

July 5, 1927.

J. A. LACHAINE

1,634,947

SHEET METAL SEAM

Filed June 19, 1926

2 Sheets-Sheet 1

Fig. 1.

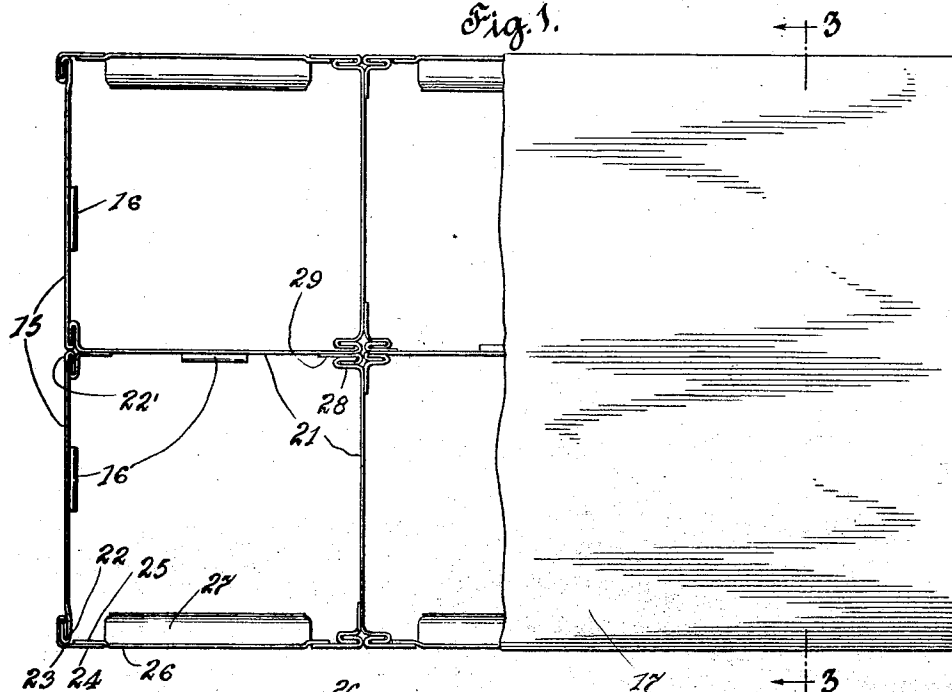
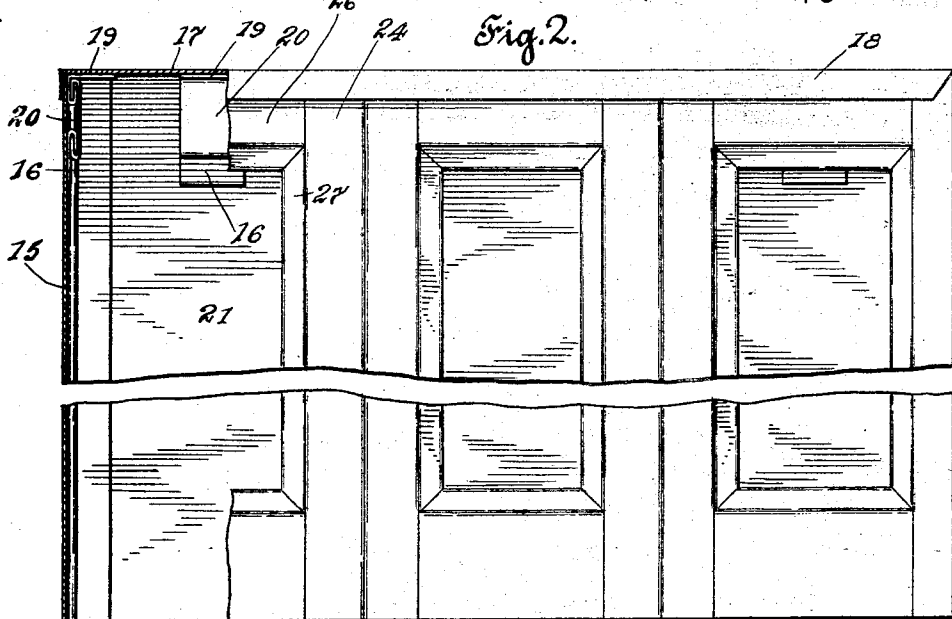


Fig. 2.



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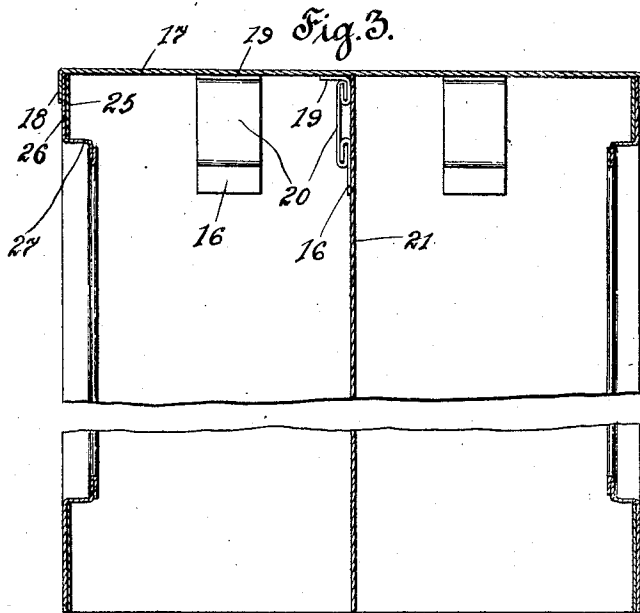
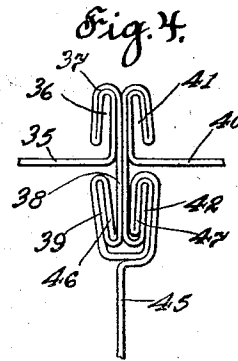
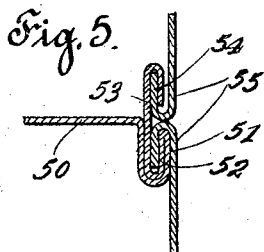
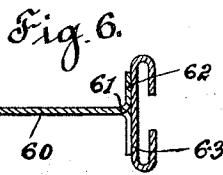
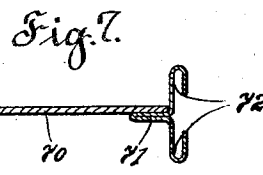
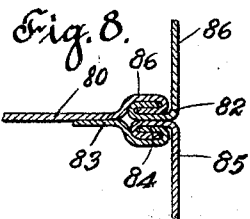
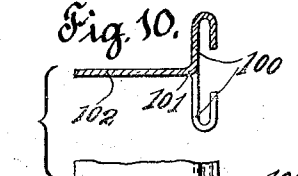
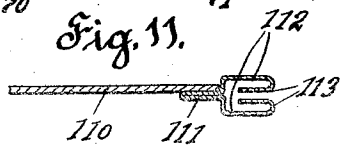
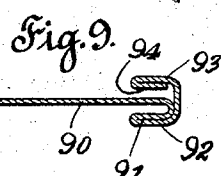
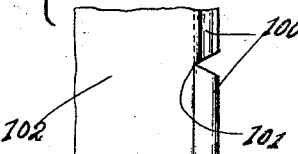
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SHEET METAL SEAM

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2 Sheets-Sheet 2



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SHEET-METAL SEAM.

Application filed June 19, 1926. Serial No. 117,061.

This invention relates to sheet metal seams and more particularly to seams made in the construction of cabinets, office files, lockers, etc.

One of the objects of the invention is to provide seamed joints so constructed as to render the cabinet fire-proof and of knock-down construction for convenience in transportation or storage.

Another object is in the provision of a simple and cheaply manufactured joint that is easily made, rugged and durable when present in the erected product.

A further aim is to provide means whereby cabinets and the like are quickly, simply and easily assembled or disassembled.

A still further characteristic is in the provision of seams or joints between a multiplicity of metal compartments having no outside means of securing or attachment, as by rivets, bolts or other fastening devices.

These several objects are accomplished by the novel construction, combination and arrangement of elements hereinafter described and depicted in the accompanying illustrations, forming a component of this invention, and in which:—

Figure 1 is a top plan view of an embodiment of the invention, having part of the cover plate broken away to show the construction.

Figure 2 is a front elevational view of the same.

Figure 3 is a transverse sectional view taken on line 3—3 of Figure 1.

Figure 4 is a plan view of a modified form of central joint.

Figures 5, 6, 7, 8, 9, 10 and 11 are sectional views of modifications of seams adaptable to side or end connections.

In the drawing, the numeral 15 designates a pair of sheet metal plates to which are fixed by electric spot welding, hooked plate members 16. A cover plate 17 having downturned edges 18 has similarly secured to its under surface, near its edge, L-shaped elements 19 each having its shorter arm hooked in the same manner as the member 16. The cover is firmly secured in position by a flat C-shaped device 20 slidingly engaging both of the hooks formed on the members 16 and 19.

The central inner plates 21 have similar means connected thereto by which the cover

is further secured and held, as may be seen in Figure 3.

The lateral edges of the plates 15 terminate in oppositely disposed longitudinal hooks 22 and 22', the former hook engaging a hooked L 23, the front arm 24 of which is welded to an offset portion 25 of a front plate 26 having an inwardly projecting member 27 surrounding an opening over which may be secured any preferred door.

The central plates 21 also ending in hooked L's 28 engage J-shaped members 29 welded to angularly adjacent plates 21. Thus it may be seen that each plate 21 has a hook formed integral therewith and a J-shaped element welded thereto all of the several curves and hooks being slidingly engageable with each other.

Figure 4 shows a 3-way joint in which a plate 35, bent at right angles, is hooked to form a space 36. It is then bent back closely upon itself at 37, its extending arm 38 on the opposite side of the plate 35 being bent to form a hook 39. A second plate 40 is similarly bent in a reverse direction to present a space 41 and a hook 42. A third plate 45 is bent in a serpentine manner to present hooked elements 46 and 47 to engage in the space formed by the members 39 and 42.

Figure 5 shows a plate 50 bent at right angles to present a hook 51, the same being inwardly bent back upon itself at 52 to form an extension 53 terminating in a second hook 54. Slidingly engageable in the space formed by the hooks 51 and 54 is a pair of similar J-shaped members 55 presenting, together with the plate 50, a 3-way seam.

Figure 6 illustrates a plate 60, sheared at 61 to form a pair of opposed arms 62 to which is welded a flattened C-shaped element 63.

In Figure 7, a plate 70 has welded to it a strip of metal thinner than the plate 70 bent re-entrantly back upon itself at its central portion 71 to present a member 72 of C-shaped cross section.

In Figure 8, a plate 80 having an offset portion 81, terminates in a hook 82. Welded to the plate 80 is a second narrow plate strip 83, shaped similarly to the plate 80 presenting an oppositely facing hook 84. Removably engageable in the hooks 82 and 84 is a pair of hooked L's, 85 and 86 respectively.

In Figure 9, the construction presents a similar appearance to Figure 8, except that there is no welding to be done, the device being unitary.

5 A plate 90 is bent to form a hooked edge 91 bent back upon itself at 92 to present a second hook 93 on the opposite side of the plate 90, ending in a close inwardly directed member 94.

10 Figure 10 presents a C-shaped element 100 formed by opposed arms sheared at 101 from a plate 102.

Figure 11 shows a plate 110 to which is welded a double walled plate 111, the wall separating at the end of the plate 110 and being bent at right angles forming extending portions 112 ending in hooks 113.

It will be noted from the foregoing, that several methods of making seams or joints for sheet metal cabinets, has been disclosed that in every way fulfill the purposes for which this invention is intended.

While certain preferred embodiments of this device have been shown and described, it will be understood that changes in the form, arrangements, proportions, sizes and details thereof may be made without departing from the scope of the invention as defined in the appended claims.

30 Having thus described my invention, what

I claim as new and desire to secured by Letters Patent, is:—

1. A sheet metal seam comprising a flat thin plate, hook-shaped portions formed integrally with said plate, oppositely disposed 35 hook-shaped members secured to said plate, and interlocking means slidably engageable with said hook-shaped element to hold the same firmly together.

2. A sheet metal seam comprising a plurality of plates, arms formed on said plates, hook-shaped elements on said arms, and means engageable with said hook-shaped elements to firmly support said plates. 40

3. A metal seam comprising a flat plate, 45 a pair of oppositely disposed arms on said plate, and a pair of hook-shaped elements formed on said arms said elements being engageable with a second flat plate.

4. A metal seam comprising a flat plate, 50 a pair of oppositely disposed arms secured to one side of said plate, said arms being of integral construction, and hooked members formed on said arms by which a plurality of joints may be interlockingly engaged. 55

Signed at Lowell, in the county of Middlesex and State of Mass., this fourth day of June, A. D. 1926.

JOSEPH A. LACHAINE.