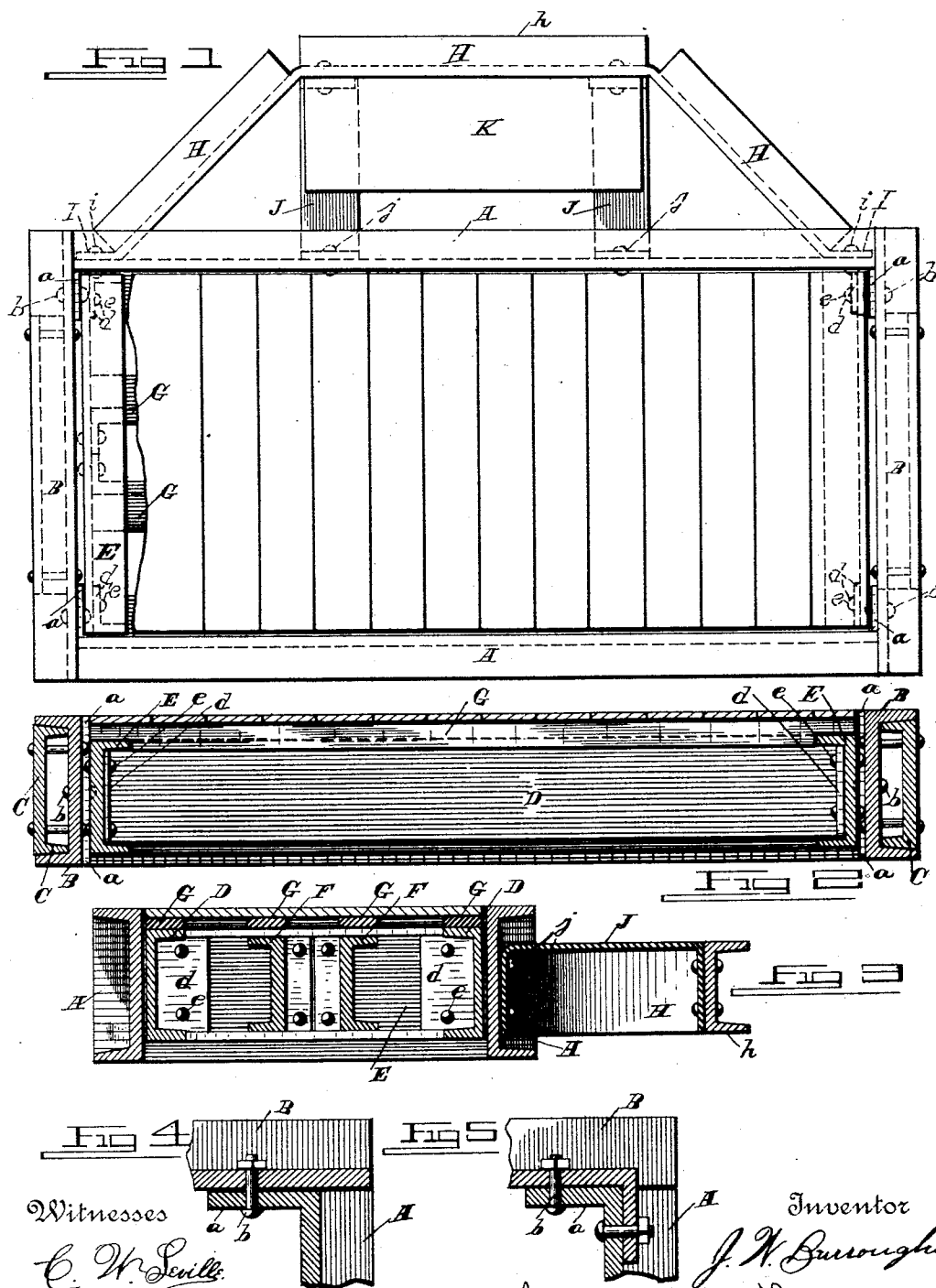


(No Model.)

J. W. BURROUGHS.
PLATFORM SCALE FRAME.

No. 470,177.

Patented Mar. 8, 1892.



Witnesses

C. W. Seville.

Arthur E. Soull.

By his

Attorney

Inventor

J. W. Burroughs.

W. A. Alexander

UNITED STATES PATENT OFFICE.

JAMES W. BURROUGHS, OF CHAMPAIGN, ILLINOIS.

PLATFORM-SCALE FRAME.

SPECIFICATION forming part of Letters Patent No. 470,177, dated March 8, 1892.

Application filed October 23, 1891. Serial No. 409,612. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. BURROUGHS, of Champaign township, in the county of Champaign and State of Illinois, have invented certain new and useful Improvements in Platform-Scale Frames; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification, in which—

Figure 1 is a plan view of my improved wagon platform-scale frames. Fig. 2 is a longitudinal central sectional view. Fig. 3 is a transverse sectional view, Fig. 1. Figs. 4 and 5 are details of the joints.

This invention is an improvement in wagon platform-scales; and its objects are to provide improved scale-framings which will endure the strains incident to rough usage without being distorted and will not sag or be warped by moisture or dryness; and it consists in novel metallic framings of angle-iron and certain novel details of construction, as will be hereinafter clearly described and claimed.

Referring to the accompanying drawings by letter, A A designate the two side pieces, and B B the two end pieces, of the frame, which are made of double-flanged or U-iron bars set with their flanges outward. The side bars A have their webs extended beyond their flanges and bent at right angles into ears *a a*, which abut against the ends of bars B B and are securely united thereto by bolts *b b*, as shown.

C C designate smaller U-iron bars secured to the end bars B, but oppositely thereto, so that their flanges lie within the flanges of bars B, and the bars B C together constitute a hollow angular end piece for the frame. The bars C thus reinforce bars B and prevent beating down of the flanges thereof by the impact of the wagon-wheels, &c., in driving thereover. The frame thus constructed is supported on a suitable foundation and is perfectly rigid and stiff, and the scale-beams and fulcrums are supported therein in the usual manner, not being shown herein.

The scale-platform, which lies within the frame, is composed of U-iron side bars D and end bars E, set with their flanges inward and united by bending the webs of side bars D

into ears *d*, which are secured to the ends of bars E by bolts *e*.

F F are intermediate longitudinal angle-iron bars secured between and to end bars E E, as shown.

G G are wooden bars bolted to the tops of bars D and F and to which the flooring-planks of the platform are nailed, as indicated in the drawings. The bars G, however, might be omitted and the flooring-planks be fastened direct to the flanged angle-iron bars. A platform so made is rigid and yielding and will not be warped by weather or exposure, and the burden of a weight placed on any part thereof will be equally distributed to the scale-beams.

H designates a bar, preferably of U-iron, which is bent into the contour of three sides of a hexagon or sexangle. Its end pieces have their webs extended into ears I, which are secured by bolts *i* to one of the side bars A, as shown. The central portion *h* of this bar is connected by U-shaped brace-straps J J to the side bar A, the ends of the strap being secured to the bars by bolts *j*, as shown. This offset portion of the frame forms a support for the scale-box and keeps the working parts of the scale mechanism always in proper relative position, as the box is thus rigidly united to the frame. The scale-box K is preferably made of galvanized iron and is bolted to and supported by the brace-straps J and central portion of the bar H. By using the angle-iron bars the frames can be made lighter, stiffer, and more durable than wooden frames, and can be moved without effecting the position of the scale mechanism hung therein; nor will the framing be affected by the unequal sinking of the foundations or supports, as would wooden frames, as the scale mechanisms are all supported or suspended in the rigid frame, so that the bearings are kept in proper relative position. When the scale-box is to be within the house, the bar H and straps J may be omitted. In Fig. 5 the extremities of the webs of both end and side bars are extended into ears, which are bolted, respectively, to the side and end bars, as shown, making a stiffer connection. The wooden flooring of the scale-platform could be removed as a whole by simply removing the securing-bolts of bars G. A frame so made will not sag or

permit the scale mechanism to settle or sink at any point.

I am aware that the employment of angle or channel irons for columns, girders, pillars, posts, &c., is old; but I do not know that they have ever been used in scale-frames, and especially with the peculiarities of construction, combination, and arrangement of parts shown herein. Therefore

What I claim as new is—

1. The herein-described frame for platform-scales, consisting of the double-flanged iron side bars set with their flanges outward and the hollow angular end pieces formed of two double-flanged iron bars set one within and opposed to the other, substantially as described, the webs of the bars being extended beyond the flanges, but at right angles and secured to the ends of the end pieces, substantially as described.

2. The herein-described scale-platform, formed of the double-flanged side bars D D and end bars E E, set with their flanges inward and having their webs extended at the ends and lapped over the webs of the adjoining

ing end or side bar and bolted thereto, substantially as described, the intermediate longitudinal bars F F, attached to bars E E and set with their flanges outward, the bars G, and flooring, substantially as described.

3. The herein-described frame for platform-scales, consisting of the double-flanged iron side bars set with their flanges outward and the hollow angular end pieces formed of two double-flanged iron bars set one within and opposed to the other, substantially as described, the webs of the bars being extended beyond the flanges, but at right angles and secured to the ends of the end pieces, and the bar H, bent, as described, and fastened to one side bar, and the brace-straps J J therefor, substantially as and for the purpose described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JAMES W. BURROUGHS.

Witnesses:

GEORGE W. GERE,
SOLON PHILBRICK.