laterally inwardly and then forwardly and outwardly for engaging said first-named flanges by a lateral and then a turning movement to form, when at right angles to said back member, a rigid joint between said back and sides.

In testimony whereof I affix my signature.

CARL T CHRISTENSEN.