

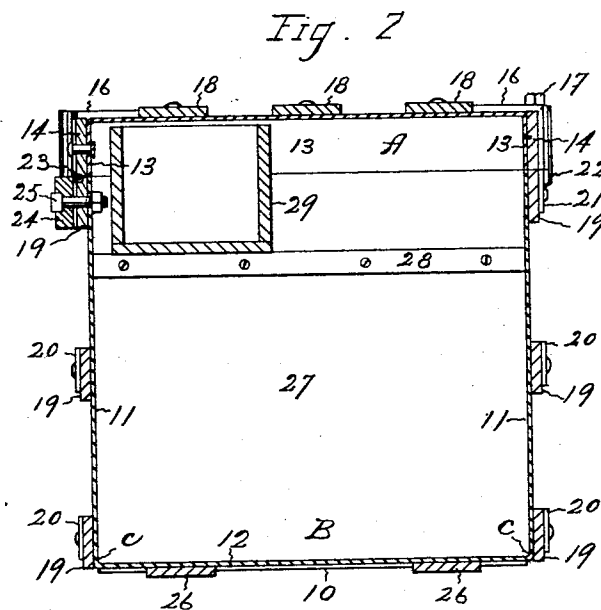
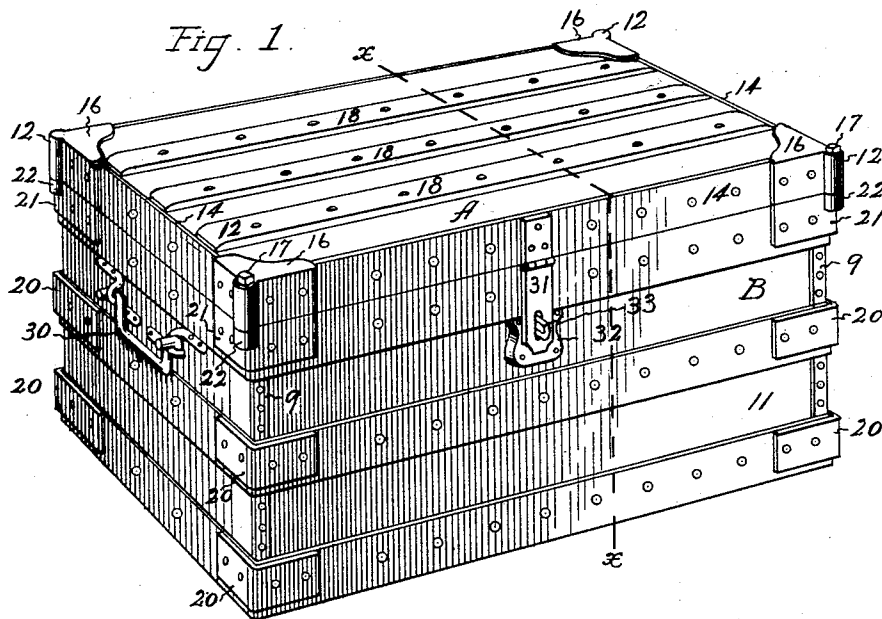
(No Model.)

2 Sheets—Sheet 1.

W. VANDERMAN.
SHEET METAL TOOL CHEST.

No. 586,297.

Patented July 13, 1897.



Witnesses

W. J. Egan
P. J. Egan

Inventor

William Vanderman
By *James Shepard*
Att'y.

(No Model.)

2 Sheets—Sheet 2.

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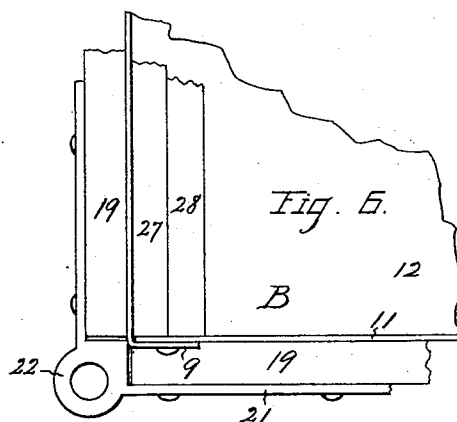
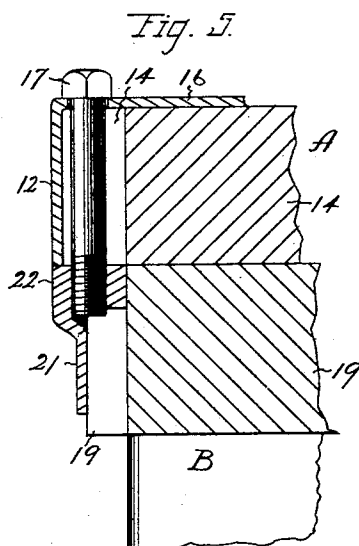
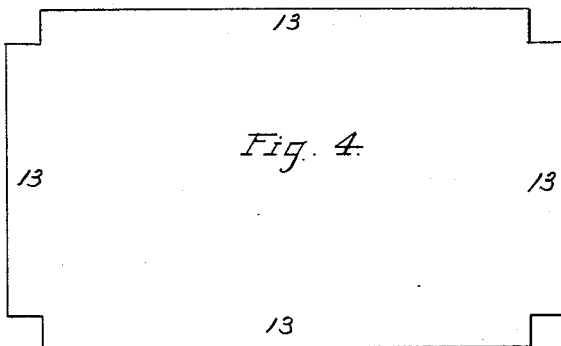
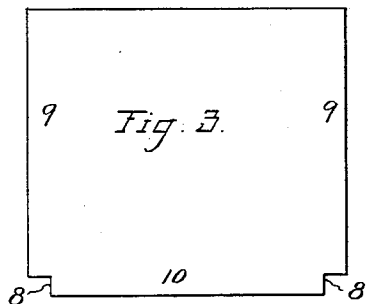
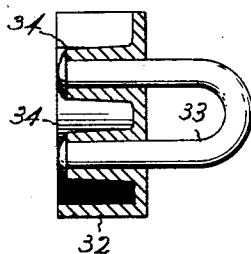


Fig. 7.



Witnesses

W. J. Stipek
P. J. Egan

Inventor

William Vanderman.
By James Shepard
Att'y.

UNITED STATES PATENT OFFICE.

WILLIAM VANDERMAN, OF WILLIMANTIC, CONNECTICUT.

SHEET-METAL TOOL-CHEST.

SPECIFICATION forming part of Letters Patent No. 586,297, dated July 13, 1897.

Application filed May 21, 1896. Serial No. 592,396. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM VANDERMAN, a citizen of the United States, residing at Willimantic, in the county of Windham and State of Connecticut, have invented certain new and useful Improvements in Sheet-Metal Tool-Chests, of which the following is a specification.

My invention relates to improvements in sheet-metal tool-chests; and the main object of my improvements is to provide a very strong and durable chest at a small cost.

In the accompanying drawings, Figure 1 is a perspective view of my chest. Fig. 2 is a transverse section of the same on the line xx of Fig. 1. Fig. 3 is a plan view of the blank for one end of the chest-body. Fig. 4 is a plan view of the blank for the cover. Fig. 5 is a transverse section at one end of the chest in a plane passing through the axis of the corner-iron bolt, said bolt being shown in elevation. Fig. 6 is a plan view of one corner of the chest-body; and Fig. 7 is a central vertical section of the hasp-keeper, the staple being in elevation.

The box-like cover A and body B are in the main formed of flexible sheet metal. The blanks for forming these parts may vary somewhat, according to the skill or judgment of the maker, but in order to disclose one way of making the trunk I will describe the preferred construction for said blanks. I make the front and rear sides of the body and the bottom of a single sheet of metal of a plain rectangular and wingless form, the same being bent longitudinally of the trunk at the lower corners, as at c in Fig. 2. The blank for the end is shown in Fig. 3, and it is notched at its lower corners, as at 8, to form one wingless top edge and three winged edges, so that the wings 9 9 on each vertical edge and the wing 10 at the bottom may be turned over and riveted to the wingless sides 11 and wingless bottom 12 of the body, as shown in Figs. 1 and 6. The blank for the cover is shown separately in Fig. 4, and it is notched at each corner to form the flanges 13, which are bent down to form the sides of the cover.

The rectangular body and cover being for a tool-chest, must be of considerable size, thus making the flexible metal comparatively thin. I also leave the raw or cut edge of the metal

at the bottom of the cover and top of the body. The chest or trunk has right-angular corners at its sides and ends, so as to show a proper rectangle in plan, side, and end views. These parts thus formed of thin metal have no stiffening or bracing shape, like rounded corners, to assist in maintaining the proper form, but have a tendency to buckle, and of themselves cannot be brought into a proper rectangular form for a tool-chest. At the same time the metal has sufficient body to give the chest ample strength provided the metal is properly held in shape. I finish the raw edges of the body and cover, bring the metal into its proper final form, and hold it against buckling by means of wooden braces or stay-strips, and I bind the ends of the stay-strips with irons.

Upon the outside of the flange 13 of the cover I secure the wooden stay-strips 14, the same being riveted to the flanges 13 with the edge of the strip about flush with the edge of the metal in the flange, whereby I not only give the edge a neat finish but remove all buckling from the metal and give the cover a symmetrical form. At the front and rear corners of the cover I secure, by means of suitable rivets, the three flanged corner-irons 16, one flange of which iron covers a portion of the top of each corner of the cover, while the other two flanges cover a portion of the stay-strips at the front and side edges of the cover. The vertical corners of these corner-irons are provided with a slightly-projecting boss 12, which is or may be perforated for the reception of the fastening-bolts 17. The rear corner-irons are not shown as thus perforated, but they may be so perforated if desired. Across the top of the cover I also place stay-strips 18, which are securely riveted, as shown.

The top edge of the chest-body I shape and finish in like manner by means of the outwardly-projecting stay-strips 19, and I secure like strips 19 to the middle and lower part of said body, as shown. The top corners of the body I provide with special corner-irons 21, having vertical flanges with a screw-hole boss 22 at the junction of said flanges, the hole in said boss being threaded to receive the threaded end of the fastening-bolt 17. The top stay-strips on the body and the stay-strips on the cover may be left short enough to form

a space at their adjacent ends to accommodate the corner-iron bosses and the fastening-bolt, as best shown in plan view, Fig. 6. Plain angle-irons 20, covering the meeting ends of the lower stay-strips on the chest-body, are firmly secured thereon by rivets. While my corner-irons and fastening-bolts are designed for this sheet-iron chest, it is evident that they could, without modification, be applied to other trunks or chests.

On the top stay-strip at the back side of the chest-body I secure the hinges 23, Fig. 2, of which I prefer to use three, and on the outer face of said stay-strip and over these hinges I secure the top stay-strip 24, of wood, and firmly secure the same in place by means of bolts or rivets, which should pass through both strips and the hinges, as shown by the bolt 25, Fig. 2. The upper edge of this stay-strip is about level with the axis of the hinges, so that it forms the stop or stay for the cover for holding it in its elevated position when turned back. The bottom of the body is also provided with stay-strips 26, as shown in Fig. 2. I line each end of the trunk-body with a thin board 27, which may be secured by as many rivets as may be desired. A cleat 28 may be secured to said board lining by means of screws for any ordinary till to slide on. Other cleats may also be secured in like manner for holding such other interior compartments as may be desired. The chest may be provided with any suitable trimmings—as, for example, the lifting-handles 30 and hasp 31.

The keeper for the hasp is of a peculiar construction. The hasp extends downwardly in a straight line over the front face of the top stay-strips 19 and below the lower edge thereof. The keeper consists of a hollow base-plate 32 and staple 33. The base-plate is of the same thickness as the stay-strip 19, and the ends of the staple are riveted in the bosses 34 on the inside of the base-plate, the riveted or headed ends of the staple being about flush with the rear edge or face of the base-plate. This base-plate is placed on the front face of the metal forming the chest-body just under the top stay-strip and riveted to said body, as shown in Fig. 1. This brings its front face flush with the front face of the top stay-strip, while the rear ends of the staple are backed or guarded by the metal in the chest-body, so that the staple cannot be pushed back through the base-plate, thereby making a cheap and durable keeper specially adapted for a chest with a metal body and wooden stay-strip at the top edge, as shown.

By my improvements I am enabled to produce a rectangular trunk or tool-chest mainly from sheet metal and of metal that is thin enough to make a large-sized chest practicable. I make a very strong chest at a small cost. Although the metal of itself would buckle and not retain its proper shape, I avoid buckling and hold the chest-body and cover in a symmetrical rectangular form by means of

wooden stay-strips, which also give a proper finish to the meeting edges of the cover and body. I protect the ends of the braces and secure them in place by suitable irons and rivets, both ends of the rivets being secured in metal. The stay-strips are backed on their inner face by the metal of the chest-body or cover and covered on their outer face at their ends with the metal of the corner and angle irons. By the employment of the corner-irons and fastening-bolts I am enabled to secure the cover to the body at either the two front or all four corners very securely. The chest is very durable and particularly adapted for carrying heavy tools, as, for example the tools of a plumber or steam-fitter. No matter how roughly it may be used, there is no liability of accidental unfastening or displacement of the cover.

I claim as my invention—

1. The combination of the chest-body, the rear wooden stay-strip 19 extending along the back side of said body at its upper edge, the hinges with one leaf secured upon the outer surface of said stay-strip, the outer stop stay-strip 24 secured upon the outer side of said hinges and stay-strip 19 with its upper edge in about the same plane as the axis of said hinges, the cover and the rear stay-strip 14 extending along the lower edge of its back side, the outer leaf of said hinges being secured to the outer side of said brace 14, substantially as described and for the purpose specified.

2. A tool-chest consisting of body and cover with the cover corner-irons 16 at the upper front corners of the cover two flanges of said irons covering a portion of the front and end surface of said cover while the third flange covers a portion of the top of said cover and is perforated to receive the fastening-bolt, the body corner-irons 21 covering a portion of the front and end surfaces of said body and having the screw-hole boss, and the fastening-bolts for extending through the corner-irons 16 into the screw-hole boss of the corner-irons 21 at the corners of the said cover and body, substantially as described and for the purpose specified.

3. A trunk or chest body having at its upper front corners outwardly-projecting cleats forming a space at their adjacent ends, and corner-irons 21 each consisting of the two right-angular vertical surface flanges, one of which extends along over a portion of the front surface of one of said cleats and the other of which extends over the face of the other cleat, said flanges having at their junction the exteriorly-rounded and interiorly-threaded screw-hole boss 22 projecting into said space and beyond the outer face of said flanges, the vertical axis of said screw-hole boss being substantially in the planes of the inner faces of both of said flanges, substantially as described.

4. A trunk or chest body having right-angular corners throughout, the cover being

formed from a notched and flanged sheet-metal blank and the body of which is formed of a plain rectangular blank and winged end pieces of sheet metal with the wings of the
5 end pieces riveted to said body, the confronting raw edges of the said cover and body being provided with wooden stay-strips firmly secured by rivets upon the outside of said
10 cover and body with the edges of the metal and stay-strips substantially even as set forth.

5. A trunk or chest body formed mainly of sheet metal, the wooden stay-strips secured to the outside of the metal of said body at its upper edge, and the keeper consisting of the

hollow base-plate 32 of the same thickness as
15 the stay-strip and provided with two surface internal bosses 34 and exteriorly rounded and the staple secured within said bosses, said keeper being secured to the front face of the
20 metal of said body under the lower edge of said stay-strip and with the inner ends of the said staple resting on the said front face of metal, substantially as described and for the purpose specified.

WILLIAM VANDERMAN.

Witnesses:

L. F. JORDAN,
THOMAS J. KELLEY.