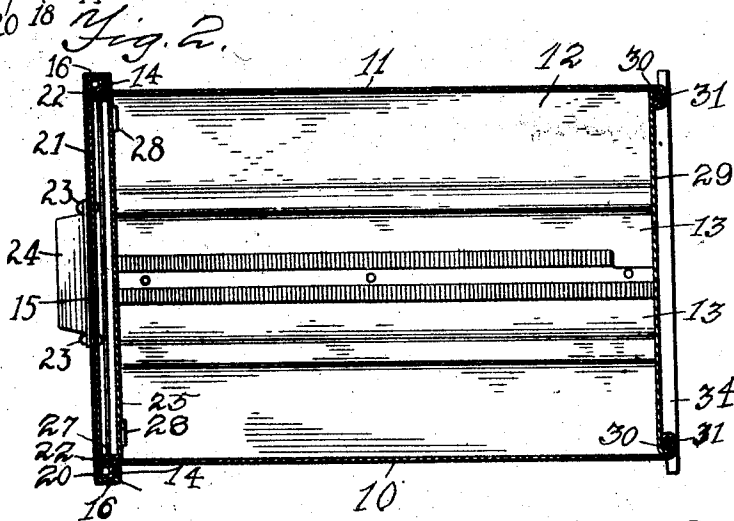
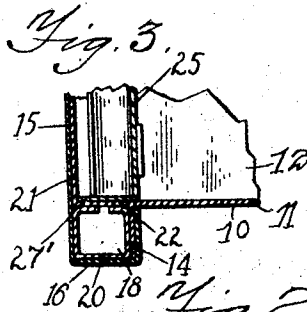
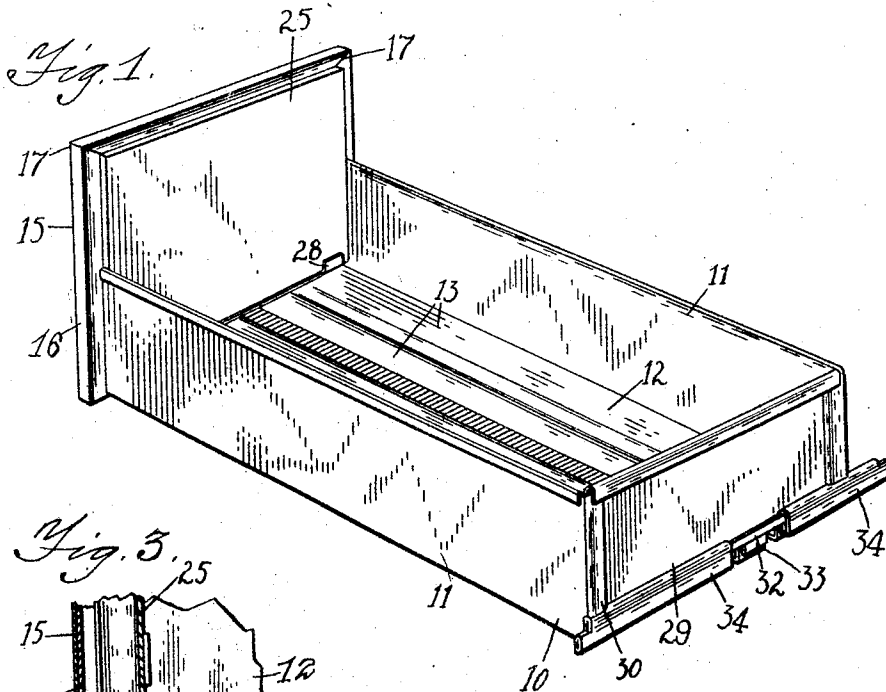


H. D. HERPST & O. J. LARSON.
 KNOCKDOWN SHEET METAL DRAWER.
 APPLICATION FILED MAY 21, 1917. RENEWED DEC. 2, 1918

1,290,743.

Patented Jan. 7, 1919.

2 SHEETS—SHEET 1.



Witness

J. E. Nordstrom
 H. O. Sandberg

Inventor

Harold D. Herpst
 and Oscar J. Larson
 By S. Arthur Fiedler
 Attorney

H. D. HERPST & O. J. LARSON.

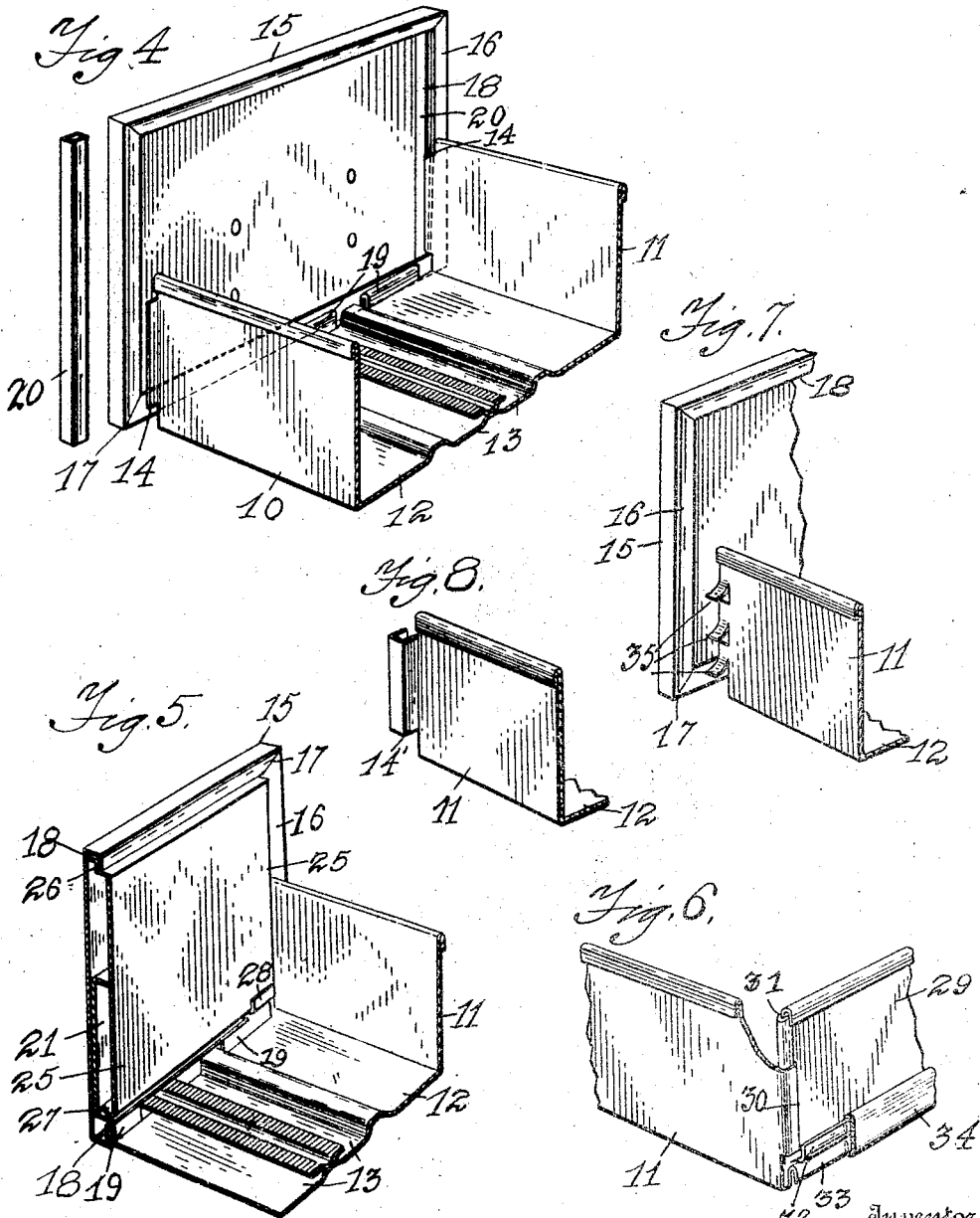
KNOCKDOWN SHEET METAL DRAWER.

APPLICATION FILED MAY 21, 1917. RENEWED DEC. 2, 1918

1,290,743.

Patented Jan. 7, 1919.

2 SHEETS—SHEET 2.



Witness
J. E. Nordstrom
H. O. Sandberg

Inventor
Harold D. Herpst
and Oscar J. Larson
By S. Arthur Faldutsky
Attorney

UNITED STATES PATENT OFFICE.

HAROLD D. HERPST AND OSCAR J. LARSON, OF JAMESTOWN, NEW YORK.

KNOCKDOWN SHEET-METAL DRAWER.

1,290,743.

Specification of Letters Patent.

Patented Jan. 7, 1919.

Application filed May 21, 1917, Serial No. 169,336. Renewed December 2, 1918. Serial No. 265,079.

To all whom it may concern:

Be it known that we, HAROLD D. HERPST and OSCAR J. LARSON, citizens 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 Knockdown Sheet-Metal Drawers, of which the following, taken in connection with the accompanying drawings, is a specification.

The invention relates to knock-down sheet metal drawers in which the parts are detachably attached to one another so that they may be shipped knock-down and set up at their destination; and the invention consists in providing a drawer with a drawer front having inwardly facing return-bend edge flanges, and a body portion having outwardly projecting edge flanges to engage within the return-bend edges flanges on the drawer front and a binding means insertible within said return-bend flanges after the body portion has been intercalated therewith and secured against displacement; second, the invention further relates to the process of assembling the parts of the drawer construction as above described, which process consists in springing the two sides of said body portion toward each other to enable the flanges at their ends to be introduced into the side grooves of the front and then pushing the wedging packing into place in the side grooves and inserting the strut sheet between the sides to hold them firmly apart; the return-bend edges of the drawer front are made wide and rectangular in shape to improve the appearance, which widening also increases the width of the side groove therein, and the packing means, preferably split tubes of rectangular section, are then provided to fill up the space between one side of each groove and the outwardly directed projections or flanges on the side walls of the body portion of the drawer part to bind the same; and the invention consists in the novel features and combinations hereinafter set forth and claimed.

In the drawings, Figure 1 is a perspective view of the assembled drawer with one of the rear tubular binders partially withdrawn. Fig. 2 is a plan view of the assembled drawer in hollow horizontal section; and Fig. 3 is a larger plan view of a front corner of the same in horizontal section. Fig. 4 is a perspective view of one of the front corners in partly assembled position

with the other corner left open and one of the binding tubes alongside for binding the unattached corner in position. Fig. 5 is a vertical sectional view of the drawer front and its adjacent parts. Fig. 6 is a perspective view of one of the back corners of the drawer, the upper portion being broken away to show the construction of the joint between the rear end and side plates. Fig. 7 is a perspective view of a modification of the means for interlocking the drawer body with the drawer front. Fig. 8 is a similar view of a further modification of the means for interlocking the drawer body with the drawer front.

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

The numeral 10 designates the drawer body with side walls 11 and bottom 12 of the one piece or U-shaped type which is preferred.

The bottom 12 is provided with lengthwise grooves 13 extending from front to rear which are provided for interlocking means for filing facilities and which constitutes no feature of the present invention and need not therefore be further described in this specification.

The vertical front edge of each side wall 11 is provided with an outwardly directed and flange 14 which is stamped up from the wall itself and thus constitutes a lateral projection for interlocking with the drawer front 15 as hereinafter described.

The drawer front 15 has a rearwardly directed return-bend flange 16 which is preferably angular extending entirely around the same, the corners 17 being mitered to form a housing with a groove 18 therewithin to receive therein at each side the outwardly projecting flanges 14 of the vertical front edge of the walls 11 on the body portion 10.

The front edge of the bottom 12 of the body portion 10 is provided with an upwardly and downwardly bent flange 19 which is received in the groove 18 across the lower edge of the drawer front. The side flanges 14 are sprung into engagement within the groove 18 and then slipped downward onto the lower flange so that the flange 19 engages over the inturned edge of the angular flange 16 across the bottom of the drawer front, the resiliency or spring of the metal causing the walls 11 to hold firmly against the flanges 16 at each side.

Both for the sake of appearance and for

room within the groove 18 the return-bend flanges 16 are made wide thereby giving a peculiarly pleasing finish entirely around the drawer front 15. This affords room for
 5 a binding strip 20 which is preferably made in the form of a resilient split tube which is rectangular in cross section and fits closely within the groove 18 after the insertion of the flanges 14 within said groove at each
 10 side of the drawer front 15. The binding tubes 20 preferably extend from top to bottom of the drawer front 15. They are pushed in between the inner wall of the drawer front and the flange 16, thereby not
 15 only binding the flanges 14 but also stiffening the entire structure and holding and reinforcing the side edges of the drawer front 15 against crushing.

In order to hold the tubular binding strips 20 in place, a spreader 21 is employed which comprises a plate approximately the same height as the side walls 11 of the body portion 10. The plate 21 is placed flat against the inner wall of the drawer front 15 and
 25 has rearwardly extending flanges 22 around its edges, the free edges of which flanges 22, abut the flanges 14 of the body sides. These flanges lie flush with the side walls 11 and project across and close the otherwise
 30 open side of the groove 18 for the height of the side walls 11 so as to keep the tubes 20 firmly in position. The spreader 21 is preferably held in position by the fastening means 23 for the drawer handle 24 which
 35 extend through the front 15 and the spreader 20 thereby binding all the parts firmly in position. Screw bolts may be used for the fastening means 23.

In order to secure the side walls 11 and flanges 14 in attachment within the groove 18 of the drawer front 15 a lining plate 25 is provided which also forms a strut and extends between the side walls 11 firmly holding them in place. As shown in Fig. 3 the
 40 strut 25 has end flanges 27 which engage the flanges 22 of plate 21 and also the side walls 11, and extend across the joints between flanges 22 and the flanges 14 of the side walls 11. This strut 25 has a Z-shaped
 45 top 26 which engages the top groove 18 and fits tightly within said groove thereby holding the top portion of the flange 16 firmly in form. The plate 25 extends to the bottom of the drawer and has a lengthwise flange
 50 27 turned toward the drawer front, which flange 27 is turned upward slightly so that the strut 25 may be pushed into place and holds firmly within the spreader 21. A lug
 55 28 is provided near each side on said spreader 21 or on the bottom 12, which lugs 28 are readily and easily bent upward by means of suitable tools thereby binding the strut 25 firmly in position and holding
 60 all the parts rigidly yet so they can be easily released or tracked down by bending down-

ward the lugs 28. It is obvious that all of these parts can be assembled after they have been enameled and by the use of ordinary tools may be secured in place without damage to the finish or enamel.

The rear end 29 of the drawer need not necessarily be made detachable but it facilitates packing for shipping if it is so made, since the U-shaped body portion 10 can be more easily nested with the other
 75 parts when the rear end is open. Accordingly vertical return-bend flanges 30 are provided on the rear vertical edges of the side walls 11 which form grooves into which the rear end plate 29 may be slid vertically,
 80 the edges of the rear end plate 29 being also turned in a return-bend flange 31 which engages with the return-bend flange or inturned edge 30 of the side walls 11.

In order to lock the rear end 29 firmly in position a flange 32 is turned upwardly across the bottom of the same and the rear end of the body portion 10 is turned upward and downward in a return-bend flange 33, which
 90 flanges 32 and 33 lying parallel and in the same plane may be easily engaged by a split tubular binder strip 34. The binder strips 34 are preferably made in two pieces though they may be made in one piece and extend entirely across the rear end of the bottom of
 95 the drawer. The two piece arrangement is preferred however since it is easier to slide the short pieces into place than to secure the parts by a single long binding strip.

It is apparent that the binding strip 20
 100 need not necessarily be constituted as a loose element, as other packing means may be employed to effect the same function. For example, the flanges 14 may be extended with forwardly bent portions 14' which abut
 105 against the inner wall of the drawer front within the groove 18, as shown in Fig. 8, thereby forming a fairly good substitute for the binding tube 20; or the flanges might take the special form shown in the modifica-
 110 tion in Fig. 7, in which lugs 35 are struck from the edges of the side walls 11 which fit within the groove 18 at each side and thereby hold the side walls firmly in position, the lugs 35 being made of such width
 115 and length that they resiliently fill the grooves 18 by pressing against the bottoms of the grooves so that when pressed into place by the spreader 21 no other packing means is required.

Obviously the members connected with the drawer front 15 may be variously modified. For example, the strut plate 25 may be shaped to hold the tubular binders 20 in position and could be held in place by the
 125 fastenings 23 for the handle 24 extending through said plate 25 instead of through a spreader 21, thereby dispensing with the spreader, but the spreader is useful for reinforcing the sheet metal front. Again the
 130

strut plate 25 could be dispensed with and the spreader 21 made to fulfil largely its office but the construction as shown is greatly preferred since the plate 25 improves the smooth finish for the inner wall of the drawer front and more firmly holds all the parts in position. It is also apparent that the spreader 21 could be extended at each side to fill the grooves 18 and take the place of the binders 20, being sprung into place much the same as hereinbefore described for the sides 11 and flanges 14 of the body portion 10. The loose element binder 20 however is preferred for different reasons.

We claim as new:—

1. A drawer comprising a drawer front having rearwardly turned rectangular flanges extending around the same to form grooves, a U-shaped body portion having outwardly directed flanges on each front end of its sides to engage said grooves in said drawer front, tubular filling strips to fill the space between one side of each groove and the outwardly directed flanges on said body portion, a spreader plate having rearwardly directed flanges to lock said tubes in said grooves and a strut sheet having a Z-shaped upper edge intercalated with the drawer front, and bendable lugs on said spreader to engagingly hold behind said strut.

2. In a drawer, a front having its ends bent rearwardly and then inwardly to form grooves, a body having the front ends of its sides flanged outwardly and engaged in said grooves, tubular filling strips in said grooves engaging said flanged ends of the body sides, and a plate extending across the front and having its ends bent at an angle and engaged with said filling strips to hold the latter in place.

3. In a drawer, a front having its end parts bent to form grooves, a body having flanges on the front ends of its sides with the flanges engaged in the grooves, filling elements in the grooves engaging said flanges to hold the latter in place, and a member extending across the front and hav-

ing parts at its ends engaging the respective filling elements to hold the latter in place.

4. In a drawer, a front having its end parts bent to form grooves, a body of U-cross section having the front ends of its sides formed for reception in said grooves, a spreader plate having its ends engaged with said front ends of the sides and lying flush with the latter to hold the same against movement toward the front, and a strut having its ends engaged with said ends of the sides and extending across the joints between the ends of the spreader plate and the sides to hold the latter against movement inwardly of the body.

5. In a drawer, a front having its end parts bent to form grooves, a body having the front ends of its sides formed with flanges engaging in said grooves, filling means removably mounted in the grooves to hold the flanges against movement out of the grooves, and means whereby to hold the filling means against movement out of the grooves.

6. In a drawer, a front having its end parts bent to form grooves, a body having the front ends of its sides formed with flanges engaging in said grooves, filling means removably mounted in the grooves to hold the flanges against movement out of the grooves, a spreader plate having its ends flanged and the flanges engaged with said filling means and with the ends of the body sides to hold the filling means against displacement, and a strut having flanges at its ends engaged over the flanges of the spreader plate and engaged with the sides of the body to hold said sides against inward movement.

In testimony whereof we affixed our signatures in the presence of two witnesses.

HAROLD D. HERPST,
OSCAR J. LARSON.

Witnesses:

H. O. SANDBERG,
I. E. NORDSTROM.