

J. BRYSON.
Platform-Scales.

No. 141,627.

Patented August 12, 1873.

Fig. 1.

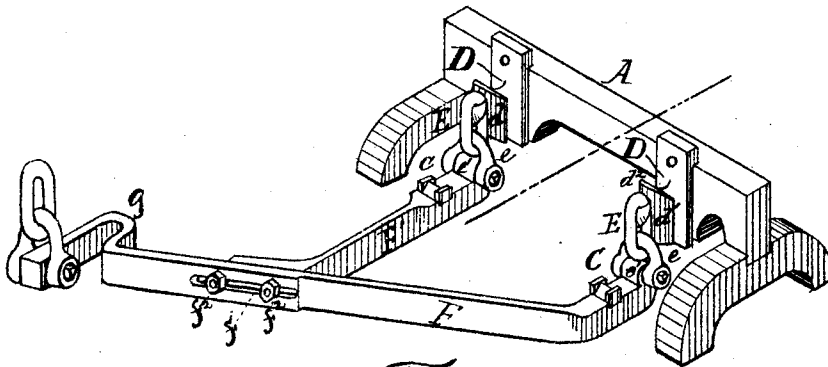
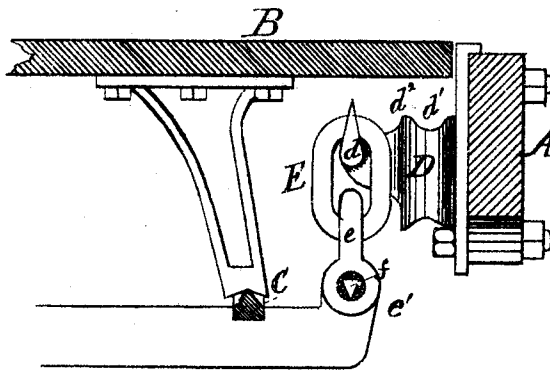


Fig. 2.



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JOSEPH BRYSON, OF QUINCY, ILLINOIS.

IMPROVEMENT IN PLATFORM-SCALES.

Specification forming part of Letters Patent No. **141,627**, dated August 12, 1873; application filed April 11, 1873.

To all whom it may concern:

Be it known that I, JOSEPH BRYSON, of Quincy, in the county of Adams and State of Illinois, have invented certain new and useful Improvements in Platform-Scales; and I do hereby declare that the following is a full, clear, and exact description thereof, that will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon which form a part of this specification.

My invention relates to platform-scales or balances; and the invention consists in a new and improved combination of devices for hanging the platform-bearings to the main or stationary frame of the scale, whereby the platform is permitted to vibrate laterally, or back and forth, without disturbing or affecting its bearings, and by means of which the balance is rendered more sensitive to the weight placed upon it. It also consists in the construction of the transmitting-lever with a circular or U-shaped end, whereby a greater bearing-surface is provided to resist the weight at the middle of the platform, and all danger of twisting the end of the transmitting-lever is obviated. It further consists in a new and improved combination of devices, whereby the position or angle of the transmitting-lever with relation to the stationary frame may be adjusted so as to compensate for the expansion or contraction of the metal by heat or cold, consequent on the change of seasons, and also to compensate for wear by the bending of the transmitting-lever through long-continued use, all as hereinafter more fully set forth.

In the accompanying drawings, Figure 1 is a perspective view, showing my improved form of transmitting-lever and the method of hanging the same to the main frame of the scale. Fig. 2 is a sectional view on the line *xx*, Fig. 1.

A represents one end of the main frame of a platform-scale. B is the platform of the scale, supported on knife-edge bearings C. D D are hooks or hangers, secured to the stationary frame A. They are constructed of

peculiar form, having an outer twisted hook, *d*, and a groove or depression, *d*¹, divided by a ridge or wall, *d*². The object of this ridge interposed between the hook and the groove is to protect the bearings from any dust or water which may find its way down between the platform and the frame, the groove *d*¹ conducting it to the ground beneath the platform. The object of the peculiar twisted form given to the hook is to permit of the platform vibrating freely back and forth, or in a lateral direction. E E are links, by means of which the stirrups *e* and bearing-blocks *e'* are suspended from the hangers D. The bearing-blocks *e'* are attached to or form part of the transmitting-lever, the latter being supported on knife-edge bearings *f* by the stirrups *e*. F is the transmitting-lever, and F' its brace-arm, the two being connected by means of bolts *f*² passed through a long slot, *f*¹, formed in the lever and secured by nuts. The end of the transmitting-lever is bent or shaped in a circular or U form, as shown at *g*, and at the extremity or point it is provided with a stirrup and link, like those before described. The link on the end of the lever connects with the scale-beam rod.

From the peculiar form of the hooks *d* and the use of the links E, and their connection with the bearings, it will be obvious that the platform will vibrate freely, either in a lateral direction or back and forth longitudinally without affecting its bearings, as the lever will move or vibrate with the platform, each maintaining its relative position, so that no extra friction on the knife-edge bearings takes place when the platform vibrates as the wagon or other moving weight comes upon it from one direction and moves off in another, heretofore a great cause of wear and injury to the bearings.

It will also be obvious that, through the method employed for securing the lever and its brace-arm, the angle of the former in its relation to the frame may be readily adjusted when necessary, and that the peculiar shape given to the end of the lever greatly strengthens it and counteracts any tendency to twist.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

The transmitting-lever F, constructed substantially as described, in combination with the arm F', when adjustable with relation to each other, by means of the slot f^1 and bolts f^2 , substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 27th day of December, 1872.

JOSEPH BRYSON.

Witnesses:

P. CALL,
JANE A. MOREY.