A. E. PRICE.

KNOCKDOWN SIGN.

APPLICATION FILED DEC. 27, 1918.

1,308,680.

Patented July 1, 1919.

2 SHEETS—SHEET 1.

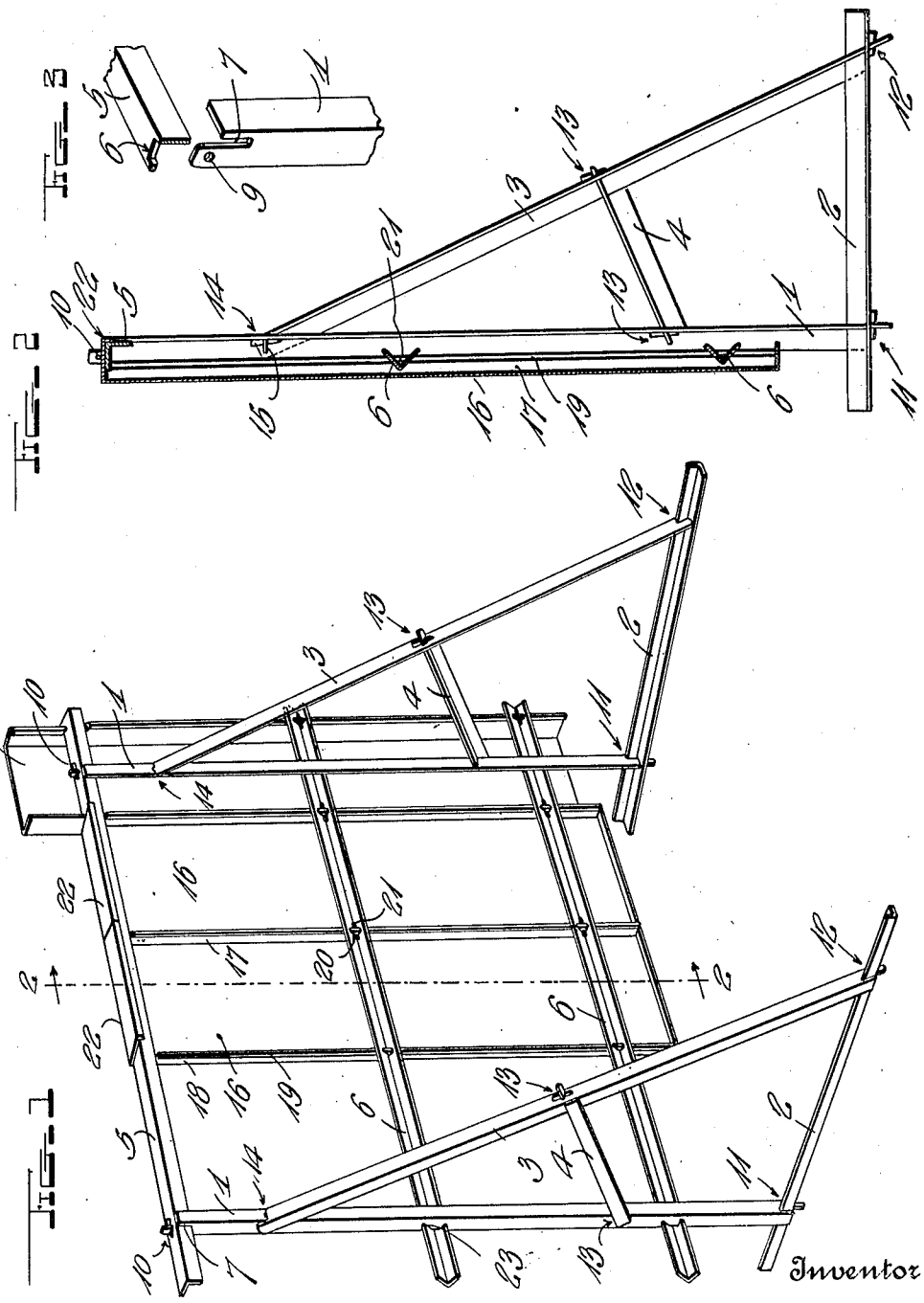


FIG. 1

FIG. 2

FIG. 3

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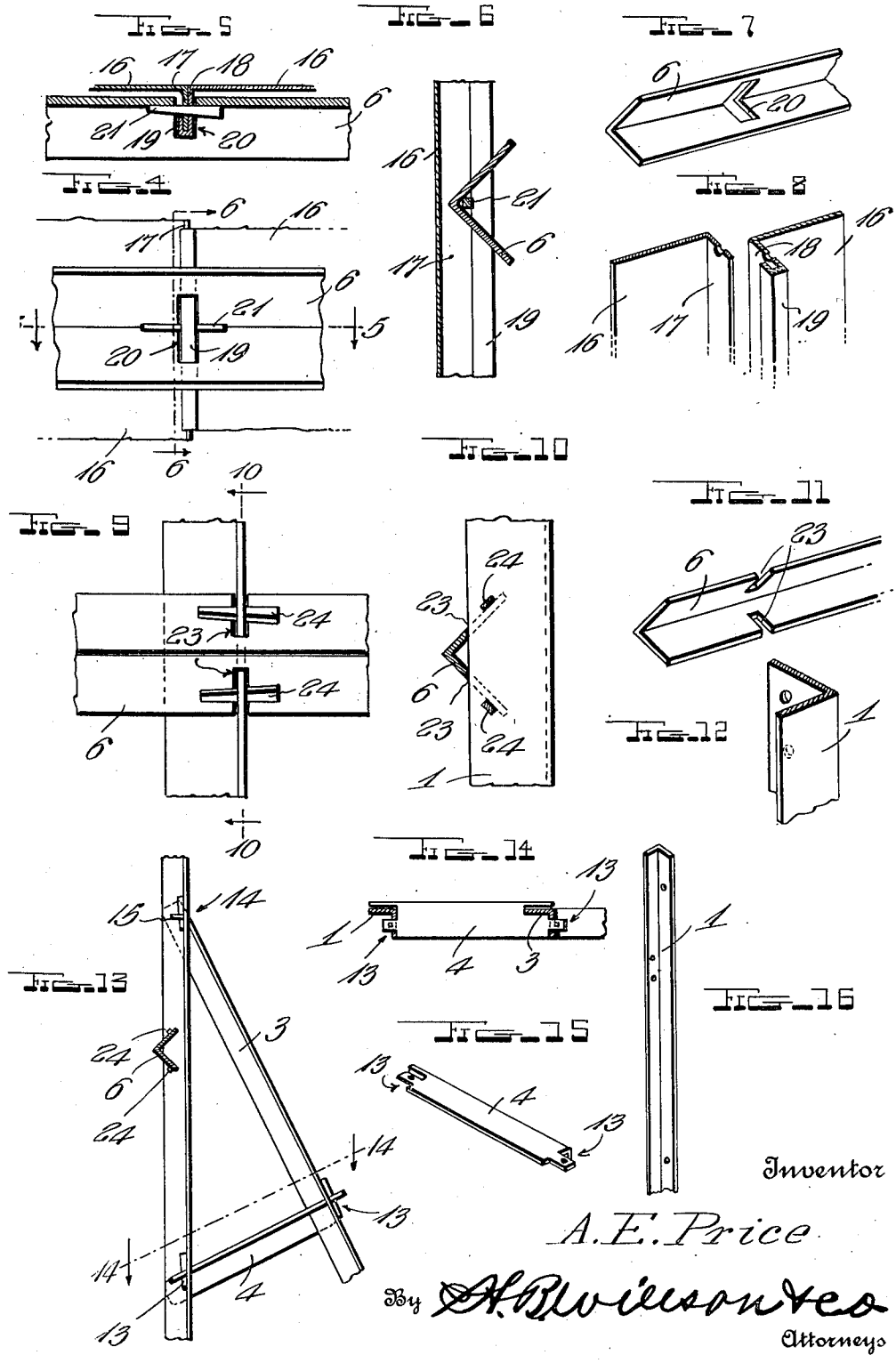
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UNITED STATES PATENT OFFICE.

AUSTIN ELMER PRICE, OF DECATUR, ILLINOIS.

KNOCKDOWN SIGN.

1,308,680. Specification of Letters Patent. Patented July 1, 1919.

Application filed December 27, 1918. Serial No. 268,496.

To all whom it may concern:

Be it known that I, AUSTIN E. PRICE, citizen of the United States, residing at Decatur, in the county of Macon and State of Illinois, have invented certain new and useful Improvements in Knockdown Signs; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its principal object to provide a comparatively simple and inexpensive, yet a highly efficient and durable knockdown sign which may be constructed totally of metal and easily assembled or disassembled as required, provision being made whereby in order to connect the several component parts of the frame, it is simply necessary to drive a number of metal pins.

With the foregoing object in view, the invention resides in the novel features of construction and unique arrangements of parts hereinafter fully described and claimed, reference being made to the accompanying drawings.

Figure 1 is a perspective view looking toward the rear of a partly completed knockdown sign constructed in accordance with my invention.

Fig. 2 is a vertical transverse section on the plane of the line 2—2 of Fig. 1.

Fig. 3 is a sectional perspective view showing the manner in which the top bar of the frame is connected with the vertical bars or studs thereof.

Fig. 4 is a fragmentary rear elevation illustrating the manner in which the sheet metal facing of the sign is connected to the horizontal bars.

Fig. 5 is a horizontal section on the plane indicated by the line 5—5 of Fig. 4.

Fig. 6 is a detail vertical section on the line 6—6 of Fig. 4.

Fig. 7 is a sectional perspective view of a portion of one of the horizontal angle iron bars.

Fig. 8 is a sectional perspective view of the adjacent portions of two sections of the facing, showing the coöperating flanges thereon.

Fig. 9 is a detail front elevation showing the connection between one of the horizontal bars and the vertical bars or studs.

Fig. 10 is a detail transverse section on the plane indicated by the line 10—10 of Fig. 9.

Fig. 11 is a detail perspective showing a portion of one of the horizontal angle iron bars.

Fig. 12 is a similar view of a portion of one of the vertical bars.

Fig. 13 is a detail end elevation with parts broken away and in section to illustrate more clearly the manner of connecting the brace bars with the vertical end bars.

Fig. 14 is a horizontal section on the plane of the line 14—14 of Fig. 13 showing one of the struts for the brace bars.

Fig. 15 is a perspective view of one of the struts.

Fig. 16 is a sectional perspective view of one of the end bars of the frame.

Briefly speaking, the present invention consists of an angle iron metal frame and a sheet metal facing upon which the advertising matter is to be pasted, painted or otherwise displayed. The frame is of such construction that its several component parts are secured together by slot and pin connections, so as to be readily knocked down or set up as occasion may require, and it will be obvious from the description herein following that the pin and slot connections may be of numerous forms. The sheet metal facing is preferably provided on its upper edge with hooks to engage the uppermost bar of the frame and the numerous sections of such facing are provided with flanges along their vertical edges which coöperate in forming tight seams between said sections and also coact with parts of the frame in securing the facing in place upon the latter. The device will now be specifically described by referring to the drawings through the instrumentality of reference characters placed thereon.

The numerals 1 designate two vertically disposed angle iron bars each having one flange projecting forwardly, said end bars rising from the front ends of two base bars 2 also constructed of angle iron. Inclined braces 3 of angle iron formation extend from the rear ends of the base bars 2 to the upper ends of the end bars 1, and angle iron struts 4 extend between said braces and end bars. The upper ends of the bars 1 are connected by a horizontal top bar 5, while the intermediate and lower end portions of said bars 1 are similarly connected by bars 6, all of said bars 5 and 6 being of angle iron con-

struction as shown. Several unique connections are employed between the several parts so far specifically mentioned and such connections will now be described.

As seen most clearly in Fig. 3 the upper end of one flange of each of the bars 1 is provided with a longitudinal slot 7 which separates it from the other flange, said slot receiving the depending flange of the bar 5 while the horizontal flange of the latter is provided with a slot 6 receiving the upper end of the first named flange of bar 1. An opening 9 is formed through said flange end and a preferably tapered pin 10 is driven through this opening and contacts snugly with the upper side of the bar 5, so that the latter is rigidly secured to the bar 1. This construction is of course duplicated at both ends of the frame but it need not be specifically described and illustrated in both instances. The connection 11 between the bars 1 and the base bars 2, is identical with that described between the bars 1 and 5 and will not therefore be specifically described further. Also, it may be stated that the connections 12 between the braces 3 and the base bars 2 is identical with that construction just set forth, as are also the connections 13 for securing the struts 4 to the braces 3 and the end bars 1. The connections 14 between the bars 1 and the upper ends of the braces 3 are slightly different, in that one flange of said braces is bent at 15 for better engagement with the slot in the bar 1 through which it passes. This slightly modified construction is shown in Figs. 2 and 13.

The sheet metal facing for the sign is formed of a plurality of vertically elongated sections 16, each section having on one edge a rearwardly extending flange 17 and on its other edge a similar flange 18 provided with a continuous hook 19 along its rear portion. The flanges 17 and 18 of adjacent sections 16 contact with each other and the hook formation 19 receives the edge of flange 17, so as to provide a stiff joint between the several sections and one which will prevent wind blowing through the seam and ripping the posters and the like from the front face of the board. Together, the rearwardly projecting flanges 17 and 18 are received in slots 20 formed across the corners of the angle iron bars 6, said bars being disposed with said corners facing forwardly as shown. It will be observed by reference more particularly to Figs. 5 to 8 that the slots 20 extend into both flanges of the bars 6 and that the flanges 17 and 18 project across the angle between said bar flanges. Pins 21 are driven through said flanges 17 and 18 and located in the aforesaid angle between the bar flanges, so that the several sections 16 and the sign board facing are rigidly secured in place (see Figs. 4, 5, 6, 7 and 8). In addition to this securing means, the upper ends of the sections 16 are by preference provided with hook-like flanges 22 which hook over the top bar 5. In Figs. 9, 10 and 11, it will be seen that the rearwardly extending flanges of the bars 6 are provided with transverse slots 23 which open through the free edges of said flanges, said slots receiving the forwardly extending flanges of the end bars 1, which flanges are formed with openings through which pins 24 are driven, said pins contacting snugly with the outer sides of the flanges of the bars 6, whereby to form rigid connections between these bars and the end bars 1.

By constructing the device as or substantially as shown and described, it may be easily hauled from place to place, and quickly and easily set up for use, by the simple act of projecting the several flanges through their respective slots and driving the pins in place, thus first completing the frame structure, after which the facing sections 16 are hooked over the upper end bar 5 and later secured to the horizontal bars 6. It will also be seen that the entire sign may be easily and quickly knocked down to be carried from one place to another. For ornamental purpose, the endmost sections 16^a of the metallic facing, may be of channeled construction so as to present the appearance of vertical pillars or columns along the vertical edges of the frame, and it will be understood that ornamentation may be in other ways derived.

From the foregoing, taken in connection with the accompanying drawings, the construction and operation of the invention will be fully understood without requiring a more detailed explanation, but it may be set forth that within the scope of the invention as claimed, considerable latitude is allowed for making numerous minor changes. Also it will be seen that the entire frame may be used for other purposes than knockdown signs for instance upon knockdown metal buildings such as garages.

I claim:

1. In a knockdown wall, a vertical frame formed of metal bars having detachable pin and slot connections, transverse base bars supporting said frame and having detachable pin and slot connections therewith, braces extending from said base bars to said frame and having detachable pin and slot connections with both, and a sheet metal facing for the frame having detachable pin and slot connections therewith.

2. In a knockdown wall, a vertical frame including an angle iron bar with its corner disposed forwardly and provided with transverse slots which extend into both flanges of said bar, a sheet metal facing for said frame having flanges on its rear side received in said slots and extending across the angle between said flanges and said bar,

said flanges of said facing having openings located in said angle, and pins driven through said openings for drawing said flanges and bars tightly together.

3. In a knockdown wall, a vertical frame including vertical angle iron bars and a horizontal angle iron bar with its corner disposed forwardly, said horizontal bar having transverse slots opening through its edges and receiving one flange of said vertical bars, said horizontal bar also being provided with additional slots across its corner which extend into both of the flanges, pins driven through said flanges and vertical bars and bearing against the flanges of said horizontal bar, a sheet metal facing for the frame having flanges on its rear side received in the corner slots of said horizontal bar, and pins driven through said facing flanges and located in the angle of said horizontal bar.

4. In a knockdown frame, an angle iron bar having a slot in one end of one flange separating said flange from the other flange, a second angle iron bar at an angle to said first named bar and having one flange received in said slot, the other flange of said second bar having a slot receiving said end of said one flange of the first named bar, and a pin driven through said flange end and contacting with the slotted flange of said second-named bar.

5. In a knockdown frame, an angle iron bar having a slot across its corner extending into both of the flanges, a flanged member whose flange extends through said slot and across the angle between the bar flanges, and a pin driven through the flange of said member and located in said angle.

6. In a knockdown frame, an angle iron bar having transverse slots opening through the edges of its two flanges, a second bar having flanges received in said slots, and pins driven through said last named flanges and bearing against said slotted flanges.

In testimony whereof I have hereunto set my hand.

AUSTIN ELMER PRICE.

Witnesses:

RALPH W. LINDER,

HARRY CAMPBELL.