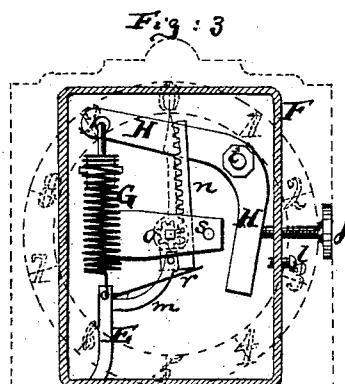
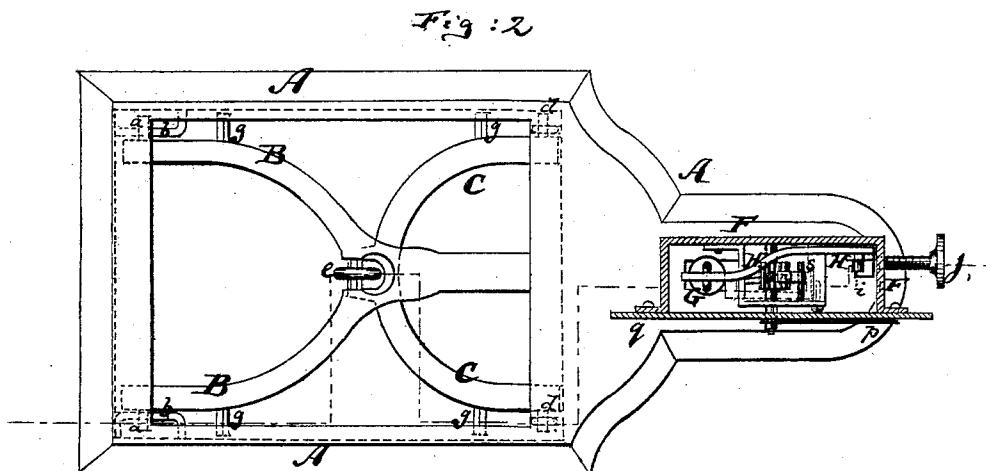
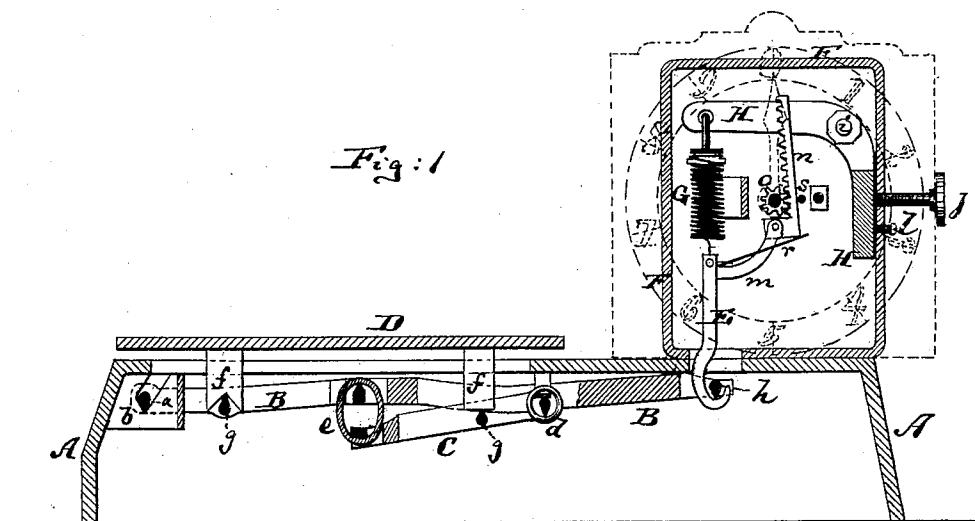


J. P. CHATILLON,

Platform-Scale.

No. 203,589.

Patented May 14, 1878.



Witnesses:

T. B. Mosher

Dr. Briesen

Inventor:

John P. Chatillon
by his attorney
Ann Briesca

UNITED STATES PATENT OFFICE.

JOHN P. CHATILLON, OF NEW YORK, N. Y., ASSIGNOR TO JOHN CHATILLON & SONS, OF SAME PLACE.

IMPROVEMENT IN PLATFORM-SCALES.

Specification forming part of Letters Patent No. **203,589**, dated May 14, 1878; application filed April 19, 1878.

To all whom it may concern:

Be it known that I, JOHN P. CHATILLON, of New York city, county and State of New York, have invented a new and Improved Platform-Scale, of which the following is a specification:

Figure 1 is a vertical central section of my improved platform-scale. Fig. 2 is a top view, partly in section, of the same, showing the platform removed. Fig. 3 is a detail sectional face view of the upper part of the scale, showing the mechanism adjusted to set the hand to zero when the platform is partly weighted.

Similar letters of reference indicate corresponding parts in all the figures.

This invention relates to several features of improvement in platform-scales of the kind used in families and on counters of stores, &c.; and the invention consists in the various details of improvement and new combinations of parts, which are hereinafter more fully specified.

In the accompanying drawing, the letter A represents the frame of the scale. Within this frame are hung two levers, B and C. The lever B is Y-shaped or forked; the lever C, U-shaped, as clearly shown in Fig. 2. The forked ends of the lever B are provided with projecting pivots *a a*, that are hung in fixed bearings *b*. (Clearly shown in Figs. 1 and 2.)

I find that by using the fixed bearings the motion of the lever C becomes steady, and the hand or index readily becomes fixed, where, with the jointed or hinged bearings, it trembles for a long time, and fails to indicate with proper rapidity the weight of the substance placed on the platform.

The ends of the U-shaped lever C are shown to be supported on hinged bearings *d*; but they may also, if desired, be hung on fixed bearings.

The two levers B and C are connected under the center of the platform D by a suitable link, *e*, and the platform has projecting legs *f f*, which rest on pivots *g g*, projecting from the levers, as shown, all the parts being so arranged that a weight on the platform, even when placed near a corner or edge thereof, will depress the lever B in accordance with such weight.

The straight stem or body of the lever B

connects at its free end to a runner, E, that extends upward into a box, F, said runner being at its upper end suspended from a spring, G, while its lower end hooks under a pivot, *h*, which is formed at the free end of the lever B, as shown in Fig. 1. The upper end of the spring G is suspended from an L-shaped lever, H, which is pivoted at *i* in the box F. Two screws, *j* and *l*, extend through one side of the box F, against the vertical arm of the L-shaped lever H. An arm, *m*, from the runner E connects by a pivot with a toothed rack, *n*, which meshes into the teeth of a pinion, *o*, that is mounted upon the shaft of the hand or index *p*. This index travels over a suitable dial, *q*, that constitutes one face of the box F; or the box may have two such dials on opposite sides, in which case two pointers or index-hands will be used.

The rack *n* is, by a spring, *r*, held in contact with the pinion, and is guided in its up-and-down motion by a pin, *s*, that bears against the smooth edge of the rack. Now, when the scale is to be used, the screw *l* is first adjusted against the lever H to so strain the spring G as to put the hand to zero when the platform is unweighted. After that, if matter is to be weighed in a receptacle, such receptacle is first placed upon the platform, and the screw *j* then applied against the lever H, to still more strain the spring and set the hand to zero while such receptacle is on the platform. The scale will, after that, correctly indicate the actual weight of the matter put into the receptacle without requiring special calculation of the tare.

I claim—

1. The combination of the lever B with the runner E, connected to the pivot *h*, and with the spring G and adjustable lever H, substantially as herein shown and described.
2. The combination of the box F with the two screws *j l*, lever H, spring G, and runner E, for operations substantially as specified.
3. The combination of the runner E, having arm *m*, with the spring G, lever H, screws *j l*, spring *r*, rack *n*, pin *s*, and pinion *o*, substantially as herein shown and described.

JOHN P. CHATILLON.

Witnesses:

T. B. MOSHER,
J. TURK.