

(No Model.)

H. L. FISHER.
PLATFORM SCALE.

No. 523,142.

Patented July 17, 1894.

Fig. 1.

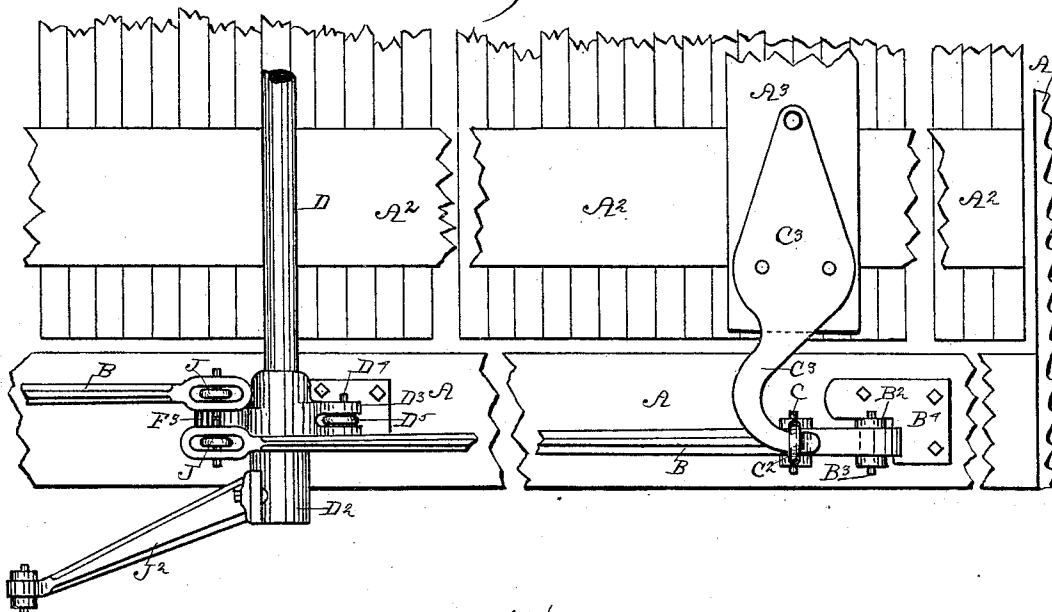


Fig. 2.

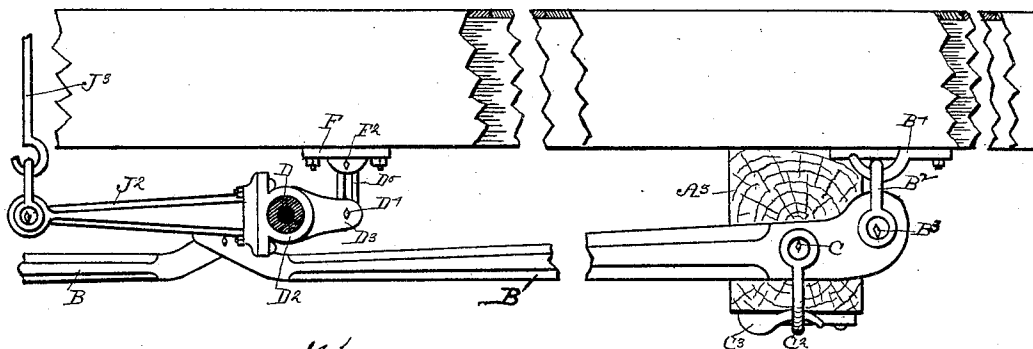
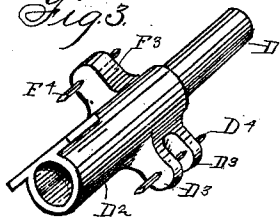


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

HARVEY L. FISHER, OF DES MOINES, IOWA.

PLATFORM-SCALE.

SPECIFICATION forming part of Letters Patent No. 523,142, dated July 17, 1894.

Application filed May 25, 1893. Serial No. 475,537. (No model.)

To all whom it may concern:

Be it known that I, HARVEY L. FISHER, a citizen of the United States of America, residing at Des Moines, in the county of Polk and State of Iowa, have invented certain new and useful Improvements in Platform-Scales, of which the following is a specification.

The objects of my invention are to cheapen the cost, simplify the construction, and increase the strength, durability and efficiency of platform scales, to place all of the bearings beneath the frame of the scales rather than under the platform and to construct the weighing mechanism in a compact manner so that a comparatively shallow pit will contain all of the operative parts and retain the platform approximately at the ground surface.

To this end my invention consists in the construction, arrangement and combination of certain operative parts of the weighing mechanism as hereinafter set forth, pointed out in my claims and illustrated in the accompanying drawings, in which—

Figure 1 is a bottom view of portions of the platform, and weighing mechanism. Fig. 2 is a side view of the same. Fig. 3 is an enlarged detail perspective view of the device to which the levers are pivoted at their inner ends.

Referring to the accompanying drawings the reference letter A is used to designate the supporting sills or frame scales preferably placed over a shallow pit.

A² designates the platform loosely placed within this frame and having the transverse cross pieces A³ beneath its ends.

The scale levers B are mounted beneath the sills or frame A and extended in the same horizontal plane from the ends to the central portion thereof along each side, each one is supported by means of a link B² which is passed over the knife edged bearings B³ and secured to the hook B⁴ which latter is fixed to the sill or frame A. A short distance in advance of the knife edged bearings B³ is a like bearing C from which depends a link C² which supports a hook C³ that is secured to the cross piece A³ of the platform A². Said levers B are disposed directly beneath the sills or frame A, in the same horizontal plane and in parallel vertical planes.

D designates a rock shaft extended transversely of the central portion of the platform. At each end of said rock shaft is a device D² adapted to be permanently fixed thereto and having the lugs D³ projecting laterally therefrom. D⁴ is a knife edged pivot in said lug. D⁵ is a link encircling said pivot.

F designates a plate fixed to a stationary support and containing a knife edged pivot F² that supports said link D⁵.

F³ is a lug projecting laterally from the opposite side of the device D² and F⁴ is a knife edged pivot mounted therein to extend in opposite directions therefrom to connect and support the inner ends of the two levers B as shown in Figs. 1 and 2.

The meeting ends of the levers B are supported at each side of the device by means of links J which are passed over the knife edged pivot. This pivot F⁴ is located directly in the transverse center of the weighing platform, beneath the side sills or frame and it will be obvious that any weight applied to the platform will cause the inner ends of the beams B to move downwardly and thereby rock the shaft D.

J² designates an arm extended laterally and outwardly from the rock shaft D to be normally in a horizontal position and J³ is a rod attached thereto to connect with a suitable scale beam in an ordinary manner, so that when the rock shaft D is moved the rod J³ will be pulled downwardly.

It is obvious that by showing only sections of the frame and the platform in the drawings the operative parts can be shown on a larger scale than if the frame and platform were shown complete. It is also obvious that the rock shaft D extends across the center of the complete scales and that its supports at each end are to be like those shown at one end only.

Having thus described my invention, what I claim as new therein, and desire to secure by Letters Patent of the United States therefor, is—

1. In a platform scales, the combination of the following elements, to wit, suitable levers pivotally supported upon the end portions of a stationary frame and extended to a rock shaft at the center of said frame, a platform pivotally mounted upon said levers near their outer ends as set forth, a rock shaft extended

transversely of the platform near its central portion and pivotally supported as set forth from a stationary frame, a lug extending laterally from the end of said shaft, knife edged
 5 pivots in the said lug and links connecting said pivots with the inner end of each lever substantially as and for the purposes stated.

2. In a platform scales, a frame A, a platform A² within said frame, a cross piece A³,
 10 a lever B extending from the side portion of the frame and pivotally supported from the said frame by means of a hook B⁴ secured thereto and a link B² and bearing B³ to connect the lever therewith and connected with
 15 the cross piece A³ by means of the bearing C, a link C² and a fixed hook C³ as set forth, a rock shaft D having a device D² on its end, the lugs D³ projecting laterally therefrom, the knife edged pivots D⁴ in said lugs, links D⁵
 20 encircling said pivots, the plate F fixed to a stationary support, a pivot F² in said plate to engage the links D⁵ as set forth, the lug F³

projecting from the device D², the pivot F⁴, in said lug and the links J to support the inner ends of the levers B from the pivot F⁴,
 25 and the arm J² extended from one end of the rock shaft D, all arranged and combined substantially as and for the purposes stated.

3. In a platform scales, a sill A, a rock shaft D and a device D² connected with the end of
 30 said shaft and provided with integral lugs D³ and F³ and pivots fixed in said lugs as shown, the levers B connected with the said lug F³ by means of links and the pivots projecting from the lug, and the said rock shaft suspended from the sill A by means of the device D², a link and the plate F having a fixed
 35 pivot F², all arranged and combined to operate in the manner set forth for the purposes stated.

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Witnesses:

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