A. W. HESS.

Platform-Scales.

No. 168,996. Patented Oct. 19, 1875.

Fig 1

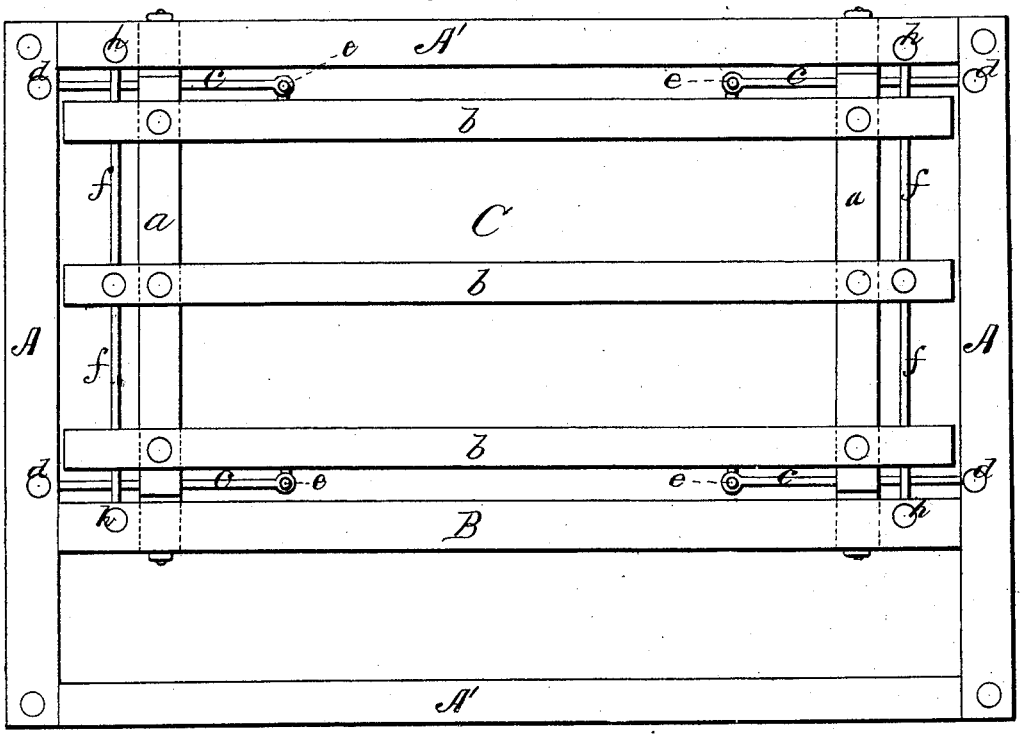


Fig 2

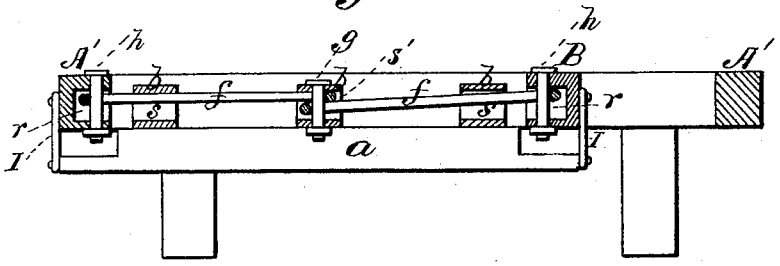
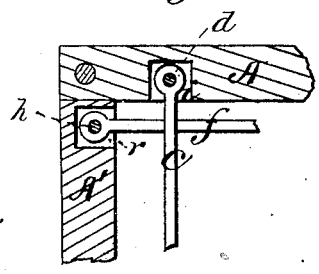


Fig 3



WITNESSES

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IMPROVEMENT IN PLATFORM-SCALES.

Specification forming part of Letters Patent No. **168,996**, dated October 19, 1875; application filed February 20, 1875.

To all whom it may concern:

Be it known that I, ABRAHAM W. HESS, of the city of Chicago, county of Cook and State of Illinois, have invented a new and useful Improvement in Platform-Scales; and I hereby declare the following to be a full and accurate description of the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, and forming a part of this specification.

Figure 1 of the drawings is a plan view of my scales, and Fig. 2 is a transverse vertical sectional view of the same. Fig. 3 is a sectional detail view.

This invention has relation to improvements in platform-scales.

The object of the invention is to devise a means whereby the lateral and endwise oscillation of the weigh-platform in relation to its frame may be prevented, and a requisite degree of stability imparted thereto.

To this end the nature of the invention consists in tie-rods attached to the weigh-platform and its frames, the said rods being vertically movable upon their attachments, but being rigidly held against endwise play thereby, whereby the weigh-platform is allowed to have free vertical motion, and in its different positions it is always retained in a horizontal plane, but is held against lateral and endwise oscillation, as will be hereinafter more fully explained.

In the annexed drawings, A A designate the end and side beams of a preferably rectangular frame, and B an intermediate beam, mortised or otherwise suitably secured to end beams A, as shown in Fig. 1. C designates a weigh-platform, consisting of sub-sills *a* and sleepers *b* arranged thereon, which platform is placed between end beams A and side and intermediate beams A′ B, and is connected from below by a system of lever-connections with the usual well-known scale-beams. *c* designates the tie or check rods attaching the platform longitudinally to the frame, their attachment to the latter being effected by means of pins *d* running through it, and engaging with an eye or loop in the end of the said check-rods, and to the former by means of hooks *e*, rigidly secured to the platform, over which an eye upon the other end of the said rods is engaged, as shown in Fig. 1. The frame ends of these rods are inserted into vertical recesses *i* in the inside of end bars A A, the said recesses being of considerable height, and in this manner, while the rods are held rigidly against endwise play, and thus hold the platform against endwise oscillation, they will allow the latter a free vertical movement, and at the same time preserve the horizontality of the platform in its different positions. *f* designates the lateral check-rods, passing through slots *s* in the lateral sleepers of the platform, and meeting each other in a slot, *s′*, in the central sleeper, so that a loop upon their inner ends shall be directly the one above the other, and admit of their being connected by means of a metallic pin, *g*, passing vertically through the said sleeper into and through the said loops. The outer looped ends of these check-rods are recessed into side bar A′ and intermediate bar B, the recesses *r* in the said bars being of such a size as that the loops shall have free vertical play in a horizontal plane. Rods *f* are held to their engagement with the said bars by means of metallic pins *h* passing vertically through registering perforations in the said bars, into and through the loops upon their outer ends.

By this means the platform is in no manner checked in its vertical movement, but is effectually held against lateral oscillation.

It will be seen from the above description that the weigh-platform is held rigidly against either endwise or lateral oscillation, but is allowed to have a free though limited vertical movement in the horizontal plane, with a view to holding the weigh platform against undue downward depression, whereby the check-rods and their attachments would be unduly strained under an overweight of articles placed thereon, before being balanced by the weight upon the scale-beam.

I make use of slotted hangers I, depending from and rigidly secured to side bar and intermediate bar B, and attached to sub-sills by means of a bolt, *i*, passing through the said links or hangers into the said sub-sills, as shown.

By this means the platform is afforded a supplementary support, and the check-rods

are relieved of all strain, under the circumstances above mentioned.

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

1. The weigh-platform C, in combination with the check-rods *c c* and end beams A, whereby longitudinal movement of the weigh-platform is prevented, substantially as described.

2. The weigh-platform C, provided with the slots *s s'*, in combination with the check-rods *f f* and side beams A, whereby lateral movement of the weigh-platform is prevented, substantially as described.

3. The weigh-platform C and stationary frame A A', both constructed as set forth, in combination with the check-rods *c c f f*, substantially as described, and for the purpose set forth.

A. W. HESS.

In presence of—
JOEL TIFFANY,
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