Nov. 4, 1930. L. F. CROWLEY 1,780,579

TRUSS BRACE

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Fig. 1.

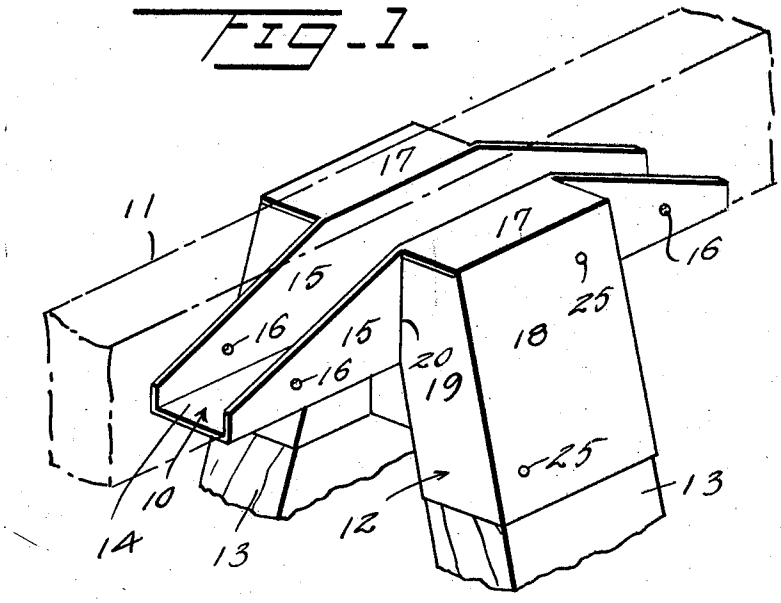
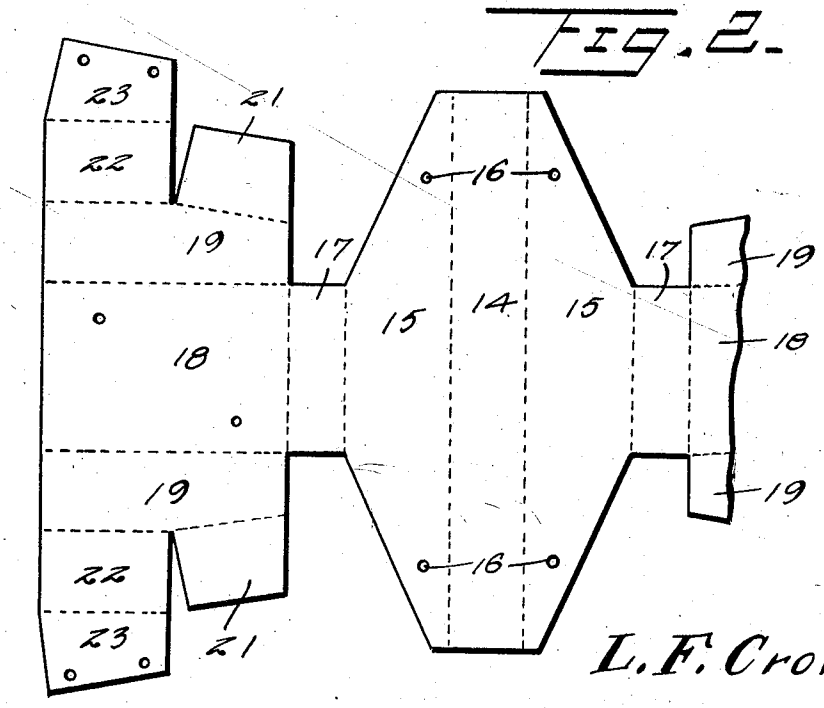


Fig. 2.



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Fig. 3.

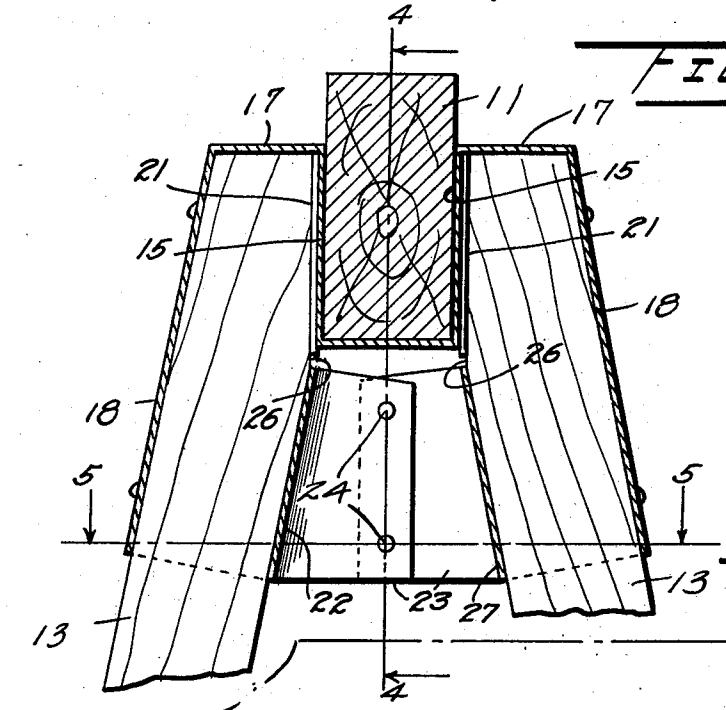


Fig. 4.

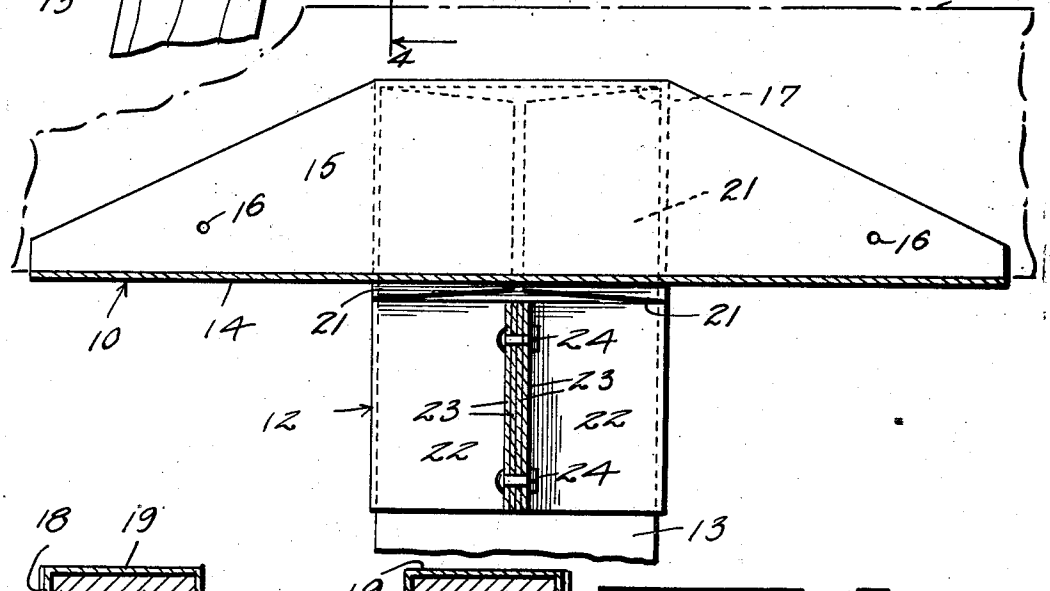
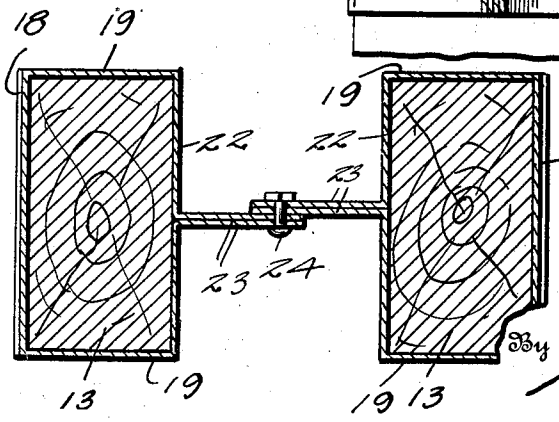


Fig. 5.



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UNITED STATES PATENT OFFICE

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TRUSS BRACE

Application filed April 21, 1928. Serial No. 271,875.

This invention relates to truss braces and more particularly to a brace for connecting the beam and legs of the type of truss generally known as a "saw horse."

An important object of the invention is to provide a device of this character which may be manufactured from sheet metal and which accordingly will be very light in weight and which, at the same time, will provide a rigid and secure connection for the element.

A further object of the invention is to produce a device of this character which may be readily and cheaply manufactured, which will be durable and efficient in service and a general improvement in the art.

These and other objects I attain by the construction shown in the accompanying drawings, wherein for the purpose of illustration is shown a preferred embodiment of my invention and wherein:—

Figure 1 is a perspective view showing a truss brace constructed in accordance with my invention;

Figure 2 is a fragmentary plan of the blank from which the brace is produced;

Figure 3 is a vertical sectional view through the brace;

Figure 4 is a longitudinal sectional view on the line 4—4 of Figure 3;

Figure 5 is a section on the line 5—5 of Figure 3.

Referring now more particularly to the drawings, the brace comprises a trough 10 to receive the beam 11 of the truss and sockets 12 to receive the legs 13 thereof. The trough comprises a bottom wall 14 upon which the beam may seat and side walls 15 adapted to fit closely against the sides of the beam and having apertures 16 for the passage of securing elements to engage the beam. The sockets 12 each comprise a top wall 17 which is integrally secured to the upper edge of the trough along one edge thereof and at its opposite edge to the outer wall 18 of the socket. This outer wall is plane and has secured thereto side walls 19. The upper portions of the inner edges of the side walls 19 are parallel to the sides of the trough 10 and the lower portions of said edges incline downwardly and outwardly from the bottom of the trough.

Means are provided for connecting the portions 20 of the side wall edges which incline toward the outer edge of the side wall to the outer face of the associated side wall 15 of the trough 10, these portions of the side walls preferably having flanges 21 which abut the side wall 15 of the trough and are welded or otherwise secured thereto. Those portions of the inner edges of the side walls 19 which parallel the outer edges thereof are likewise provided with flanges, indicated at 22. The adjacent edges of the flanges 22 are provided with outturned flanges 23 which are secured to one another. The flanges 23 are made of such length that they overlap the flanges 23 of the other of the sockets and securing elements 24 are directed through these overlapped portions to connect them to one another, so that the two sockets are rigidly connected. The outer wall 18 is apertured for the passage of securing elements 25 to engage the legs 13 inserted in these sockets.

The trough 10 and sockets 12 are made of a size to receive standard beams. In the present instance, each of these elements is constructed to receive a standard dressed 2 x 4.

It will be understood that two of the units just described will be employed in the construction of each truss and the end of the beam 11 will be placed in the troughs of these units and secured therein by securing means 16 which passes through the apertures 16. Legs of desired length are then cut and after beveling one face thereof, as indicated at 26, to fit within the tapered upper portion of the socket, they are inserted in the sockets and secured in position therein by the elements 25. The trough 10 is of elongated formation, the sockets 12 are secured to the sides of the trough centrally between the ends of the latter, the sockets extend below the trough, and the flanges 23 by which the sockets are connected are arranged below the trough and at the vertical center of the trough and sockets, whereby to render the brace strong and durable.

It will be obvious that with a construction of this character, any of the elements of the truss may be removed and replaced very readily. The structure of the brace being extremely light will enable a light truss to be produced and, at the same time, will very rigidly connect these elements.

Since the construction hereinbefore set forth is capable of a certain range of change and modification without materially departing from the spirit of the invention, I do not limit myself to such specific structure except as hereinafter claimed.

I claim:—

1. A truss brace comprising a trough, sockets secured to the sides of the trough and extending below the trough, flanges secured to the socket below the trough and at the vertical center of the trough and sockets, and means connecting the flanges together.

2. A truss brace comprising an elongated trough, sockets secured to the sides of the trough centrally between the ends of the trough, the sockets extending below the trough, and flanges extending from one socket to the other at a point below and at the vertical center of the trough and sockets.

3. A truss brace comprising sockets each embodying an outer wall, side walls and a top wall, the top walls being connected at their outer edges to the upper edges of the outer walls, and the side walls having the upper portions of their inner edges arranged vertically and the lower portions of said edges inclined downwardly and outwardly, a trough arranged between said vertical edge portions and having the upper edges of its sides connected to the inner edges of the top walls, upper flanges secured to said vertical edge portions and to the sides of the trough, lower flanges secured to said inclined edge portions, and flanges secured to said lower flanges and arranged in overlapping relation and secured together, said last flanges being arranged at the vertical center of the trough and sockets.

In testimony whereof I hereunto affix my signature.

LILLIAN F. CROWLEY.