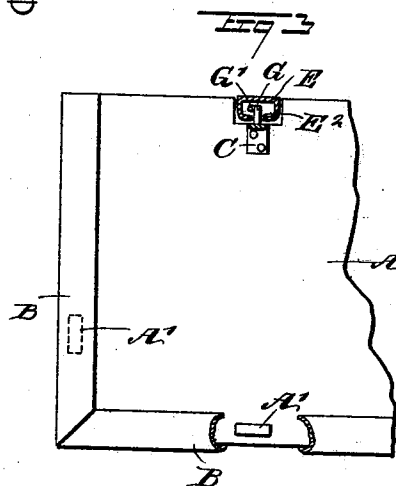
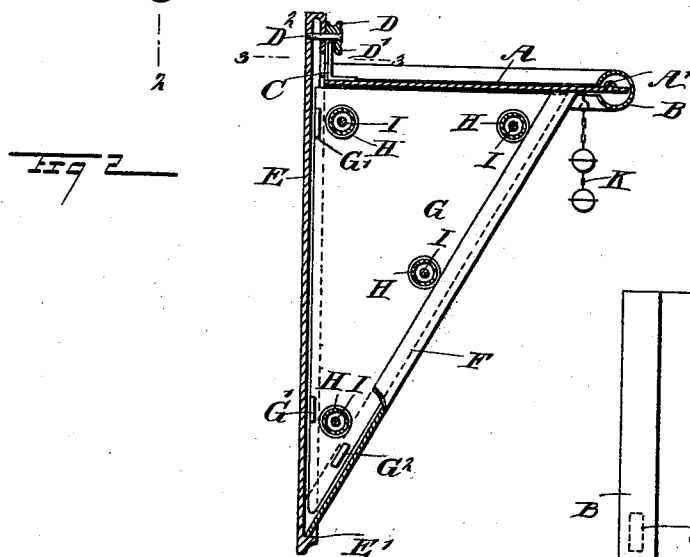
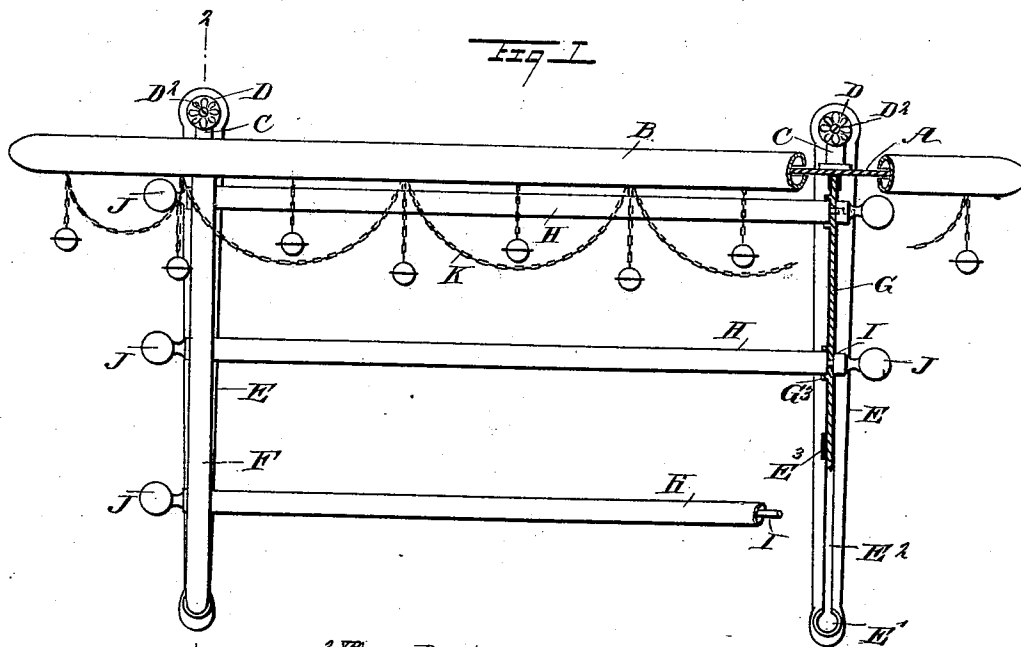


(No Model.)

C. W. MARQUARDT.
METALLIC SHELF.

No. 517,349.

Patented Mar. 27, 1894.



WITNESSES:
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UNITED STATES PATENT OFFICE.

CHARLES W. MARQUARDT, OF DETROIT, MICHIGAN.

METALLIC SHELF.

SPECIFICATION forming part of Letters Patent No. 517,349, dated March 27, 1894.

Application filed July 10, 1893. Serial No. 480,065. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. MARQUARDT, of Detroit, in the county of Wayne and State of Michigan, have invented a new and Improved Metallic Shelf, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved metallic shelf, which is simple and durable in construction, very ornamental in appearance, and designed for use as a metallic mantel, bracket, table top and other devices.

The invention consists of certain parts and details, and combinations of the same, as will be hereinafter described and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a front view of the improvement with parts in section. Fig. 2 is a cross section of the same on the line 2—2 of Fig. 1. Fig. 3 is a plan view of part of the improvement and with parts in section on the line 3—3 of Fig. 2; and Fig. 4 is an enlarged rear elevation of one of the buttons for holding the shelf plate in position.

The improved device is provided with a sheet metal plate A, adapted to be engaged at its edges by slotted tubes B, likewise made of sheet metal so as to be comparatively light and strong and to form a suitable flange for the shelf plate A.

When the device is used as a bracket or mantel, then only three sides of the shelf plate A are engaged by tubes B, as will be readily understood by reference to the drawings. When however, the device is used for a table top then all the four edges of the plate are engaged by tubes B cut to a miter at the adjacent edges or joint; see Fig. 3.

On the top of the shelf plate A and near the edges to be engaged by the tubes B are struck up projections A', adapted to pass into the tubes by the latter being slipped lengthwise onto the edges so that the projections are within the tubes, and prevent displacement of the shelf plate and tubes.

On the top of the shelf plate A near the rear edge are secured the angular plates C having their upward arms beveled to engage

a correspondingly-shaped beveled recess D' formed on the rear face of a button D made in the form of a rosette and held on a screw D², secured in the brackets E; see Figs. 1, 2 and 4. The brackets E are also in the form of metal tubes and are adapted to be fastened to the wall or other suitable means of support, and each bracket is provided at its lower end with a socket E', adapted to be engaged by the lower correspondingly-shaped end of braces F, likewise made of sheet metal tubing, and the brackets are formed with a longitudinal slot E² similar to the slots in the tubes E and B. The tube brackets E and the corresponding braces F are engaged by connecting plates G, made of sheet metal and formed with lugs G' and G², struck up in the said plates G to engage the inside of the tubes E and F to securely unite the same by the said plates G. It is understood that the lugs G' and G² pass into the tubes E and F in the same manner that the projections A' pass into the tubes B, as above described.

In order to strengthen the device the two plates G are connected with each other by rods H, engaging corresponding sockets G³, formed on the opposing faces of the plates as will be readily understood by reference to Figs. 1 and 2. Through the tubular rods H pass the screw rods I also passing through the plates G, to be engaged at the outer faces thereof by nuts J, made in the shape of knobs as illustrated in Fig. 1. It will be seen that by this arrangement the entire device can be cheaply manufactured, and the several parts assembled in a convenient manner, to finally produce a very strong and durable support which can be utilized for various purposes as above mentioned. If desired the under side of the shelf plate A may be ornamented by pendent ornaments K, &c., as indicated in Figs. 1 and 2.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A shelf, consisting of tubular brackets, tubular braces engaging said brackets near their lower ends connecting plates secured to the brackets and braces and a shelf plate secured to the brackets and resting upon the braces, substantially as described.

2. A shelf, consisting of slotted tubular

brackets, slotted tubular braces, engaging said brackets near their lower ends, a shelf plate secured to the brackets and resting upon the braces, and connecting plates secured to the
5 slotted brackets and braces, substantially as described.

3. A shelf, comprising slotted tubular brackets, slotted tubular braces engaging the brackets near their lower ends, a shelf plate, secured
10 to the brackets and resting upon the braces and connecting plates provided with projections adapted to engage the inner surfaces of the slotted brackets and braces, substantially as described.

4. A metallic shelf comprising slotted tubular brackets formed with sockets at their lower
15 ends, buttons held on the said brackets, a metallic shelf plate formed with arms engaged by the said buttons, slotted tubes engaging the edges of the said shelf plate, and braces
20 made in the shape of tubes and engaging with their lower ends the sockets in the said braces and with their upper ends the said shelf plate, substantially as shown and described.

5. A metallic shelf comprising slotted tubular brackets formed with sockets at their
25 lower ends, buttons held on the said brackets, a metallic shelf plate formed with arms engaged by the said buttons, slotted tubes engaging the edges of the said shelf plate, and braces
30 made in the shape of tubes and engaging with their lower ends the sockets in the said brackets and with their upper ends the said shelf plate, and plates for connecting the said braces
35 with the said brackets, substantially as shown and described.

6. A metallic shelf comprising slotted tubular brackets formed with sockets at their
40 lower ends, buttons held on the said brackets, a metallic shelf plate formed with arms engaged with the said buttons, slotted tubes

engaging the edges of the said shelf plate, and braces made in the shape of tubes and engaging with their lower ends the sockets
45 in the said brackets and with their upper ends the said shelf plate, and plates for connecting the said braces with the said brackets, each of the said plates being formed with projections adapted to pass into the said
50 brackets and braces, as set forth.

7. A metallic shelf comprising slotted tubular brackets formed with sockets at their
lower ends, buttons held on the said brackets, a metallic shelf plate formed with arms engaged by the said buttons, slotted tubes engaging
55 the edges of the said shelf plate, and braces made in the shape of tubes and engaging with their lower ends the sockets in the said brackets and with their upper ends
60 the said shelf plate, plates for connecting the said braces with the said brackets, tubular rods engaging sockets in the said plates, and screw rods and nuts for holding the said tubular
65 rods in place, substantially as shown and described.

8. In a metallic shelf, the combination with slotted brackets, of a shelf plate formed with
angular arms of which the upright member is dovetailed, buttons held on the said brackets
70 and formed with dovetailed recesses to engage the said dovetailed arms, and braces engaging with their lower ends sockets in the said brackets, the upper ends of the braces
75 resting on the under side of the said plate, and plates for connecting the said braces and brackets, substantially as shown and described.

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