No. 830,930. PATENTED SEPT. 11, 1906.

W. H. SARGENT.

WEIGHING SCALE.

APPLICATION FILED MAR. 12, 1906.

2 SHEETS—SHEET 1.

Fig. 1.

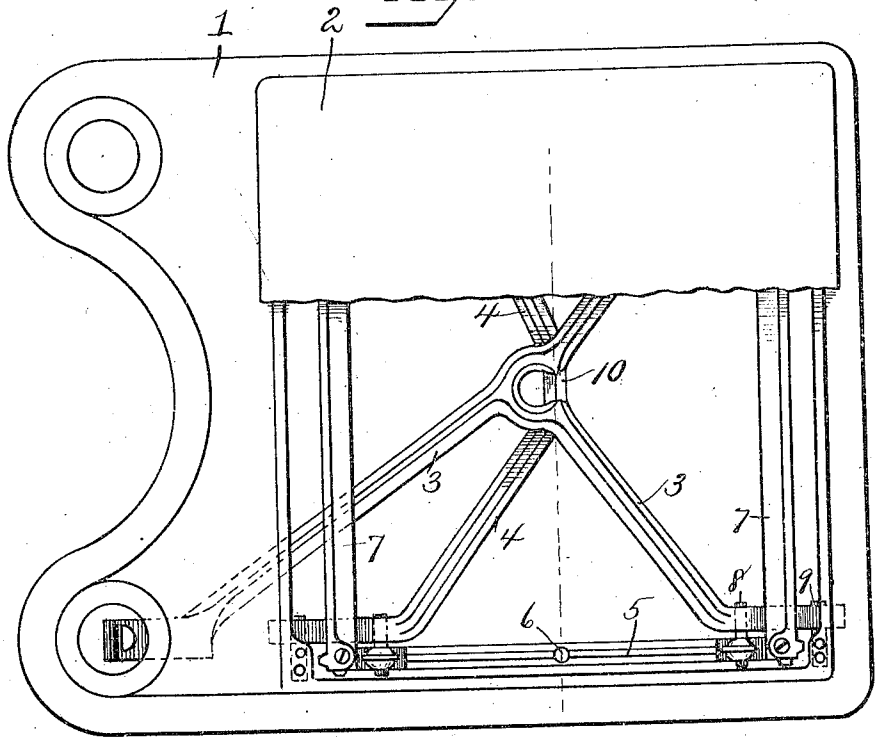
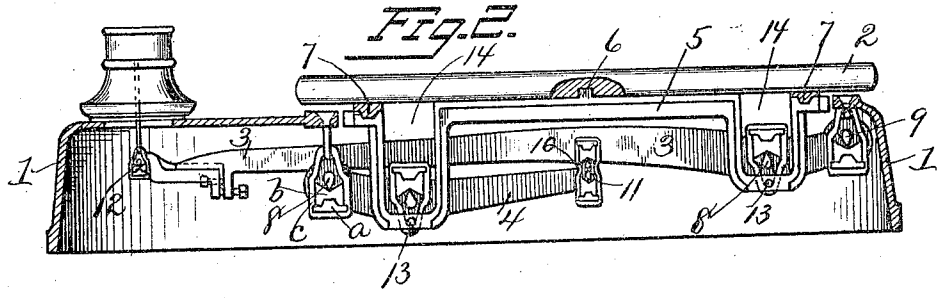


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

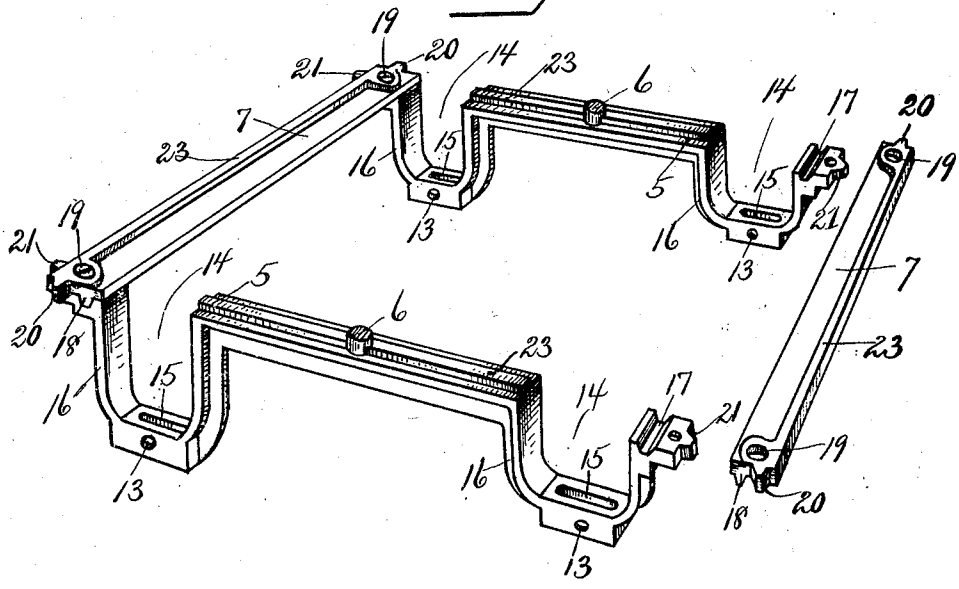
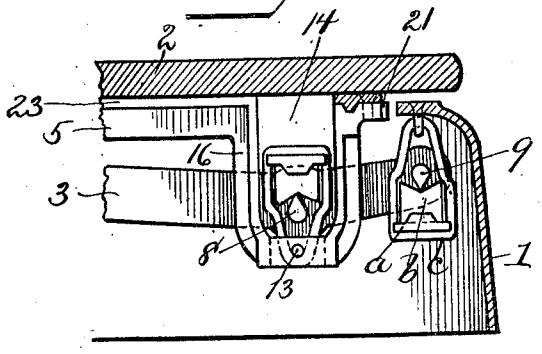


Fig. 4.



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UNITED STATES PATENT OFFICE.

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WEIGHING-SCALE.

No. 830,930. Specification of Letters Patent. Patented Sept. 11, 1906.

Original application filed November 22, 1905, Serial No. 288,579. Divided and this application filed March 12, 1906. Serial No. 305,516.

To all whom it may concern:

Be it known that I, WILLIS H. SARGENT, a citizen of the United States, residing at St. Johnsbury, in the county of Caledonia, State of Vermont, have invented certain new and useful Improvements in Weighing-Scales, of which the following is a description, reference being had to the accompanying drawings and to the characters of reference marked thereon.

This application is a division of my application for patent for improvement in suspension-bearing scales filed November 22, 1905, Serial No. 288,579.

The invention relates to suspension-bearing weighing-scales, and has for its principal object to provide a weighing mechanism of great sensitiveness and durability and to so arrange and construct the same as to permit ready access to all parts of the scale for examination, cleaning, and repairing.

A further object of the invention is to improve and simplify the construction of the platform-supporting frame.

With these and other objects in view the invention consists in the novel construction and arrangement of parts hereinafter described, illustrated in the accompanying drawings, and pointed out in the appended claims.

In the drawings, which illustrate the invention, Figure 1 is a plan view of the lower portion of a platform-scale constructed in accordance with the invention, a portion of the platform being broken away in order to more clearly illustrate the construction. Fig. 2 is a transverse sectional view of the same. Fig. 3 is a detail perspective view of the platform-supporting frame, one of the transverse tie-bars being shown detached; and Fig. 4 is a detail sectional view of a portion of the sketch, showing the suspension-bearings of the platform-lever.

In the drawings the bearings are each formed of a block *b* of non-corrodible material, such as agate, as fully set forth in the application above referred to. These blocks *b* have cap-plates *a*, preferably formed of metal, and are arranged within loops or bails *c*.

The frame 1 of the scale is of the usual construction and is arranged to receive levers 3 4, also of the usual construction. These levers are hung to the frame by the agate bearing-loops previously referred to, the loops being hung on staples carried by the frame. The levers are suitably connected at the center.

Arranged inside the scale-frame is a skeleton frame of the construction best shown in Fig. 3 and consisting of parallel side bars 5, united by cross or tie bars 7, the ends of the bars 5 having projecting end lugs 21 and the tie-bars being provided with end lugs 20, which strike against the scale-frame and limit lateral play of the platform. The lower faces of the bars 7 are provided with ribs 18, which enter grooves 17, formed in the side bars 7, and the frame members are held rigidly together by screws 19. On the upper faces of all of the bars are arranged vertical ribs 23, which serve as supports for the platform 2, and projecting upward from the ribs of the side bars are pins or lugs 6, which enter recesses in the platform and prevent independent movement thereof. Each bar 5 of the frame is bent near each of its ends to form an inverted arch 16, and each open-top recess thus formed receives one of the agate bearing-loops, the block receiving the knife-edge 8 of the lever and the lower end of the loop entering a slot in the bar and being held by a pin 13.

One of the principal advantages of the construction described is that by merely lifting off the platform 2 immediate access may be had to the several bearings and by removing the pins 13 and the screws 19 the side bars may be conveniently removed through the bottom of the scale-frame. All of the parts may be readily cleaned and repaired and the work of assembling the scale is materially simplified.

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

1. In a scale, a skeleton platform-frame having open-top recesses, platform-levers, bearings arranged in the recesses and connecting the frame to the levers, and a removable platform forming a cover for the recesses.

2. In a scale, a platform, platform-levers, a skeleton frame having open-top recesses, and suspension-bearings arranged therein and connecting the frame to the levers.

3. In a scale, a platform, platform-levers, a skeleton frame comprising side and tie bars, the side bars being provided with inverted

arches near their ends and suspension-bearings arranged within such arched portions and connecting the frame and levers.

4. In a scale, platform-levers, a frame including recessed side bars, and bars forming detachable connections between the side bars, a platform resting on the frame and detachable therefrom, and a plurality of bearing members arranged in the recesses of the side bars and connecting the frame with the levers.

5. In a scale, platform-levers, a frame including detachable side and tie bars, said side bars being bent downward to form open-top recesses, and being slotted, bearing-blocks, links carrying the same and extending into the slots, pins crossing the slots, and connecting the links to the side bars, and a platform loosely mounted on said frame.

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

WILLIS H. SARGENT.

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