Feb. 13, 1923. 1,445,395

K. B. HARVEY.

TABLE.

ORIGINAL FILED SEPT. 8, 1921. 2 SHEETS—SHEET 1.

Fig. 1.

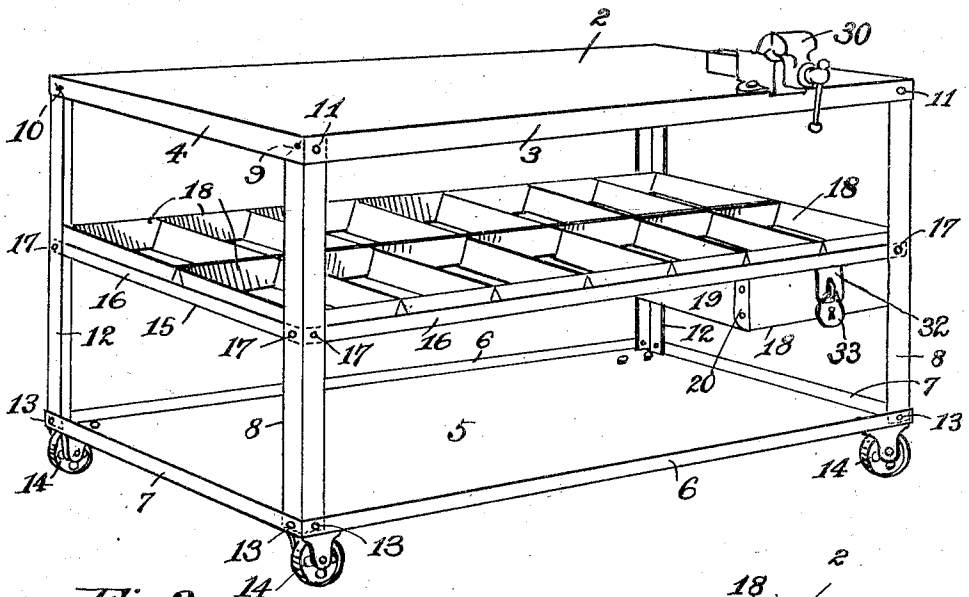


Fig. 2.

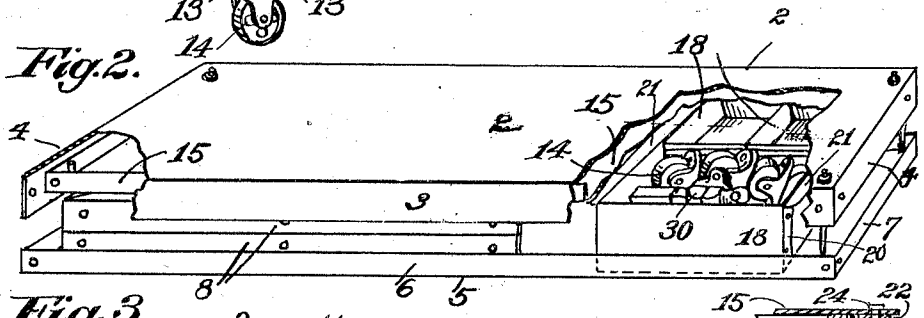


Fig. 3.

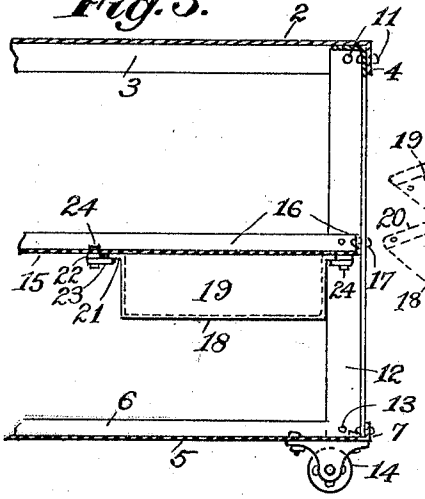


Fig. 4.

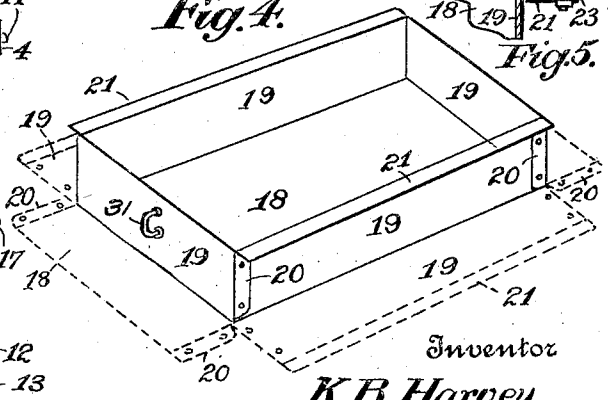


Fig. 5.

Inventor

K. B. Harvey

By his Attorney

Wm. H. Reid.

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K. B. HARVEY.

TABLE.

ORIGINAL FILED SEPT. 8, 1921. 2 SHEETS—SHEET 2.

Fig. 6.

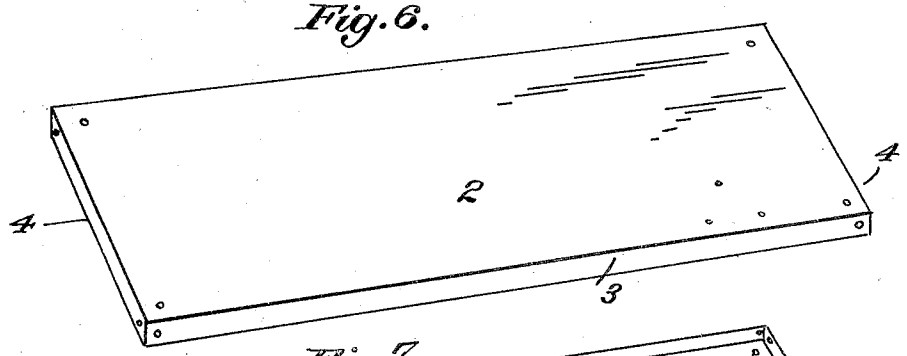


Fig. 7.

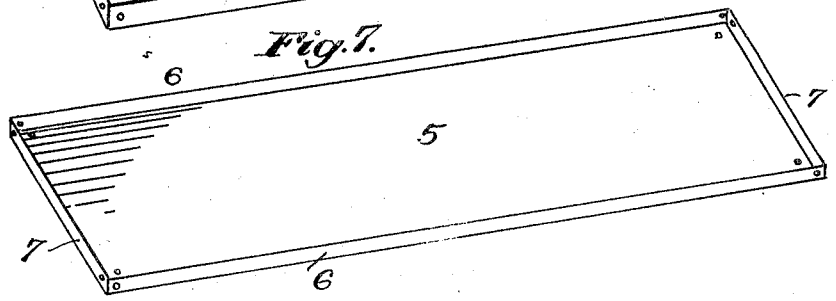


Fig. 9.

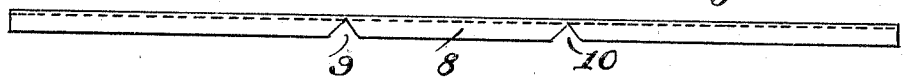


Fig. 8.

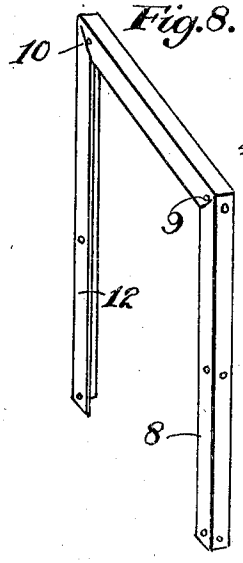
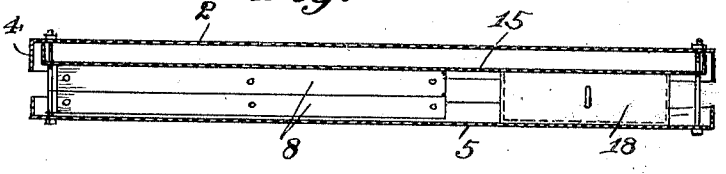


Fig. 10



Inventor

K. B. Harvey

By his Attorney

Wm. H. Reid.

Patented Feb. 13, 1923. 1,445,395

UNITED STATES PATENT OFFICE.

KELLY B. HARVEY, OF NEW YORK, N. Y.

TABLE.

Application filed September 8, 1921, Serial No. 499,143. Renewed October 30, 1922. Serial No. 598,015.

To all whom it may concern:

Be it known that I, KELLY B. HARVEY, a citizen of the United States, and a resident of New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Tables, of which the following is a specification.

This invention has reference to a structure of the kind known as knock-down; and has for its object to provide a kind of table or work bench that can be easily constructed from plain structural material with a small amount of labor for forming the parts and assembling them; which will be strong and rigid in its construction yet of comparatively light weight, and which structure can be readily dis-assembled and form a compact structure that can be practically nested together and secured by several bolts.

In the accompanying drawing showing one embodiment of my invention, Figure 1 is a perspective view of the device.

Fig. 2 is a perspective view of the device in its knock-down condition and assembled for transportation or storage.

Fig. 3 is a sectional view at one end.

Fig. 4 shows the drawer separately.

Fig. 5 shows a detail of the drawer sliding means.

Fig. 6 shows the top member.

Fig. 7 shows the bottom member.

Fig. 8 shows one of the end frames.

Fig. 9 shows the strip for the end frames.

Fig. 10 shows the device in folded form.

As shown in the drawing the device comprises essentially two end members, a top member and a bottom member; and also an intermediate shelf member if desired. The top member comprises a plate of sheet metal 2 that will have the four corners cut out to form a square notch, and the four portions between the notches are bent downwardly, to form side flanges 3, 3, and end flanges 4, 4, see Fig. 6, and when the flanges are thus bent down the edges of the flanged portions will meet on vertical lines and form a kind of boxed arrangement.

The bottom member comprises a plate 5 that is similarly constructed with flanges 6 and 7 that are bent upwardly instead of downwardly in a box form. The end members and supporting members that connect the top, middle and bottom members, I form of angle iron from a strip whose length is equal to the height of the top member on each side plus the width at the end. I take a strip of angle iron 8 of this character and form notches at 9 and 10, see Fig. 9, in one of the sides and then the other two sides are bent to form a right angle with the middle portion, as indicated in Fig. 8.

The notched portions have the sides at a right angle so that the edges of the notch are brought together when the other sides are bent to form a right angle. This structure is of a width to be placed inside of the top member 2 at each end, so that the downwardly extending portion at the top will engage the flanges 3 and 4 at the corners and both members are suitably apertured to have bolts 11 placed therein. The lower ends of the upright parts 8 and 12 of the end member, fit in the inside of the bottom member 5 at the flange corners and are secured by suitable bolts 13. By this means a rectangular structure is formed by having one of these end frames at each end as shown. If desired, suitable casters 14, 14 may be secured at each corner so that the table may be readily pushed about the place of use.

An intermediate shelf member is preferably provided that is formed identical with the top and bottom members, comprising a plate 15 that is notched at the corners and then bent to form upwardly extending flanges 16. This member fits inside of the four angle pieces 8 and 12 as shown in Figs. 1 and 2 and the flanges are bolted to the corner pieces as shown by bolts 17. If desired trays 18 may be placed on this shelf to hold tools or small objects. These trays may have converging sides so that they can be readily nested.

A drawer is provided to slide on one of the members such as the shelf member 15. This drawer I form from a plate 18, that is notched at four corners to form side members 19, 19, that are bent upwardly and secured together by bent flanged portions 20 that may be suitably bolted or riveted to the adjacent side member. Two opposite members 19 have flanges 21, 21, extending outwardly. A pair of strips 22 and 23 are suitably bolted to the shelf member by bolts 24 see Figs. 3 and 5 and these are arranged at two portions to engage the oppositely extending flanges 21, whereby the drawer can slide out and in and can be supported on the shelf 15.

One of the principal advantages of a

structure of this kind is its adaptability to be folded together or nested in a very compact form, as indicated in Figs. 2 and 10. The end frames are removed from the three members by taking out the bolts and these end members are laid inside of the bottom member, one on top of the other and then the shelf member 15 is laid on top of the bottom member that will bring the two members together and form a closed space between members that will contain the two end members. This closed space can also contain the drawer member and the trays at one end beyond the frame members, and also the bolts used in holding the end members to the other three members can be placed in this compartment, also the vice, the tools, and other attachments, and also casters that are bolted in place to be easily removed. The top member that may be larger than the other two members if desired, is simply placed on top of these two members, and a bolt 25 passed through the entire structure at each corner. By this means the entire structure is contained in its own compartment and does not need to be boxed for shipment as all of the parts are protected and insured against loss or damage. Various implements can be secured to the top member such as a vice 30 as indicated. The drawer may be provided with a handle 31 that may operate together with a hasp 32 to be secured by a bolt 33 if desired.

What I claim is:

A portable work bench, comprising a top member formed of a sheet metal plate with the corners notched and the four margins bent down to meet at the corners, a bottom member formed in the same manner, an intermediate shelf member of the same character but of less lateral dimensions, a pair of end frames each comprising a metal angle strip bent downwardly to form two vertical portions connected by a horizontal portion and of a horizontal length to fit into the said top member, and to be detachably bolted thereto, one frame at each end of the top member, said bottom member being placed with the flanges extending upward and the lower ends of the end members extending into the bottom member and detachably secured at the corner portions, the shelf member being located intermediate of the top and bottom member and detachably secured to the said end members, said members being detachably bolted together whereby upon separation the end frames and the shelf member can be placed between the top and bottom members, bolts adapted to pass through the top and bottom members at the corners, whereby the end members and the middle shelf member are contained and secured between the said top and bottom members, a drawer member of sheet metal, means for slidably mounting the drawer under the middle shelf member, said drawer being removable and of dimensions to be contained between the said top and bottom members when bolted together and positioned beyond the said end members.

Signed at New York city, N. Y., on Sept. 3, 1921.

KELLY B. HARVEY.