

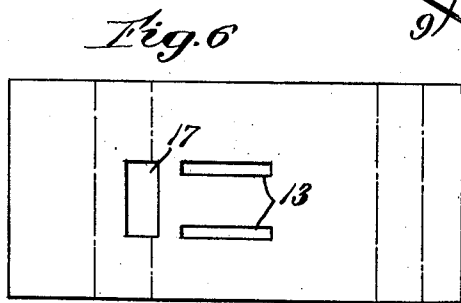
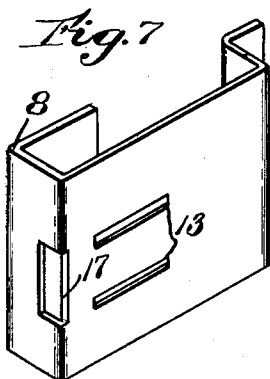
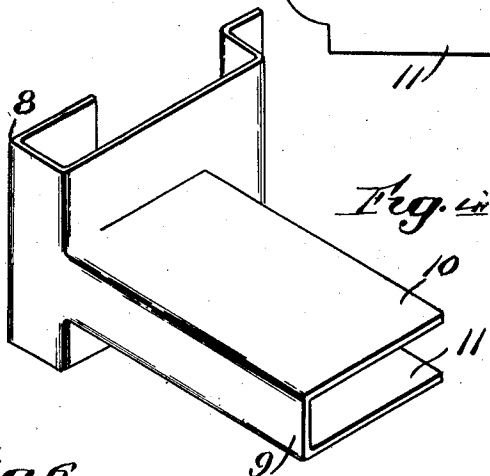
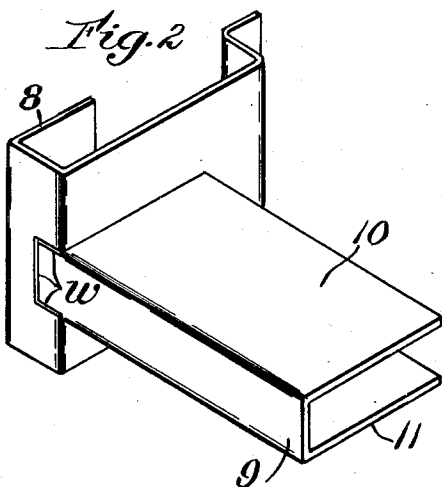
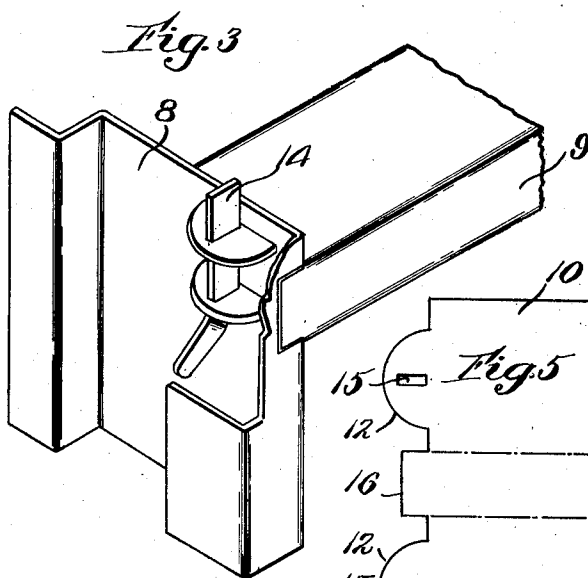
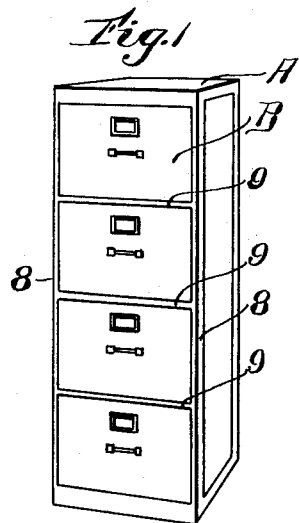
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1,540,140

E. OHNSTRAND

JOINT FOR CABINETS AND THE LIKE

Filed July 29, 1922



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UNITED STATES PATENT OFFICE.

ENOCH OHNSTRAND, OF MOHAWK, NEW YORK, ASSIGNOR TO LIBRARY BUREAU, OF CAMBRIDGE, MASSACHUSETTS, A CORPORATION OF NEW JERSEY.

JOINT FOR CABINETS AND THE LIKE.

Application filed July 29, 1922. Serial No. 578,414.

To all whom it may concern:

Be it known that I, ENOCH OHNSTRAND, a citizen of the United States of America, and resident of Mohawk, in the county of
5 Herkimer and State of New York, have invented new and useful Improvements in Joints for Cabinets and the like, of which the following is a specification.

This invention relates to metal cabinets
10 and the like, such as file cabinets, adapted to hold bulky and heavy records, and more particularly to joints for connecting or uniting the parts forming the frames of such devices.

15 The frames of cabinets of the types described are subjected to considerable strain in ordinary use due to the frequent pulling out and closing of the heavily loaded drawers, which are often moved with considerable force, and to leaving the drawers in
20 extended position. Moreover, when a heavily laden cabinet is moved without removing the drawers the strain upon the frame becomes excessive. Since the joints of cabinets in common use are ordinarily not
25 rigid, the racking they receive soon loosens the joints with the result that the cabinet can be swayed more or less from side to side. This looseness or lack of rigidity on
30 the frame frequently interferes with the easy operation of drawers and doors and impairs the utility and appearance of the cabinet.

One object of the invention is to overcome the defects above noted by providing
35 an improved joint or connection between the parts of the frame which will hold the frame rigid indefinitely. Another object which is incidental to the first relates to
40 improving the appearance of such cabinets.

In order to illustrate the invention, one concrete embodiment thereof is shown in the accompanying drawing, in which:

45 Figure 1 is a perspective view of a file cabinet embodying the features of the invention;

Figure 2 is an enlarged detail perspective view of a joint prior to welding;

50 Figure 3 is a perspective view of the parts shown in Figure 2 taken from a different angle and with parts broken away;

Figure 4 is a view similar to Figure 2 of the completed joint;

Figures 5 and 6 are plan views of the

parts forming the joint in blank prior to
55 being bent into shape; and

Figure 7 is a perspective view of the part shown in Figure 6 after bending;

The embodiment of the invention shown for the purpose of illustration comprises
60 a file cabinet A having a metal frame consisting of uprights 8 interconnected by cross-pieces or separators 9 between which the drawers B of the cabinet slide. The joint shown in Figures 2, 3 and 4 illustrates the connection of uprights 8 and
65 cross-pieces 9 but similar joints may be used for the top and bottom of the cabinet also. Uprights 8 and cross-pieces 9 are angular in form as illustrated in the detail views, Figures 2, 3, 4 and 7. The cross-
70 pieces 9 are preferably bent to form channel members and are mounted with the bases thereof coplanar or flush with one side (the front) of the file cabinet. The parallel
75 flange portions 10 and 11 of cross-pieces have tenons 12 adapted to extend through vertically spaced slots 13 in the inner sides of uprights 8 and are held therein by wedge
80 pieces 14 extending through aligned openings 15 in the tenons, the wedge members being adapted to abut the inner faces of uprights 8 as illustrated in Fig. 3. The lower end of each wedge member may be bent to prevent its accidental displacement.
85

As indicated in Figs. 2, 3, and 5, the base or front of each cross-piece 9 is provided at each end with an extension forming a tenon 16 of any desired shape, in this instance substantially rectangular, which fits
90 in a similarly shaped recess 17 in the front of uprights 8, the parts in assembled position being shown in Figs. 2 and 3. Tenon 16 is then integrally united with the coplanar front face of upright 8 as by welding
95 at the points W, Fig. 2. The welding material extends around the top and bottom edges of the cross-piece as indicated in Figure 5, forming a partial integral connection of the parallel flanges 10 and 11
100 to the cross-pieces. Thus the weld in two angular planes together with the tenons and wedge connections forms an exceptionally strong and rigid joint which in front view
105 Figs. 1 and 4 shows no crack or joint whatever in the frame.

Thus the parts 8 and the horizontal parts 10 and 11 meet at a right-angle, with the

upper and lower sides of the angular parts 9 interlocked with the inner side of the angular uprights 8 and the front sides of the parts 9 in parallelism (preferably coplanar as shown) with the front sides of the uprights 8.

The joint above described is economical to produce. The tenons and slots are formed when the blanks for the uprights 8 and cross-pieces 9 are struck out. A section of the blank for one of the cross-pieces 9 prior to bending is shown in Fig. 5, and a portion of a blank for one of the uprights 8 is shown prior to bending in Fig. 6 and after bending in Fig. 7. As indicated the blanks for uprights 8 are bent to dispose slot 17 extending through the inner edge of the front so that the extension or tenon 16 of the cross-pieces may lie in the plane of the uprights.

I claim:

1. A joint comprising angular members joined together with one pair of sides meeting at an angle and another pair of sides in parallelism, the sides of said first pair being interlocked together, and the sides of the other pair having a coplaner tongue and recess interfitting together.

2. A joint comprising angular members joined together with one pair of sides meeting at an angle and another pair of sides in parallelism, the sides of said first pair being interlocked together, and the sides of the other pair having a coplaner tongue and recess interfitting together, the edge of said tongue being welded to the walls of said recess.

3. A joint between parts angular in cross-section and meeting at an angle with one side of one part coplaner with one side of the other part, said parts being integrally united by interfitting portions on said coplaner sides, and an interlocking connection between other sides of said parts.

4. A joint comprising hollow uprights, a cross-piece angular in cross-section extending between said uprights having its front

flush with the front faces of said uprights, tenons on the horizontal part of said cross-piece extending through slots in said uprights and locked therein, and tenons on said front received in slots in the front faces of the uprights and welded thereto to provide a seamless front and rigid joints.

5. A joint for file cabinets and the like having a member U-shaped in cross section engaging an angular support with the base of the U-member coplaner with one side of said support, means attaching the parallel flanges of the U-member to the other side of said support and a tenon on the base of the U-member fitting in a recess in the said first side of the support and integrally united thereto.

6. A cabinet joint construction including an upright having lateral slots and a face mortise formed therein and a cross piece having shoulders abutting the upright, tenons centrally projecting beyond the shoulders into the slots, means securing the tenons to the upright and an additional tenon projecting and secured within the face mortise whereby the shoulders and tenon prevent relative twisting movement of the parts about the slot-engaging tenons.

7. A joint comprising two angular frame members meeting at an angle and having one pair of sides lying in substantially the same plane and another pair of sides lying in intersecting planes, the sides of the first pair having an interfitting tongue and recess and the sides of the second being connected together.

8. A joint comprising two angular frame members meeting at an angle and having one pair of sides lying in substantially the same plane and another pair of sides lying in intersecting planes, the sides of the first pair having an interfitting tongue and recess welded together and the sides of the other pair abutting each other.

Signed by me at Mohawk, N. Y., this 26th day of July, 1922.

ENOCH OHNSTRAND