M. S. CADWELL. BOX.

(Application filed Dec. 14, 1898.)

(No Model.) Frig.3. Inventor Marvin S. Cadwell MMMMMH Son

United States Patent Office.

MARVIN S. CADWELL, OF DETROIT, MICHIGAN.

BOX.

SPECIFICATION forming part of Letters Patent No. 620,538, dated February 28, 1899.

Application filed December 14, 1898. Serial No. 699, 228. (No model.)

To all whom it may concern:

Be it known that I, MARVIN S. CADWELL, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Boxes, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention consists in the peculiar construction of a box, and in particular in the peculiar construction by means of which the box may be readily shipped in knockdown form and quickly assembled when wanted for use, as more fully hereinafter described and

15 claimed.

In the drawings, Figure 1 is a perspective view of my box complete. Fig. 2 is a longitudinal section on line y y, Fig. 1. Fig. 3 is a cross-section on line x x, Fig. 1. Fig. 4 is a longitudinal section through the box in knockdown form. Fig. 5 is a cross-section thereof; and Fig. 6 is a perspective view of the sections composing the box, showing the manner of assembling the same.

My improved box is preferably formed of thin strips or slats of wood, which are secured together by cross-cleats and are provided with longitudinal reinforcing-strips where necessary, as will be described hereinafter.

30 A is the bottom section, which is formed of a number of cross-slats a, placed edge to edge and secured together by the longitudinal strips b and c above and below said slats, at opposite ends thereof. At opposite ends of 35 the section a are secured the straps or tongues C, which are fastened to the section by passing one end of each between the strip c and slats a and then nailing or otherwise firmly securing. These straps are formed of flexible 40 material, preferably of sheet metal, such as sheet-zinc. The opposite ends of the straps are secured to the end section B of the box, said sections being formed of the body portion d, cut away at e, and the upper or han-45 dle portion f, preferably of greater thickness than the portion d. The slats d and f are secured together by the vertical posts g on the inner face of the section and the strips h on the outer face.

In securing the sections A and B together they are so arranged that when subsequently the end sections B are turned up at right an-

gles to the bottom section A the lower edge of the section B will rest on said bottom and will abut against the end of the strip b, the 55 straps C holding the parts in this position.

D are the side sections of the box, which are formed of the longitudinal slats i, reinforced at the upper end by strips j and secured together by the central vertical cross- 60 strips k and l on the inner and outer side of the section. The section D is also provided with a strap or tongue E similar to the strap C, which is secured to the central cross-strip l, preferably by being bent to form a socket, 65 in which the end of said strip l is adapted to engage. This socket forms a protecting-cover for the strip l, which prevents it from being easily knocked off. The protecting ends of the straps E are adapted to be inserted be- 70 tween the strip c and slats a of the bottom section and when secured thereto form a firm connection between said sections.

In assembling the parts the sections A and B are turned up at right angles to each other, 75 as before described, the projecting tongues of the straps E are inserted between the strip and body of the bottom section, and the section D is then turned up in position with its ends resting against the sides of the posts g. 80 These side sections are then securely united to the ends by placing metallic straps F at the ends of the section, having outwardlyprojecting tongues m, adapted to be turned down over the ends of the posts g and secured 85 thereto by a nail or tack. The box as thus assembled is shown in Fig. 1 of the drawings and is adapted to be used as a delivery-basket, the strips f forming handles by which said basket may be lifted. For this use it is 90 desirable to protect the bottom of the box, so that it may not be easily broken in sliding it in or out of the delivery-wagon, and to this end I provide longitudinal strips or runners G, as shown in Figs. 6, 2, and 3, on which the 95 box normally rests and may be easily slid along the wagon-bottom.

In order that I may place several of these boxes one upon the other, the strips or runners G are placed in such position on the bottom of the box that they will fit inside of the top of a similar box, the ends of the runners abutting against the posts g and their sides resting against the strips k. A number of

such boxes may thus be readily placed in vertical series without danger of the upper one falling off or without materially diminishing the holding capacity of the lower boxes.

As before stated, my box is adapted to be shipped in knockdown condition, and when thus arranged the end sections B are folded the opposite way, so as to rest against the cleats or runners G, as shown in Figs. 4 and The gide sections D are then placed in

the space or pocket formed between the runners G. When the parts are thus arranged, they will occupy very little space, and whenever it is desired to set up the box this may be accomplished expeditiously.

What I claim as my invention is-

1. A knockdown box comprising a bottom section having longitudinal runners secured to the under side thereof, end sections secured to said bottom section by flexible straps and adapted to be folded thereunder and side sections adapted to be stored in the space between said runners and the bottom and folded end sections.

2. A box comprising a bottom section, end

and side sections secured thereto and to each other and having inside corner-posts and runners secured to the under side of said bottom section longitudinally thereof, adapted to fit inside the side sections of a similar box and 30 with their ends abutting against the corner-

posts thereof.

3. A box comprising a bottom section having longitudinal reinforcing-strips at the sides thereof, end sections secured to said bottom 35 section by flexible straps and having inside corner-posts, said sections having a central vertical reinforcing-strip and a tongue or strap secured thereto, adapted to be inserted between said bottom section and its reinforcing-strip, and straps secured to the ends of said side sections adapted to be bent over and fastened to the upper ends of said corner-posts.

In testimony whereof I affix my signature 45

in presence of two witnesses.

MARVIN S. CADWELL.

Witnesses:

M. B. O'DOGHERTY,

H. C. SMITH.