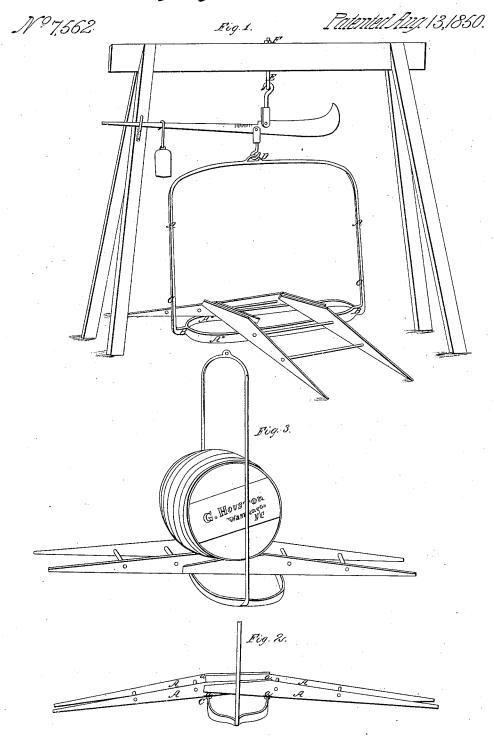
## G. Houston.

## Weighing Scales.



## UNITED STATES PATENT OFFICE.

GEO. HOUSTON, OF WASHINGTON, NORTH CAROLINA.

## WEIGHING-MACHINE.

Specification of Letters Patent No. 7,562, dated August 13, 1850.

To all whom it may concern:

Be it known that I, George Houston, of Washington, in the county of Beaufort and State of North Carolina, have invented a 5 new and useful Machine for Suspending Barrels, Hogsheads, and other Cylindrical Packages, for the Purpose of Ascertaining the Weight of Each, which I call "the Skid-Scale; "and I do hereby declare that the 10 following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which-

Figure 1 is a perspective view, and Figs. 2

and 3 are longitudinal elevations.

The scale frame, (Fig. 1) A, A, A, A, is of iron, nearly in the form of a stirrup iron. The bed-bars A\*, A\*, are ½×1½ inches set 11½ inches apart, for the distance of 24 inches. The ends, B, B, are then gradually brought together, and welded to the suspending parts, C, C, which are of  $\frac{7}{16} \times 1_{\overline{16}}$ inches, and 40 inches in the clear, to the 25 height of 35 inches, therein reaching to the full height of 40 inches. On the top, in the center of the arch, a piece of ½ inch round iron is welded, D, forming an eye, in order to attach it to the lower hook of a scale-30 beam. Leading from the upper hook of the scale-beam there is a screw eye-bolt, E, passing through a cross-beam, with a tap on the upper end, F, to elevate or depress the scale. Fig. 2 shows longitudinally the position 35 of the scale when suspended and ready for

use. The skids, 2 pairs, A, A, A, A, are of oak, 42 inches in length,  $\frac{3}{4}$  of an inch on the edge, 3 inches deep at the resting points, a, a, a, a, and tapering on the top edge to 1 40 inch at the extremity of the short, and ½ an inch at the extremity of the long, ends. Each pair is connected by two spokes, B, B, and are set 13 inches apart. They are faced with thin iron on the upper surface and on

the lower parts of the outer ends. On the 45 under edge of each, near a, a, a, there is a plate of iron the width of the skid let in, through which there are two holes to receive a small staple, one part of which is passed through a hold in the bed-iron, (near 50 C, close to the upper edge,) and so driven home as just to let the skids play freely.

Fig. 3 shows the scale with a barrel suspended, ready for weighing. To use the skid-scale, the iron frame, with the skid at- 55 tached as before described, is connected with the lower hook of a weighing beam; the upper hook of the weighing beam is inserted in the eye of the regulating screw in a cross-beam, and raised, by means of the 60 tap, to within about  $\frac{3}{8}$  of an inch of the ground or floor. In weighing, the barrel is rolled up one pair of the skids till it passes the first bed-iron, when its weight depresses the short ends of the skids to the bed-irons 65 and lifts the long ends from the ground, thus forming a bed for the barrel, as shown in Fig. 3. To remove the barrel from the scale, it is only necessary for the weigher to depress either pair of skids with his foot, 70 and the barrel will roll from the scale.

A scale of the dimensions stated in this specification is sufficient for weighting ordinary barrels of 300 lbs. For larger and heavier packages it would have to be in- 75 creased in size and proportion.

What I claim as my invention, and seek to secure by Letters Patent, is—

The iron frame, together with the skids, and regulating screw, used in connection 80 with a weighing beam, as described in the foregoing specification, and represented in drawings accompanying this.

GEORGE HOUSTON.

Witnesses:

HENRY J. B. CLARKE, W. S. CORDON.