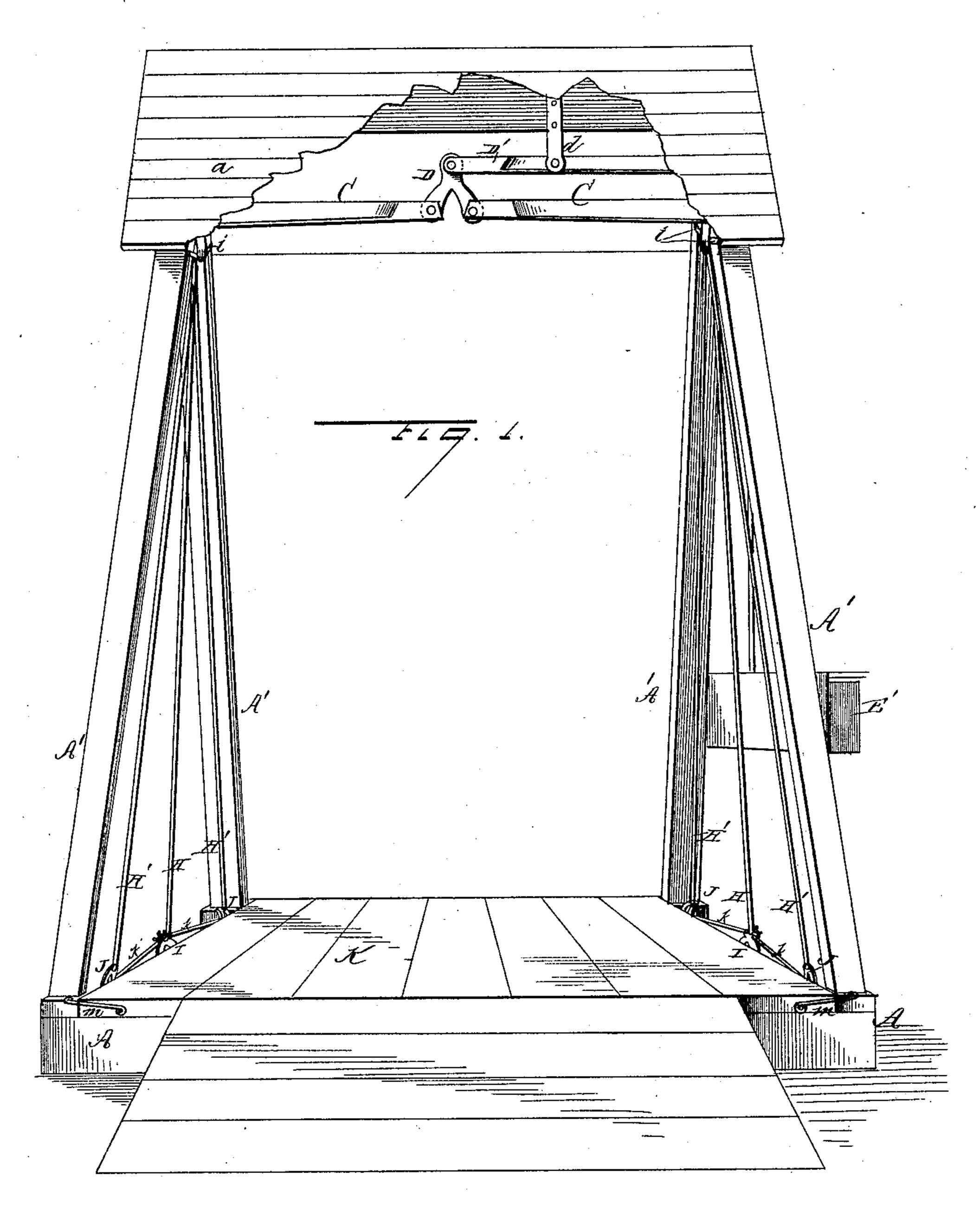
A. G. LOMBARD.

HANGING PLATFORM SCALE.

No. 303,300.

Patented Aug. 12, 1884.



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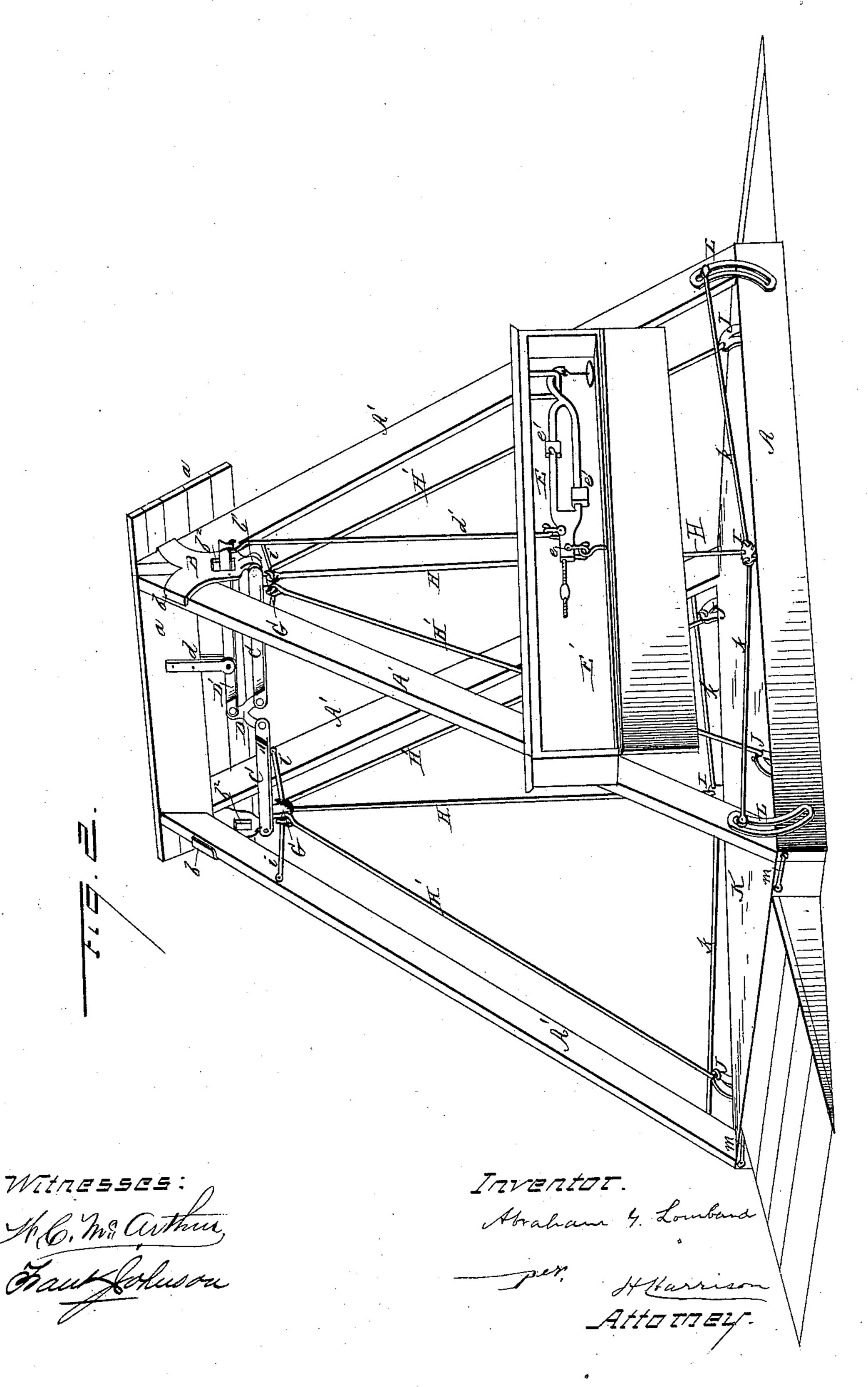
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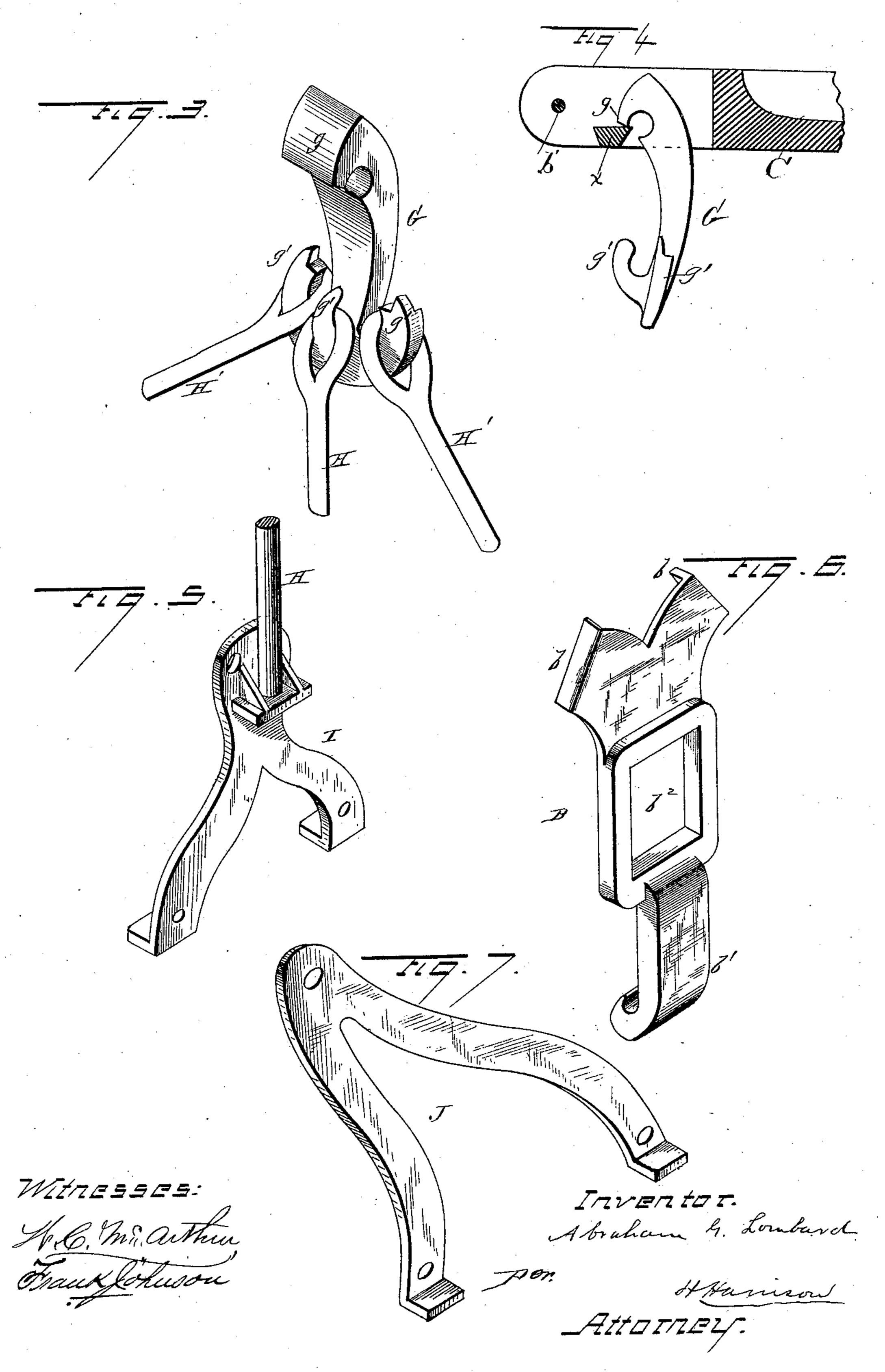


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HANGING PLATFORM SCALE.

No. 303,300.

Patented Aug. 12, 1884.



United States Patent Office.

ABRAHAM G. LOMBARD, OF CHATFIELD, MINNESOTA.

HANGING PLATFORM-SCALE.

SPECIFICATION forming part of Letters Patent No. 303,300, dated August 12, 1884.

Application filed October 11, 1883. (No model.)

To all whom it may concern:

Be it known that I, ABRAHAM G. LOMBARD, a citizen of the United States, residing at Chatfield, in the county of Fillmore and State of 5 Minnesota, have invented certain new and useful Improvements in Hanging Platform-Scales, of which the following is a specification, to wit:

This invention relates to an improvement in 10 platform-scales; and it consists in a platform suspended above ground from a series of levers connecting it with the scale-beam, and in the devices for balancing it and insuring perfect weight, substantially as will be hereinaf-15 ter more fully described, and specifically pointed out in the claims.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe 20 its construction and operation, referring to the

accompanying drawings, in which—

Figures 1 and 2 are perspective views of my improved scale, with the frame partly broken away to show the mechanism. Figs. 3 and 4 25 are detail views of the casting by which the platform is hung to the levers. Figs. 5 and 7 represent the devices for securing the suspension-rods to the platform, and Fig. 6 is the hook-cap by which the levers are hung to the

30 main frame. A represents a frame-work intended to be laid upon the ground, and provided with supporting-posts A' upon each side, which meet each other at their upper ends, and have their 35 peaks covered by a small roof, a, beneath which the lever system is placed to protect it from the weather. Upon the upper ends of the supporting-posts A', upon each side, is placed an iron, B, formed with flanges b, which 40 overlap the edges of the posts, and formed with hooks b' upon their lower ends, above which is an opening, b^2 , through the casting, as clearly seen in Fig. 6. Upon the points of the hooks b' rest the outer ends of two levers, 45 C'C, the inner ends of which approach each other in the center of the apparatus, and are pivoted to a pronged iron, D, which is suspended from the inner end of a lever, D', which is fulcrumed in a strap, d, depending 50 from the roof of the device, and having its outer end passed through the opening b^2 in |

one of the castings B, and connected by a rod, d', with the scale-beam E, located within a box, E', secured upon the posts A', as shown. This scale-beam is of the usual or any suitable form, 55 fulcrumed at e, near its connection with the rod d', and provided with the usual adjustable weight, e'.

To the levers C C, near their outer ends, are small castings G G, formed with a hooked nose, 60 g, on their upper end, which rests upon a suitable knife-edge, x, or ledge upon the levers, and having their lower ends formed with three prongs or hooks, g' g'. To these prongs or hooks g' are secured the suspension-rods H 65 H'—three upon each side—the center rods, H, of which have their lower ends secured to a metal plate, I, in the center of each edge of the platform K, and the outer rods, H', are secured to metal plates J near the ends of the plat- 70 form, as clearly shown in the drawings.

To prevent the platform from swaying in either direction, the hooked castings G are connected by stay-rods i i with the posts A'. and the central plate, I, by rods k k, with slot- 75 ted segments L at the corners of the main frame. The ends of the rods k are made adjustable in these slotted segments, by which means the platform is always adjusted and held in a perfectly-level position. The ends 80 of the platform K are also connected to the main frame A by links or short rods m m, which prevent any side motion of the same.

The scale having been placed in position and adjusted to an even balance, it is ready 85 for use, the method of using being so clearly represented in the accompanying drawings as to need no special description in this place. The platform always hangs even, no matter what the location of the weight to be tested, by 90 reason of the stay-rods; and the entire scale being above ground and requiring no pit, it is easily taken apart and moved from point to point, as may be desired. Chains or wires may be used instead of the iron rods, and the 95 frame and supporting-posts made of metal, if desired.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a platform-scale, a main frame provided with a system of levers, beneath which

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the platform is suspended, in combination with stay-rods connected to the center of the platform, and having their outer ends adjustably secured in slotted plates, whereby the platform may be evenly adjusted and perfect weight insured, whether the load be in the center of the platform or not, substantially as shown and described.

2. In a platform-scale, the frame A A' and the series of levers C C D', in combination with the platform K, suspended therefrom, and the stay-rods k k, having their ends secured in slotted segments L, substantially as and for the purpose set forth.

and for the purpose set forth.

3. The combination, in a platform-scale, of

the frame A A', entirely above the ground, the castings B B, levers C C D', rod d', and scale-beam E, with the suspension-hooks G, having prongs gg', rods H H', secured to the center and ends of the hanging platform, the 20 stay-rods ii, min, and ki, and slotted segments L, all constructed and arranged to operate substantially as and for the purpose set forth.

In testimony whereof I affix my signature in 25 presence of two witnesses.

ABRAHAM G. LOMBARD.

Witnesses:

J. R. Jones,

J. N. WILSON.