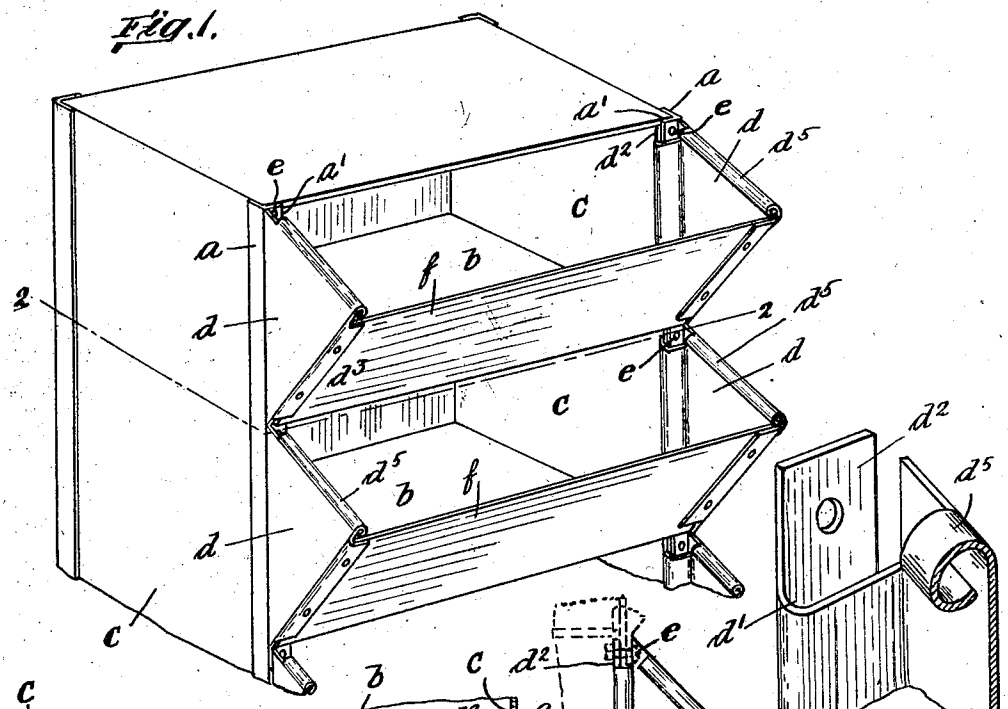
Oct. 16, 1923. 1,471,197

J. H. OXLEY

SHEET METAL BIN

Filed Sept. 14, 1922

Fig. 1.



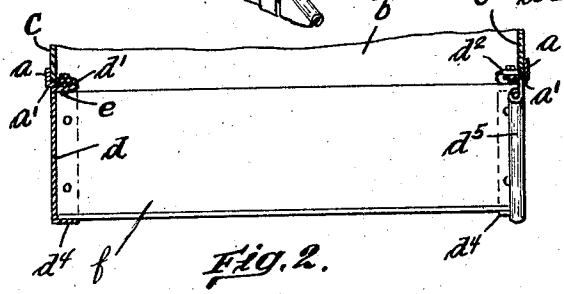


Fig. 2.

Fig. 4.

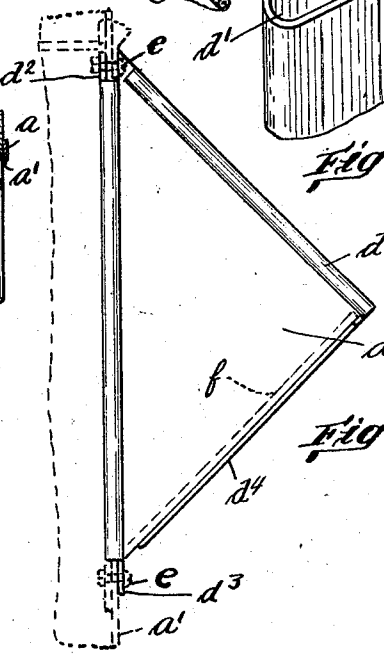


Fig. 3.

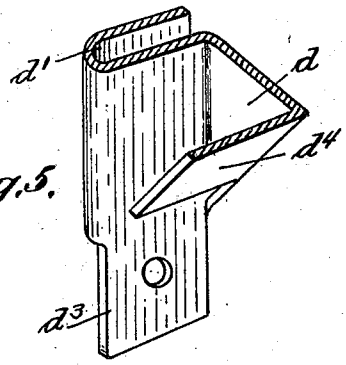


Fig. 5.

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Patented Oct. 16, 1923. 1,471,197

UNITED STATES PATENT OFFICE.

JOHN H. OXLEY, OF HAVERHILL, MASSACHUSETTS.

SHEET-METAL BIN.

Application filed September 14, 1922. Serial No. 588,146.

To all whom it may concern:

Be it known that I, JOHN H. OXLEY, a citizen of the United States, a resident of Haverhill, in the county of Essex and Commonwealth of Massachusetts, have invented an Improvement in Sheet-Metal Bins, of which the following is a specification.

This invention relates to sheet metal shelf construction, and has for its object to provide a simple and efficient means for converting sheet metal shelving into a series of super-imposed bins, the bottoms of which are formed by the shelves from which the bins are converted.

I accomplish this object by providing, in connection with a well known form of sheet metal shelving construction, a triangular shaped side-extension, adapted to interlock with the shelf supporting standards and with a bin front to hold the latter in the desired position.

For a more complete understanding of my invention, reference is made to the accompanying drawing in which:

Fig. 1 is a perspective view of a plurality of bin sections embodying my invention.

Fig. 2 is sectional view of line 2—2 of Fig. 1.

Fig. 3 is a side view of one of the side extensions which I employ.

Figs. 4 and 5 are detail perspective views of the upper and lower end portions, respectively, of a side extension on an enlarged scale.

The particular form of sheet metal shelving in connection with which my invention is associated, comprises a pair of front standards, or uprights *a*, formed of angle iron, and to which a series of horizontal shelves *b* are attached by means of bolts, in the usual manner, said shelves having upright sides *c*, at their side edges which extend rearward from the standards and are bolted thereto, and extend continuously from the bottom to the top of the stack.

According to my invention, I provide a pair of triangularly shaped, side-extension sections *d*, for each shelf, the longer or base edge of each section being approximately equal to the distance between adjacent shelves and the other two edges thereof being preferably approximately equal in length, so that they are disposed at an angle of 45° to the base edge. The base edge portion of each section *d* is bent inwardly or towards the section opposite thereto, at right angles, and then rearwardly and reversely, to form a socket *d'*, which is adapted to receive the inwardly projecting edge-portion *a'* of the adjacent upright. The front side of the socket thus formed is cut away at its upper end to form an upwardly extending ear d^2 at the rear side of the flange *a'*, as indicated in Figs. 3 and 4, and the rear side of the socket is cut away at its lower end to form a downwardly extending ear d^3, at the front side of the flange *a'*, as shown in Figs. 3 and 5, so that, when placing the triangular sections in position on a standard, the upper ear d^2 of one section will be directly in the rear of the lower ear d^3 of the next section above, at opposite sides of the flange *a'*. Said ears are each provided with an aperture, which, in this position, will be in register with an aperture in the flange *a'*, so that a single bolt *e* may be passed through each pair of adjacent ears, to secure the sections to the uprights. The side edge portion, which is lowermost, of each section, is bent transversely towards the opposite section, at right angles, to form a transverse flange or projection d^4, and a bin front *f* is provided between each pair of sections *d*, which is supported on the flanges d^4, at its outer side and engages, at its lower edge, the front side of the sockets *d'* and meets or practically meets the front edge of the corresponding shelf *b*, bolts being passed through the flanges d^4 and the bin front, to hold the parts in position and provide a rigid construction.

The upper side edge of each section *d* is rolled inward to form a beaded edge d^5.

The above described construction enables a stack of sheet metal shelving to be readily converted into a stack or series of bins, which are strong and durable and are sightly in appearance.

I claim:

1. A sheet metal bin comprising a pair of uprights, a series of horizontal shelves supported by said uprights and having sides extending rearwardly therefrom, a pair of triangular shaped extension sections arranged in front of the uprights between each pair of adjacent shelves and in continuation of the sides, with their base edges extending from one shelf to the next, each section

having a transverse flange interlocked with the adjacent upright to retain the same in position, and having a similar flange on the lower side edge thereof, projecting towards the opposite section, and a front wall extended upwardly and outwardly from the front edge of each shelf between each pair of sections and supported by the flanges at the lower edges of the sections between which it is located.

2. A series of sheet metal bins comprising a pair of front uprights, each having a longitudinal flange projecting towards the other, a series of horizontal shelves supported by said uprights and having sides extending rearwardly therefrom, a pair of triangularly shaped extension sections arranged in front of the uprights between each pair of adjacent shelves and in continuation of the sides, each section having its base edge extended from one shelf to the next and provided with a transversely disposed and longitudinally extending socket in which the flange of the corresponding upright is engaged, and the lower edge portion of each section being provided with a longitudinal flange which projects towards the opposite section, and a bin front extending upwardly and outwardly from the front edge of each shelf and engaged at its ends by the projecting flanges of the extension sections, to support the same in position.

3. A series of sheet metal bins comprising a pair of front uprights, each having a longitudinal flange projecting towards the other, a series of horizontal shelves supported by said uprights and having sides extended rearwardly therefrom, a pair of triangularly shaped extension sections arranged in front of the uprights between each pair of adjacent shelves in continuation of the sides, each section having its base edge extending from one shelf to the next, and having the base edge portion thereof transversely and reversely extended to provide a socket in which the corresponding upright flange is located, the front side of one end of the socket and the rear side of the opposite end thereof being extended vertically beyond the socket to form ears which are arranged directly opposite the adjacent ears of the next adjacent extension sections, securing means passing through each pair of opposite ears and the intervening flange, to secure said sections in position, the lower edge portion of each section having a longitudinal flange projecting towards the section directly opposite thereto, and a bin front extended upwardly and outwardly from the front edge of each shelf and engaged at its ends by the lower edge flanges of the adjacent extension sections.

In testimony whereof I have signed my name to this specification.

JOHN H. OXLEY.