Dec. 2, 1924. 1,517,299

E. G. LEHMAN

SECTIONAL CASE CONSTRUCTION

Filed Sept. 21, 1918 3 Sheets-Sheet 1

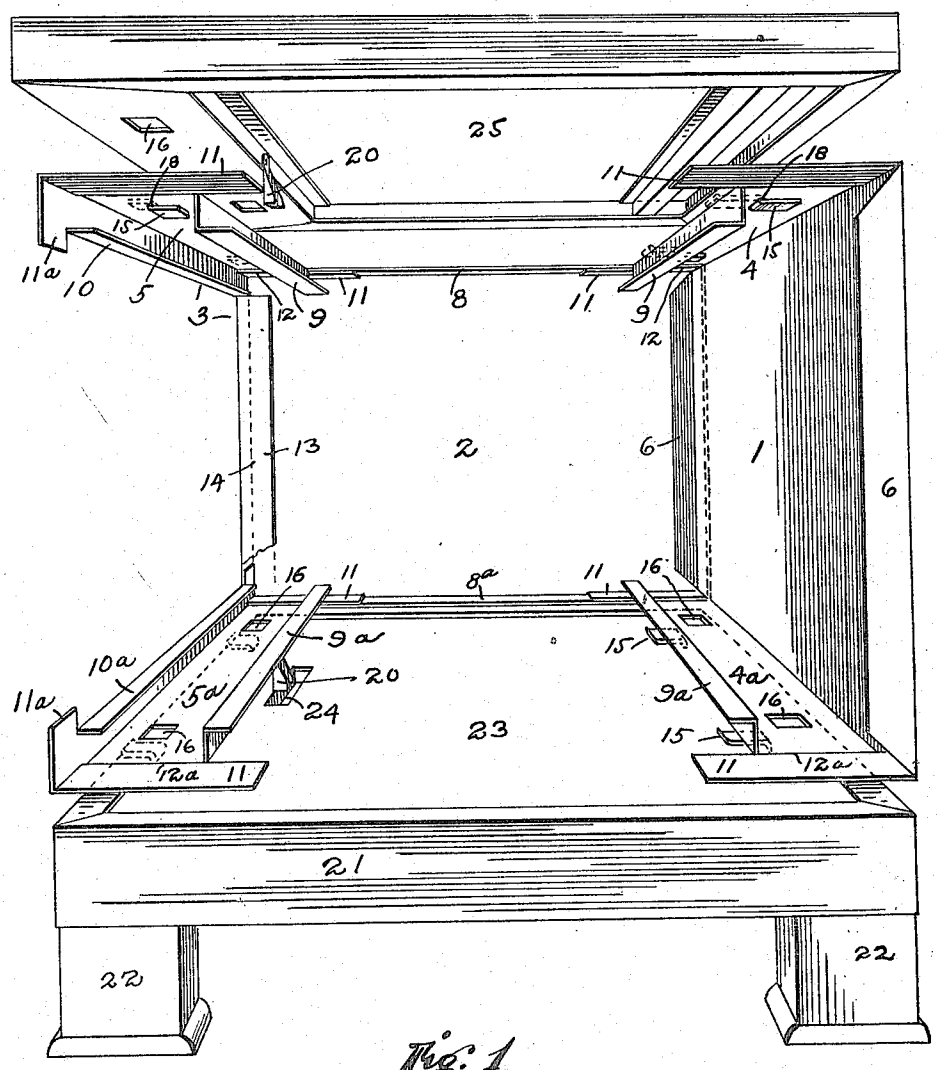


Fig. 1

WITNESS
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SECTIONAL CASE CONSTRUCTION

Filed Sept. 21, 1916 3 Sheets-Sheet 2

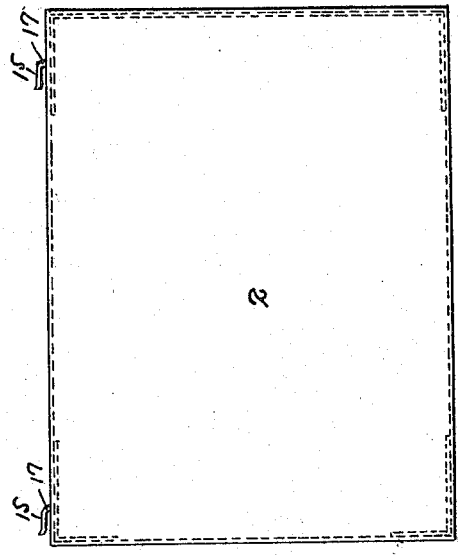


Fig. 4

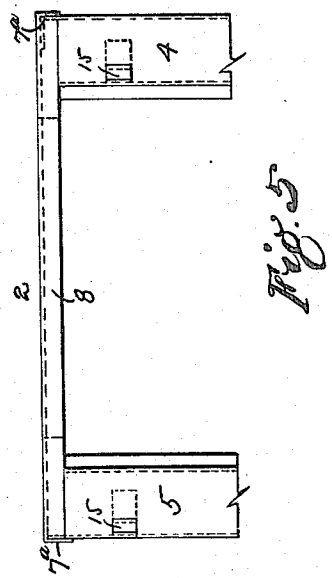


Fig. 5

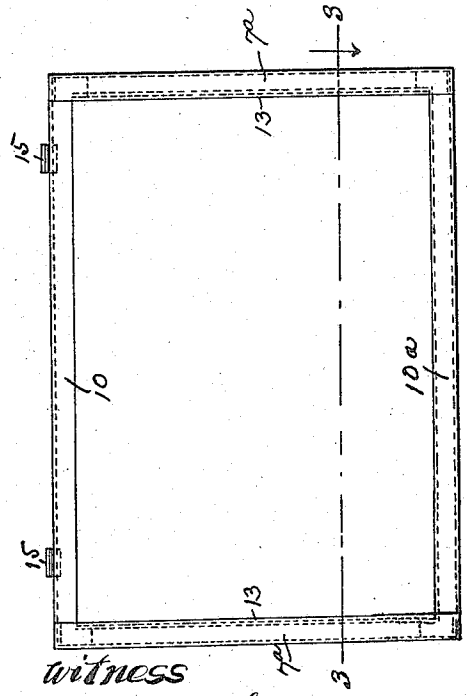


Fig. 2

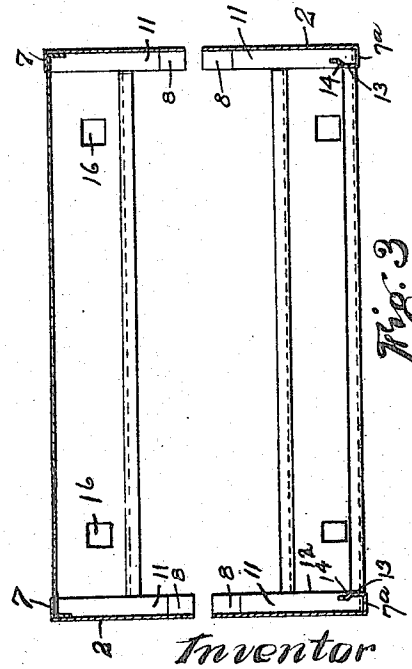


Fig. 3

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Filed Sept. 21, 1918 3 Sheets-Sheet 3

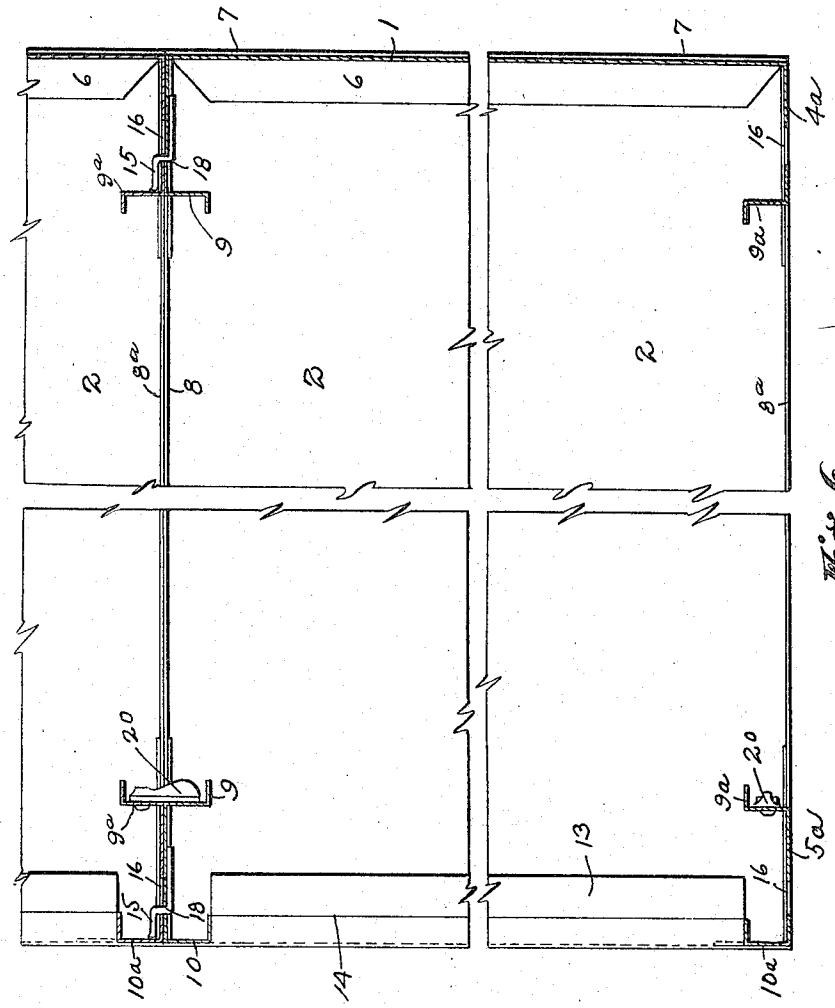


Fig. 6

Witness
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Patented Dec. 2, 1924. 1,517,299

UNITED STATES PATENT OFFICE.

EDWARD G. LEHMAN, OF CANTON, OHIO, ASSIGNOR, BY MESNE ASSIGNMENTS, TO UNITED ALLOY STEEL CORPORATION, OF CANTON, OHIO, A CORPORATION OF NEW YORK.

SECTIONAL-CASE CONSTRUCTION.

Application filed September 21, 1918. Serial No. 255,086.

To all whom it may concern:

Be it known that I, EDWARD G. LEHMAN, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Sectional-Case Constructions, of which the following is a specification.

The invention relates to sectional cases made of sheet metal for filing and storing purposes, and the object of the improvement is to make the shell or frame of each section or unit of such a case with a minimum amount of sheet metal so disposed as to give the necessary strength, and to provide means for engaging and locking the sections together when assembled one above the other to form a stand or tier.

A preferred embodiment of the invention, thus briefly outlined, is illustrated in the accompanying drawings forming part hereof, in which—

Figure 1 is a perspective view of the shell of a single section having one side plate removed, with a base section and a top section spaced therefrom to show the method of engaging and locking the sections together;

Fig. 2, a front elevation of the shell of a single section;

Fig. 3, a plan section of the same on line 3—3, Fig. 2;

Fig. 4, an end elevation of the same;

Fig. 5, a top plan view of the same; and

Fig. 6, a side elevation section showing two sections engaged and locked together.

Similar numerals refer to similar parts throughout the drawings.

Each section or unit of the case or cabinet comprises a back plate 1, side plates 2, and a front frame 3; and the cross plates 4 and 4ª at the top and bottom of the back plate and 5 and 5ª at the top and bottom of the front frame. The back plate 1 has side flanges 6 abutting the side plates, and each side plate 2 has rear flanges 7 embracing the flanged corner of the back plate and forward flanges 7ª forming the ends of the front frame. The side plates 2 also have top and bottom flanges 8 and 8ª embracing the ends of the upper and lower cross plates 4, 4ª and 5 and 5ª of the back plate and the front frame.

The upper and lower cross plates 4 and 4ª are bent inward from the upper and lower edges of the back plate, and the similar cross plates 5 and 5ª form the top and bottom of the front frame; and all these plates have inturned L-flanges 9 and 9ª on the inner edges, while the front frame plates also have similar flanges 10 and 10ª on their forward edges, which flanges serve to stiffen the cross plates.

The ends of the L-flanges terminate at the inner edges of the side plate flanges 8 and 8ª, leaving the inwardly extending tongues 11 and 11ª and the corresponding portions of the connecting plates to be overlapped by the side plate flanges 7ª, 8 and 8ª; and the overlapped end portions of the cross plates are preferably off-set along lines 12 and 12ª, so that the side plate flanges will lie in the same plane as the body of the cross plates.

The front frame 3 is formed by the L-flanges 10 and 10ª turned inward along the forward edges of the cross plates 5 and 5ª, and the ends of the frame are completed by the forward flanges 7ª of the side plates, which not only overlap the ends of the L-flanges 10 and 10ª and the tongues 11ª thereof, but have L-portions 13 extending inward at the inner edges of the tongues 11ª and are preferably off-set on line 14 corresponding to the inner edge of the L-flanges 10 and 10ª, so as to strengthen the frame forming the front opening of the section or unit.

It will be understood that all the embracing and overlapping portions of the parts thus described are secured or connected together as by spot-welding and that the section or unit thus formed will have great rigidity in all directions in view of the angular and overlapping flange construction.

Superposed sections are engaged together by means of flat hooks 15, provided on the upper cross plates and extending through apertures 16 provided in the lower cross plates, there being preferably one hook and aperture located near each end of each cross plate.

Each hook is preferably made of a strong metal strip off-set to form a vertical shank 17 between its horizontal end portions; which shank is located in a transverse slot 18 provided therefor in the connecting plate and the lower horizontal portion is secured as by spot-welding to the under side of said plate, while the upper horizontal portion

forms a flat hook spaced above the top of the plate, the free end of the hook being directed forward thereon.

The apertures 16 are provided in the lower cross plates 4^a and 5^a of a length and breadth to freely receive the length and breadth of the flat hooks 15; and the hooks and apertures are so located on the respective cross plates, that when an upper section is placed upon a lower section, and the hooks passed through the apertures, the upper section will be off-set forward from the lower section, and that by pushing the upper section rearward, the hook will pass bodily over the body of the cross plate in front of the aperture and engage the sections together, when they are alined with each other.

A turn button 20 is pivoted to the upright portion of the L-flange 9^a of the superposed section, which is rotated upward for engaging the sections; but after the sections are engaged, this button is swung downward immediately back of the vertical portion of the L-flange 9 of the subsidiary section, as shown in Fig. 6, which securely locks the sections together and prevents a disengagement of the hooks.

A base 21 having legs 22 and a solid floor 23, is preferably used at the bottom of each tier or stand of sections, upon which floor is provided the hook 15 for engaging in apertures 16 of the lower unit, and also a slot 24 for locking the same unit in engagement with the base; and a finishing top 25 is preferably provided at the top of the stand or tier, which top is provided with suitable apertures 16 for engaging with the hooks of the upper unit and a button 20 for locking the top to the same unit.

Although the tops and bottoms of each separate unit are open between the front and rear cross plates, the upper and lower ends of the tier are completely closed by the finishing top and the solid base; and it will be understood that the interior of each unit or section is fitted with suitable guides or slides, not shown, for receiving drawers, shelves and other filing receptacles, as may be desired, the same to be entered and withdrawn through the opening formed by the front frame of the unit.

I claim:

1. Sheet metal shell construction for sectional case units comprising back and side plates, cross plates at the top and bottom of the back plate having inturned flanges at the forward edges, and a front frame including top and bottom cross plates having inturned flanges at the forward and rear edges, there being flanges on the side plates overlapping the ends of the cross plates and said forward flanges of the front frame cross plates, the forward side plate flanges being bent and extended inward between the forward cross plate flanges.

2. Sheet metal shell construction for sectional case units comprising back and side plates, cross plates at the top and bottom of the back plate having inturned flanges at their forward edges, and a front frame including top and bottom cross plates having inturned flanges at the forward and rear edges, there being tongues extending inward at the ends of the cross plates and of the forward inturned flanges of the front frame cross plates, and there being flanges on the side plates overlapping the ends of the cross plates and said forward flanges, and the tongues extending therefrom, the forward side plate flanges being bent and extended inward at the inner edges of the front flange tongues.

3. Sheet metal shell construction for sectional case units, comprising back and side plates, cross plates at the top and bottom of the back plates having inturned L-flanges along their forward edges, and a front frame including top and bottom cross plates having inturned L-flanges at their forward and rear flanges, there being tongues extending inward at the ends of the cross plates and of the forward L-flanges of the front frame cross plates, and there being flanges on the side plates overlapping the ends of the cross plates and said forward L-flanges and the tongues extending therefrom, the forward side plate flanges being bent and extended inward at the inner edges of the front flange tongues.

4. Sheet metal shell construction for sectional case units including tops and bottoms composed of cross plates at the front and rear, flat hooks spaced upward from the top plates and corresponding apertures in the bottom plates adapted to pass the hooks when an upper section is set forward upon a lower section for bodily engaging the plates of the upper section under the hooks by pushing the upper section rearward into alinement with the lower section, and means, as a button, for stopping the sections in engaged position.

5. A hook for the sheet metal top of a sectional unit or the like, comprising flat end portions with an intervening perpendicular shank, there being a slot in the plate adapted to receive the shank for securing one end portion to one side of the plate and spacing the other flat portion from the other side of the plate.

EDWARD G. LEHMAN.