

April 19, 1932.

J. E. BALES

1,854,777

TOOL STAND

Filed April 4, 1930

FIG. 1.

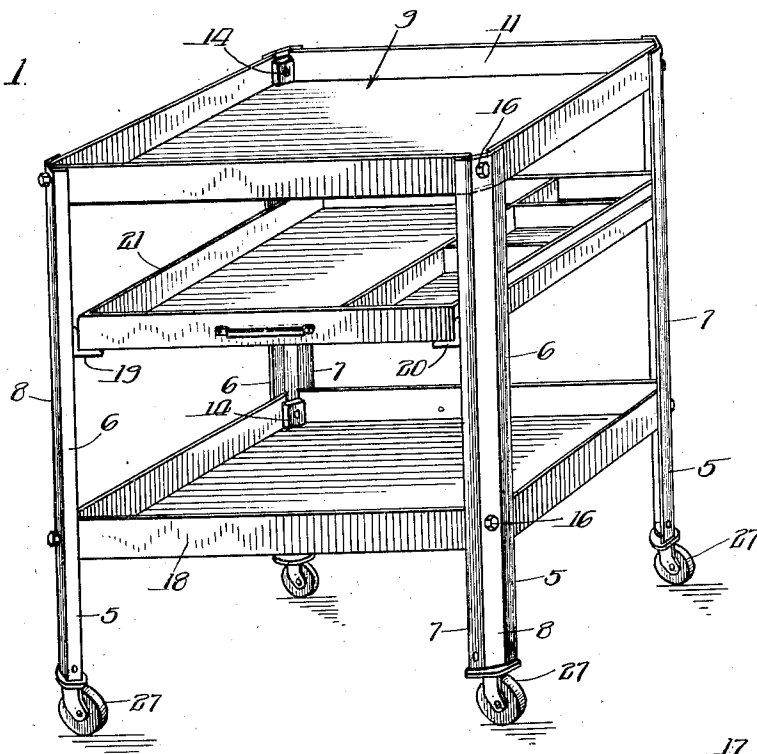


FIG. 2.

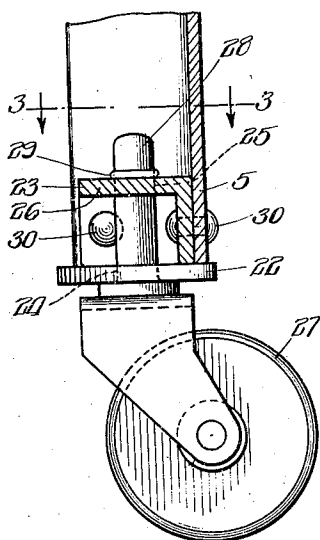


FIG. 3.

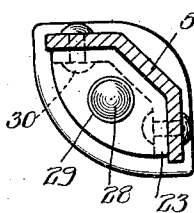
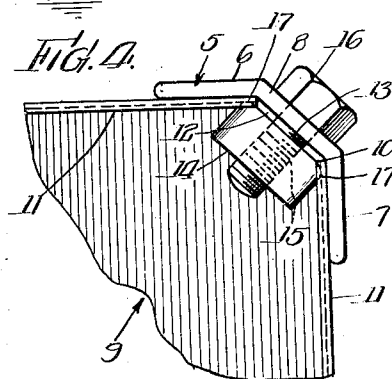


FIG. 4.



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# UNITED STATES PATENT OFFICE

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## TOOL STAND

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This invention relates to a tool stand and particularly to an all metal tool stand. More specifically, the invention relates to means for fastening shelves or trays to stands.

5 The primary object of the invention is to provide a new and improved tool stand which has novel legs or supports and which is provided with simple and efficient means for fixing a tray or shelf in position.

10 Another object is to provide a tool stand of improved construction whereby trays are fixed to the stand uprights by means of a fastening member extending through the legs and through upstanding flanges on the trays.

15 Another important object is to provide a tool stand which has a novel member fixed thereto for receiving a castor.

Numerous other objects and advantages will be apparent throughout the progress of the following specification.

20 The invention comprises in general a plurality of uprights or legs which may be made of sheet metal and which have outwardly extending legs integrally connected with the diagonally extending body member. Trays are provided which have upwardly extending flanges about the periphery thereof and the trays have diagonal edges at the corners thereof which engage the diagonal edges of the uprights or legs. A metal bar is arranged against the inside flanges of the tray, and a bolt extends through each leg, a flange on the tray, and threadedly engages the bar where-  
30 by the tray is fixed rigidly and securely to the uprights.

An angle iron having legs extending inwardly is fixed to some of the legs to provide a slide for a drawer.

40 The accompanying drawings illustrate a selected embodiment of the invention and the views therein are as follows:

Fig. 1 is a detail perspective view of the improved stand.

Fig. 2 is a detail sectional view of one of the legs showing a castor socket fixed thereto.

Fig. 3 is a detail sectional view on the line 3-3 of Fig. 2.

Fig. 4 is a detail sectional view showing the manner in which the trays are fixed to the legs or uprights.

Referring to the drawings, 5 designates generally a vertical support or leg which has outwardly extending legs 6 and 7 which are integrally connected by a diagonal body portion 8.

An upper tray 9 is provided with a bevel corner 10 as clearly shown in Fig. 4. An upstanding flange 11 is provided around the sides of the tray which meet with an upstanding flange 12 provided at the bevel portion 10. The flange 12 is adapted to be received within the legs 6 and 7 of the legs or uprights 5 and bears against the inside face 13 of the leg body portion 8. Each corner of the tray is beveled and a leg 5 is attached to each of the four corners of the tray as shown in Fig. 1. A bar or nut 14 is arranged against the flange 12 at the inside thereof, Fig. 4, and this bar is provided with a threaded opening 15. A bolt 16 passes through the body 8 of the legs and threadedly engages the hole 15 in the bar. The edges 16 and 17 of the bar engage the flanges 11 on two of the sides of the tray and securely fix the tray in position relative to the uprights. The bar and bolt connection not only causes the flange 12 to be impinged between the leg and the bar, but causes the upstanding flanges 11 on the sides to be impinged between the bar and the leg as designated at 16 and 17 in Fig. 4.

A lower tray 18 which is exactly the same construction as the upper tray 9, is connected to the legs in the same manner.

Oppositely disposed angle iron guides 19 and 20 may be connected to some of the legs, Fig. 1, to receive a drawer 21 which may be interposed between the top tray 9 and the bottom tray 11.

The bottom of the legs may rest upon a cross member 22, Fig. 2, and this cross member is rigidly attached to a substantially channel-shaped member 23. The member 22 is provided with a hole 24 which alines with a hole 25 provided in the upper leg 26 of the channel member 23. A castor 27 is provided with an upstanding portion 28 which passes through the alined holes 24 and 25. A collar 29 may be fixed to the upstanding member 28 above the top leg 26 to prevent the castor from falling out of the alined

openings 24 and 25. The channel member 23 may be fastened to the legs in any convenient manner such as by rivets 30.

The invention provides a tool stand which is rigid in construction, and which can be readily and economically manufactured. The stand is capable of being disassembled quickly and may be shipped "knocked-down." The trays are held in position by bolts fastening through the legs and engaging a vertical bar. The bar not only engages the diagonal upstanding sides of the trays but also causes the vertical side-flanges of the tray to be pressed tightly against the legs.

Changes may be made in the form, construction, and arrangement of the parts without departing from the spirit of the invention or sacrificing any of its advantages, and the right is hereby reserved to make all such changes as fairly fall within the scope of the following claims.

The invention is hereby claimed as follows:

1. A metal stand comprising a plurality of metal uprights, each upright having outwardly extending flanges disposed at right angles to each other and a diagonal body portion integrally connecting the flanges, a tray supported by said uprights, said tray being provided with metal sides, each flange of each upright having an end of adjacent sides contacting thereagainst, a nut engaging the ends of adjacent sides, and a bolt passing through the upright and threadedly engaging said nut whereby tightening movement of the bolt will draw up the nut and impinge the ends of the tray sides between the nut and upright.
2. A metal stand comprising a plurality of metal uprights, each upright having outwardly extending flanges disposed at right angles to each other and a diagonal body portion integrally connecting the flanges, a metal tray supported by said uprights, said tray being provided with integral metal sides turned up from the bottom of the tray, the ends of said sides being spaced, each flange of each upright having an end of adjacent sides contacting thereagainst, a relatively large nut directly engaging the adjacent sides near their ends, a bolt passing through the diagonal body portion of an upright between the spaced ends of said sides and engageable with said nut, whereby tightening movement of the bolt will draw up the nut and impinge the ends of the metal sides between the nut and upright, angles connecting said uprights, and a shelf supported by said angles.
3. A sheet metal stand comprising a plurality of metal uprights, each upright having a body portion, flanges integral with said body portion and extending outwardly therefrom, a pair of spaced metal trays sup-

ported by said uprights, each of said trays being provided with integral sides turned up from the bottom of the tray, each flange on each upright engaging adjacent tray sides, a relatively large nut engaging the adjacent ends of a pair of sides, a bolt passing through the body portion of each upright and threadedly engaging the nut whereby tightening movement of the bolt will draw up the nut and impinge the ends of the metal sides between the nut and the upright, angles connected to said legs between said trays, and a shelf slidably supported by said angles.

In witness whereof, I have hereunto subscribed my name.

JAMES E. BALES.