E. J. JONES.

SHEET METAL FURNITURE.

APPLICATION FILED MAR. 24, 1913.

1,080,513.

Patented Dec. 2, 1913.

2 SHEETS—SHEET 1.

Fig. 1.

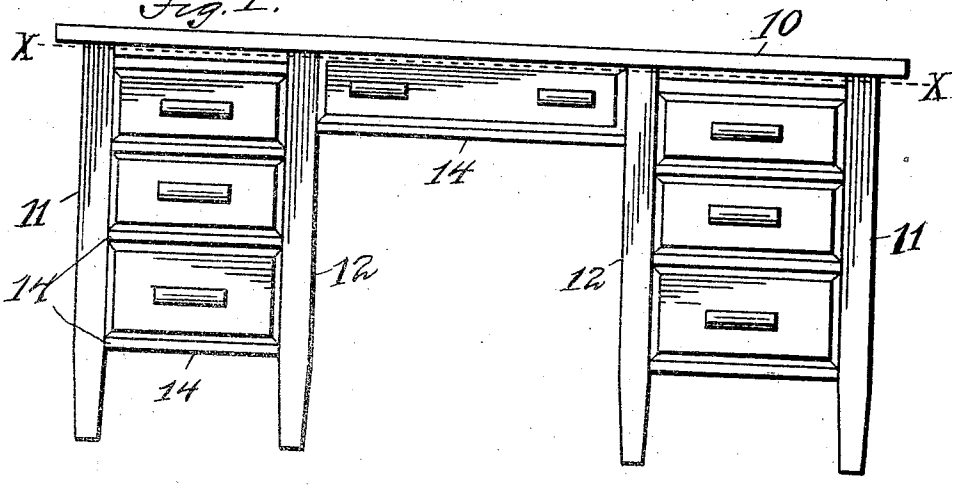


Fig. 2.

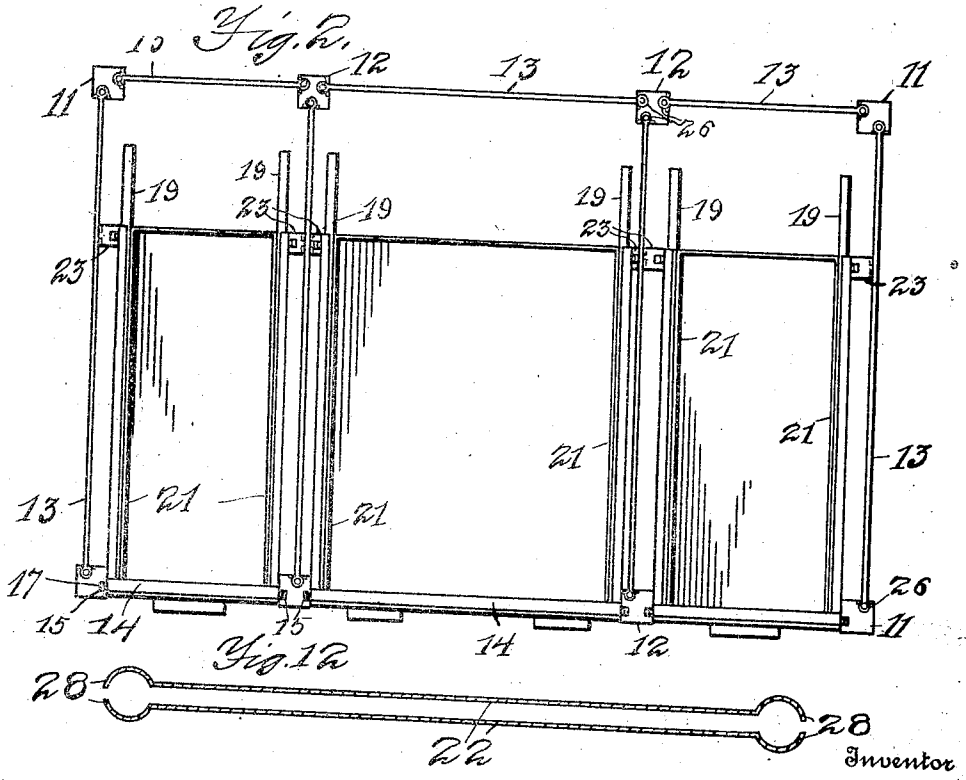


Fig. 1a

Witnesses

Arthur O. Snowe

H. A. Sandberg

Inventor

Emil J. Jones

By S. Arthur Baldwin.

Attorney

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2 SHEETS—SHEET 2.

Fig. 3.

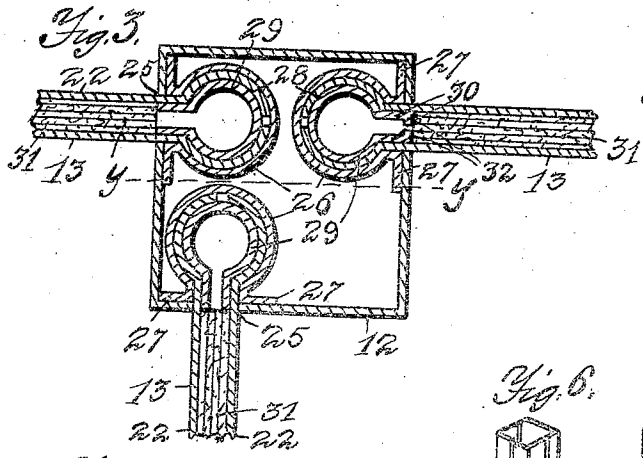


Fig. 5.

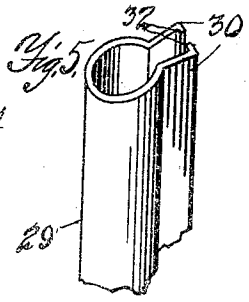


Fig. 6.

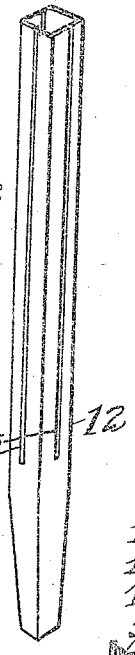


Fig. 7.

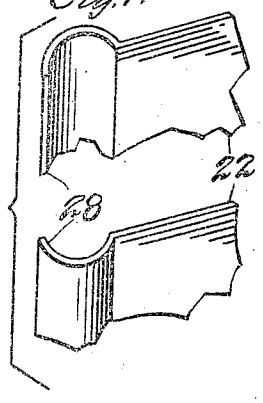


Fig. 4.

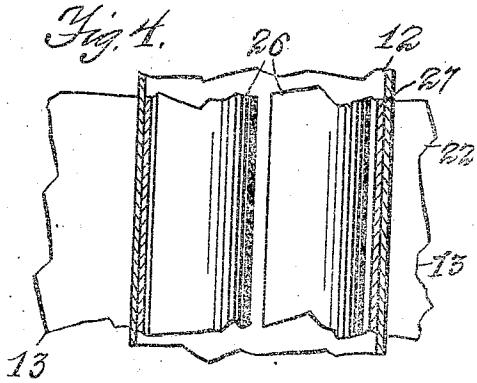


Fig. 8.

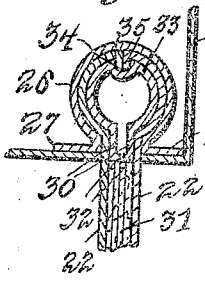


Fig. 9.

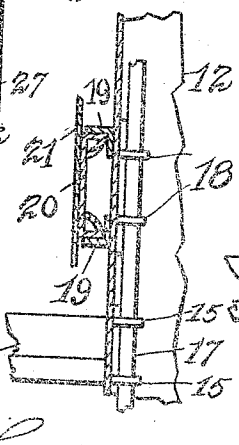


Fig. 11.

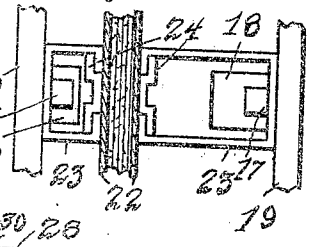
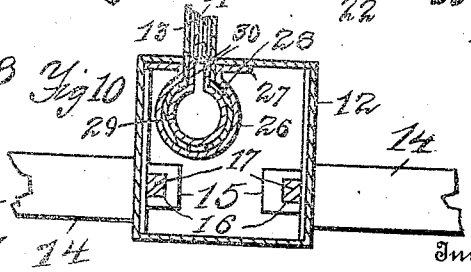


Fig. 10.



Witnesses

Arthur C. Moss

H. A. Sandberg

Inventor

Emil J. Jones

By S. Arthur Baldwin.

Attorney

UNITED STATES PATENT OFFICE.

EMIL J. JONES, OF JAMESTOWN, NEW YORK, ASSIGNOR OF ONE-HALF TO JOHN A. JONES, OF JAMESTOWN, NEW YORK.

SHEET-METAL FURNITURE.

1,080,513. Specification of Letters Patent. Patented Dec. 2, 1913.

Application filed March 24, 1913. Serial No. 756,279.

To all whom it may concern:

Be it known that I, EMIL J. JONES, a citizen of the United States, residing at the city of Jamestown, in the county of Chautauqua and State of New York, have invented certain new and useful Improvements in Sheet-Metal Furniture, of which the following, taken in connection with the accompanying drawings, is a specification.

The invention relates to the construction of sheet metal furniture, and the improvement consists, first, in providing a simple and durable joint or manner of uniting the panels to the legs or uprights in desks, dressers and similar articles of furniture in which a plurality of drawers, cupboards or other inclosures are surrounded by a suitable sheet metal case; and second, in the combination and arrangement of the parts as shown in this specification and the accompanying drawings and pointed out in the claims.

In the drawings, Figure 1 is a front elevation of an office desk; and Fig. 2 is a crosswise sectional view of said desk at line X X in Fig. 1. Fig. 3 is an enlarged crosswise sectional view of one of the posts or uprights, showing the improved manner of holding the panels in said uprights and uniting the parts. Fig. 4 is a vertical section at line Y Y in Fig. 3, showing an elevation of a portion of the tubular holding means for the sheet metal sides of the panel. Fig. 5 is a perspective view of one of the tubular locking keys for holding the panels. Fig. 6 is a perspective view of one of the posts or uprights, showing the slots therein. Fig. 7 is a perspective view of the oppositely curved edges of the two panel plates, the main portion of the plates being broken away. Fig. 8 is a crosswise sectional view of a modification of the tubular holding means or joint for the panel plates and uprights. Fig. 9 is a lengthwise sectional view of a portion of one of the front uprights, showing one of the drawer guides in cross section with a portion of the drawer side attached thereto and the end of one of the front cross bars which separates between the drawers; and Fig. 10 shows a crosswise sectional view of said front upright, showing the two cross bars attached therein and the panel. Fig. 11 is an enlarged crosswise sectional view at line X X in Fig. 1 as shown in Fig. 2, showing the manner of attaching the drawer supports to each side of the vertical panel. Fig. 12 is a sectional view of the two oppositely placed panel plates.

Like numerals of reference refer to corresponding parts in the several views.

The numeral 10 designates the desk which is composed of the corner uprights or posts 11, and the central uprights or posts 12 which are connected by means of the panels 13 and cross bars 14.

The cross bars 14 are preferably made in tubular form of sheet metal having the end lugs 15 with the holes 16 therein for the insertion of the keys 17 vertically therethrough thereby holding a plurality of the cross bars firmly in position by one key 17, the lugs being inserted through suitable slots in the sides of the posts or uprights 11 or 12; the key 17 may also hold the lugs 18 on the supporting strips 19 for the angular drawer slide 20 which is attached to the side 21 of the drawer.

The drawer supports 19 are supported in line near their rear end on the panel plates 22 by means of a tubular clip 23 and the flanged holding piece 24, the lugs 18 extending within the clip 23 and being keyed therewithin by key 17, the same as within the upright 11 or 12. It is apparent that the clip 23 may be made in different sizes according to the off set of the posts or uprights 11 or 12 in order to bring the drawer slides 19 into line. The flanged strips 24 may be riveted or spot welded to the plates 22.

The posts or uprights 11 and 12 are provided with lengthwise open ended slots 25, and tubular holding slotted or cleft strips 26 are spot welded lengthwise to the inner side of said post, the tubular holding strips 26 having suitable flanges 27 for rigid attachment by welding each side of the slot 25. The edges 28 of the panel plates 22 are curved oppositely to fit within the tubular holding strips 26 and a resilient tubular slotted key 29 is provided which fits within the curved edges 28 when placed within the

tubular holding strip 26, the spring of the key 29 firmly holding the edges 28 in place within the cylindrical portion of the tubular strip 26. The flanged edges 30 of the key 29 extend within the panel plates 22 and form a stop for the asbestos filling 31 between the panel plates 22, the edges 32 of the flanges 30 may be turned toward one another in thin sheet metal to form a sufficient stop for the filling 31.

In certain forms of furniture when extreme rigidity is desired a specially strong key 33 is provided having a groove 34 lengthwise thereof opposite the flanges 30, and the curved edges 28 of the panel 22 have additional inward angular turned edges 28. The turned flanges 35 are slipped lengthwise within the groove 34 when the key 33 is slipped into position within the turned edges 28, thereby firmly locking all the parts in place and giving added stiffness to the construction. It is now apparent that the panels 22 with the curved edges 28 and the posts or uprights 11 or 12 may be provided as hereinbefore described, also the cross bars 14 and drawer slides or supports 19 with their connective clips, and the whole may be assembled by slipping the keys into place, and when so assembled a construction is provided which has great rigidity and strength, yet is extremely simple and on account of the parts being almost entirely formed by suitable dies extremely cheap in a sheet metal construction. It is also obvious that while the construction is shown as applied to an office desk in the present drawing and specification, it is equally applicable to dressers, chiffonniers, washstands, and similar articles of furniture.

I claim as new:

1. A sheet metal joint comprising a sheet metal plate having a slot therein, a cleft tubular strip attached to said sheet metal plate each side of said slot, a panel plate having an edge to fit within said tubular strip and extending through said slot, and a tubular key to fit within said tubular strip and panel plate edge to attach said panel plate to said sheet metal plate.

2. A sheet metal joint comprising a sheet metal plate having a slot therein, a slotted tubular strip attached to said plate each side of said slot, panel plates having oppositely bent edges to fit within said tubular strip and extending out through said slot, and a tubular key to fit within said panel plate edges and tubular strip to attach said panel plates to said sheet metal plate.

3. A sheet metal joint comprising a sheet metal plate having a slot therein, a tubular strip having a lengthwise slot therein, the edges of said tubular strip each side of said lengthwise slot attached to said sheet metal plate each side of the slot therein so that the slots in said strip and sheet metal plate register, panel plates having oppositely curved edges to fit within said tubular strip, and a resilient tubular key to fit within said curved edges of said panel plates to attach said panel plates to said sheet metal plate.

4. A sheet metal joint comprising a sheet metal post having an open ended lengthwise slot therein, a slotted tubular strip attached within said sheet metal post so that the slots in said strip and post register, sheet metal plates having curved edges to fit within said tubular strip and the plates extend out through said slots, and a tubular key to fit within said curved edges of said sheet metal plates to attach them to said post, said tubular key having a lengthwise slot and flanged edges each side of said slot to extend between said panel plates and hold the key in position.

5. A sheet metal joint comprising a metal plate having an open ended slot therein, a tubular strip having a lengthwise slot therein attached each side of the slot in said metal plate so that the slot in said plate and strip register, panel plates having curved edges to fit within said tubular strip and the plates extend out through said slot, the edges of said curved edges turned inward in an angular flange, and a tubular key to fit within said curved edges having a lengthwise curve to receive said angular flanges on said curved edges.

6. A sheet metal joint comprising a sheet metal plate having an open ended slot therein, a tubular member with edges separated along one side and attached to said sheet metal plate each side of said slot, sheet metal plates having oppositely bent edges to fit within said tubular member and extend out through said slot, a resilient tubular locking strip engaging and holding said edges of said panel plates within said tubular member, said locking strip being longitudinally split to form separated adjacent flanged edges permitting the strip to expand and contract upon the application and release of pressure.

7. A sheet metal desk comprising tubular sheet metal posts having open ended lengthwise slots extending downward from their upper ends, tubular strips having lengthwise slots therein attached within said posts so that the slots in said strips and posts register, metal plates having edges to fit within said tubular strips and extend out through said slots, tubular slotted keys to fit within said edges of said panel plates to hold said plates, the edges of said tubular slotted keys turned in lengthwise flanges to extend out between said panel plates and form stops, said panel plates having asbestos filling therebetween.

8. In a sheet metal desk the combination of the frame posts having open ended vertical slots therein, tubular members [illegible] lon-

gitudinally for attachment each side of said slot within said frame posts, panel plates extending through said slots and curved to fit within said tubular members, and resilient slotted tubes adapted to be inserted in said tubular members to hold said panel plates, substantially as described.

In testimony whereof I have affixed my signature in the presence of two witnesses.

EMIL J. JONES.

Witnesses:
H. A. SANDBERG,
ARTHUR O. MORSE.