

April 20 , 1926.

1,581,256

P. M. WEGE

SHEET METAL CASE CONSTRUCTION

Filed July 24, 1922

2 Sheets-Sheet 1

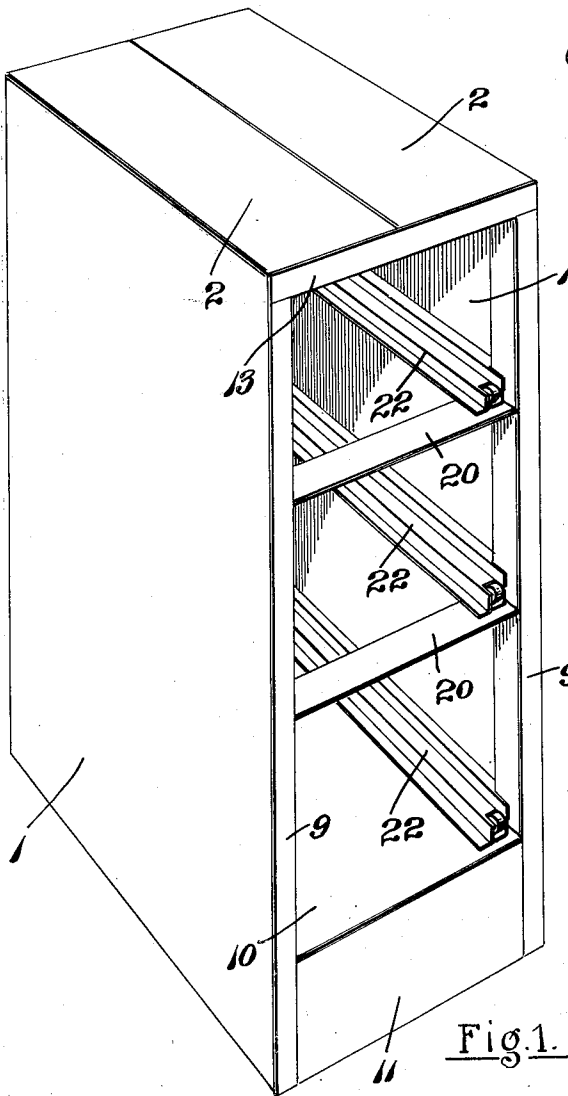


Fig. 1.

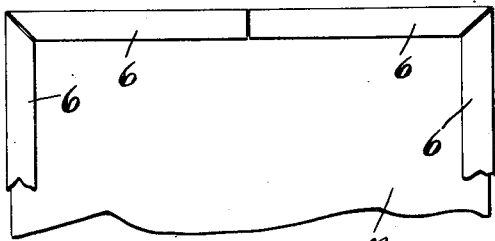


Fig. 3.

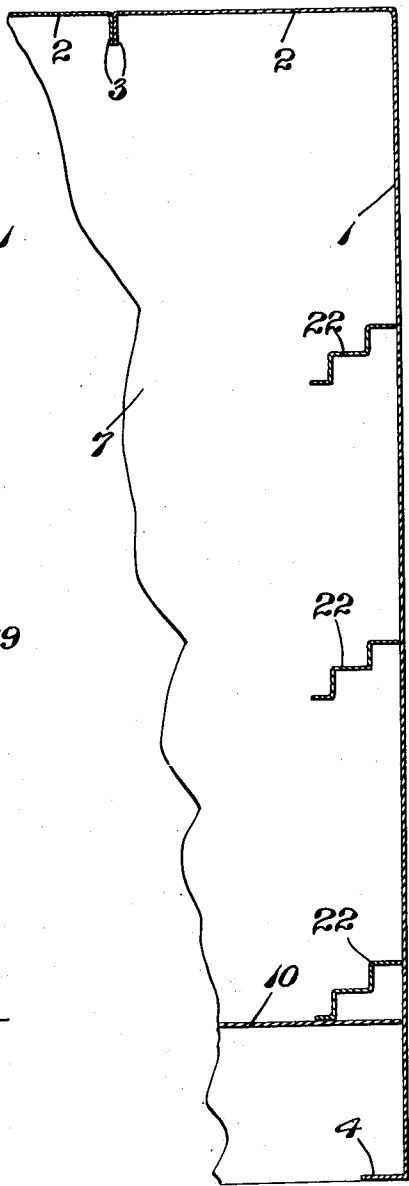


Fig. 2.

Inventor
Peter M. Wege.
By Frank E. Liverance, Jr.
Attorney.

April 20, 1926.

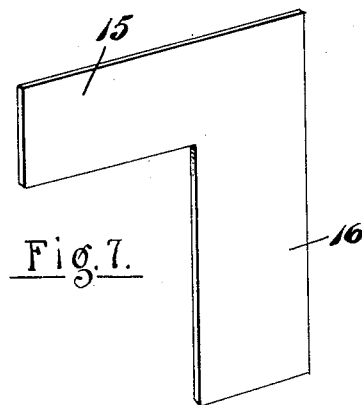
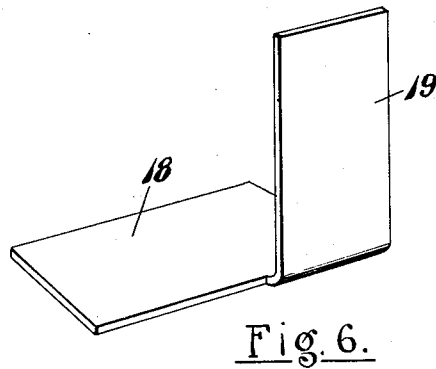
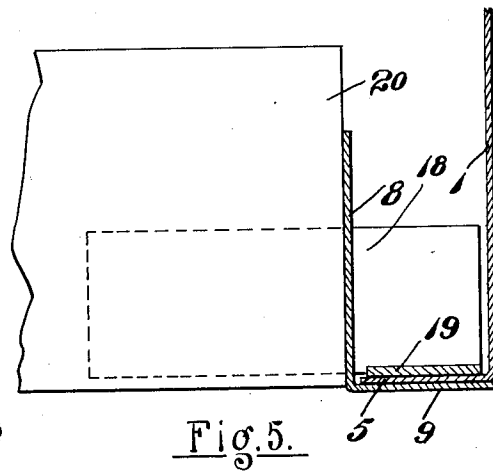
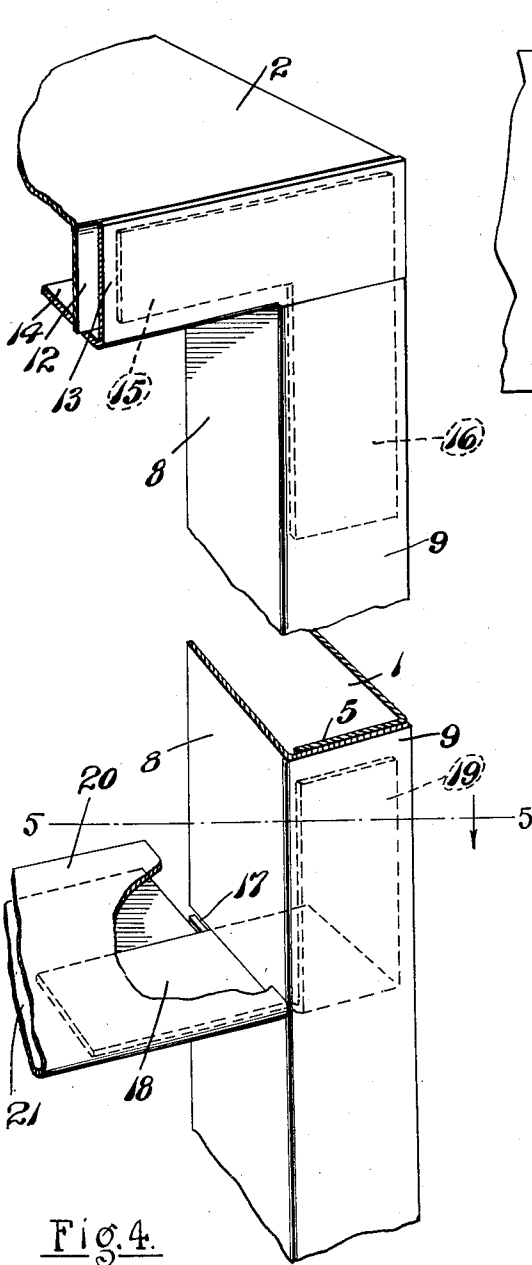
1,581,256

P. M. WEGE

SHEET METAL CASE CONSTRUCTION

Filed July 24, 1922

2 Sheets-Sheet 2



Inventor
Peter M. Wege
By *Frank E. Luerance, Jr.*
Attorney.

UNITED STATES PATENT OFFICE.

PETER M. WEGE, OF GRAND RAPIDS, MICHIGAN, ASSIGNOR TO METAL OFFICE FURNITURE COMPANY, OF GRAND RAPIDS, MICHIGAN, A CORPORATION OF MICHIGAN.

SHEET-METAL CASE CONSTRUCTION.

Application filed July 24, 1922. Serial No. 576,942.

To all whom it may concern:

Be it known that I, PETER M. WEGE, a citizen of the United States of America, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Sheet-Metal Case Construction; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a case construction, particularly adapted for metal filing cases, though not in any sense limited exclusively thereto. It is a primary object and purpose of the present invention to make a case construction of metal at a minimum cost of production, making use of light gage sheet metal and providing novel reinforcing structure for the case so that it is extremely strong and rigid and fully capable of withstanding the usage to which it is subjected in service. The invention consists in many novel constructive details and arrangements of parts for effectively attaining the above named ends, as well as many others not at this time specifically set forth, but which will appear as understanding of the invention is had from the following description, taken in connection with the accompanying drawings, in which,

Fig. 1 is a perspective view of a metal filing case made in accordance with my invention.

Fig. 2 is an enlarged fragmentary vertical section taken in a plane paralleling the front or back of the case.

Fig. 3 is a fragmentary rear elevation of the case.

Fig. 4 is a fragmentary enlarged perspective view of the front of the case at one side thereof, parts being broken away and in section for better disclosure of the construction.

Fig. 5 is a fragmentary horizontal section, taken substantially on the plane of line 5—5 of Fig. 4, and

Figs. 6 and 7 are perspective views of re-

inforcing and supporting brackets used in the front construction of the case.

Like reference characters refer to like parts in the several figures of the drawings.

In the construction of the case, two sides of relatively thin gage sheet metal are provided, as indicated at 1, having portions 2 at their upper edges turned inwardly toward each other to make the top of the case, the meeting ends of said portions 2 being each formed with a downturned flange 3, said flanges lying alongside each other and permanently connected together as by spot welding or otherwise. Each side at its lower edge is inwardly turned, forming a flange 4, on which flanges the case rests on the floor. Each side at its forward edge is formed with an inturned vertical flange 5, as shown, and each side 1 and top portion 2, at their rear edges are formed with inwardly and downwardly turned flange portions 6 which pass over the edges of a sheet metal plate 7 and are spot welded thereto, securing the back in the case.

At each side of the front of the case, an angle-shaped member, each including an inwardly extending leg 8 and a leg 9 positioned at right angles thereto, is positioned, so that the legs 9 come against the flanges 5, heretofore described, being spot welded thereto. Adjacent the lower end of the case, a bottom 10 of sheet metal is located, at its front being formed with an integrally connected and downturned portion 11 which reaches to the floor.

At the front edges of the top portions 2, flanges 12 in alinement are bent downwardly, associated with which is a second angle-shaped member formed with an inwardly extending horizontal leg 14 and a vertical leg 13 which lies against the front sides of and covers the flanges 12. An angle shaped reinforcing bracket comprising arms 15 and 16 located at right angles to each other is located at each upper front corner of the case, the arms 15 lying back of the flanges 12 at the ends thereof and the arms 16 extending downwardly back of the flanges 5. By spot welding the flanges 12

and leg 13 are permanently connected, and in the same manner the arms 15 and 16 are permanently connected to the flanges 12 and 5, respectively.

At different points in the length of the inwardly extending flanges or legs 8, horizontal slots 17 are cut for the passage of inwardly extending parts 18, horizontally positioned at the lower end of a second part 19 which is turned upwardly from the front edge and at the outer end of the part 18 and lies against the rear side of the adjacent flange 5 to which it is permanently secured by spot welding.

At the different points where the parts 18 extend inwardly as described, horizontal cross bars are located, made from sheet metal by doubling a piece of sheet metal lengthwise upon itself thereby forming an upper side 20 and a lower side 21, the bend being at the front edge of the bar as best shown in Fig. 4. The parts 18 extend into the space between said upper and lower sides of the bars at the ends thereof. Rails 22 of the form shown are positioned horizontally alongside the sides 1 of the case for carrying drawers adapted to be inserted therein and the front ends of said rails, the cross bars at their ends and the parts 18 are permanently connected together by spot welding, the rails also having similar connection to the legs 8.

A construction made as described is rigid and strong and fully capable of withstanding hard usage. The gage of metal required is very thin compared to what has formerly been considered necessary, and the cost of manufacture is correspondingly reduced. The bracket reinforcement, combined with the cross bar and drawer rail constructions make the construction one which does not spring or warp out of form, extreme strength and rigidity for the thin metal used being attained. The structure is also complete in appearance, in every way fulfilling the requirements for metal filing cases. Of course the same or similar construction may be utilized for desks or other articles having drawers. The appended claims define the invention and I consider myself entitled to all forms of structure coming within their scope.

I claim:

1. A construction of the class described, comprising spaced apart sides of sheet metal, each of said sides at its front being formed with an inturned flange, a top located between the upper ends of said sides, said top having a downturned flange at its front edge, a back for the construction, two angle members of sheet metal located at the front of each side and formed with a leg bearing against said front flanges of the sides and permanently secured thereto, and with an inwardly extending leg, said inwardly ex-

tending legs being horizontally slotted at spaced apart intervals, integral reinforcing and supporting members having upstanding parts connected directly with the front flanges of said sides at said slots, each of said members having parts extending horizontally inward through the slots, cross bars disposed horizontally across the front of the construction and permanently connected at their ends to said inwardly extending parts, and an upper angle member having all parts thereof lying in the same plane permanently connected to the front flange of the top, substantially as described.

2. In a metal case construction, sides of sheet metal located in spaced apart relation and each, at its front being formed with an inturned flange, angle members located at the fronts of said sides, each angle member comprising a leg located against the front side of a side flange and permanently secured thereto and a second leg extending inwardly substantially parallel to the adjacent side, each of said second legs being horizontally slotted at spaced intervals, a reinforcing and connecting member comprising a horizontally located part to pass through a slot in said second leg and a vertical part to lie against the rear side of the flanges of the sides associated with each slot in said second legs, the horizontal parts of the members passing through the slots and extending inwardly, and the vertical parts being permanently secured to said front flanges of the sides, and a sheet metal cross bar located between the opposite sides of the case at each of the said members and permanently connected at its ends to the inwardly extending parts thereof, substantially as described.

3. In a metal case construction, spaced apart parallel vertical sides, a top and a back of sheet metal, flanges turned inwardly at the front edges of the sides, angle shaped members permanently connected to the flanges and having parts extending to the rear into the case substantially paralleling the sides, supporting and reinforcing members having vertical parts connected to the rear sides of the flanges and formed with parts integral with said vertical parts extending horizontally inward from the sides of the case, and cross bars permanently secured at their ends to said horizontally extending parts, substantially as described.

4. In a metal case construction, spaced apart parallel vertical sides, a top and a back of sheet metal, said sides at the front being formed with inturned vertical flanges, members of sheet metal of angle formation located one against each vertical flange, each of said members comprising a part covering said flange and spot welded thereto and an additional part extending inwardly into the case substantially in parallel relation to the

adjacent side of the case, combined with supporting members attached to said flanges at the rear sides thereof and having integral parts extending horizontally inwardly toward each other at opposite sides of the case, and a sheet metal cross bar formed of a length of sheet metal doubled longitudinally on itself disposed between each pair of supporting members, said horizontal parts of the supporting members being received between the opposite sides of the cross bars, substantially as described.

In testimony whereof I affix my signature.

PETER M. WEGE.