

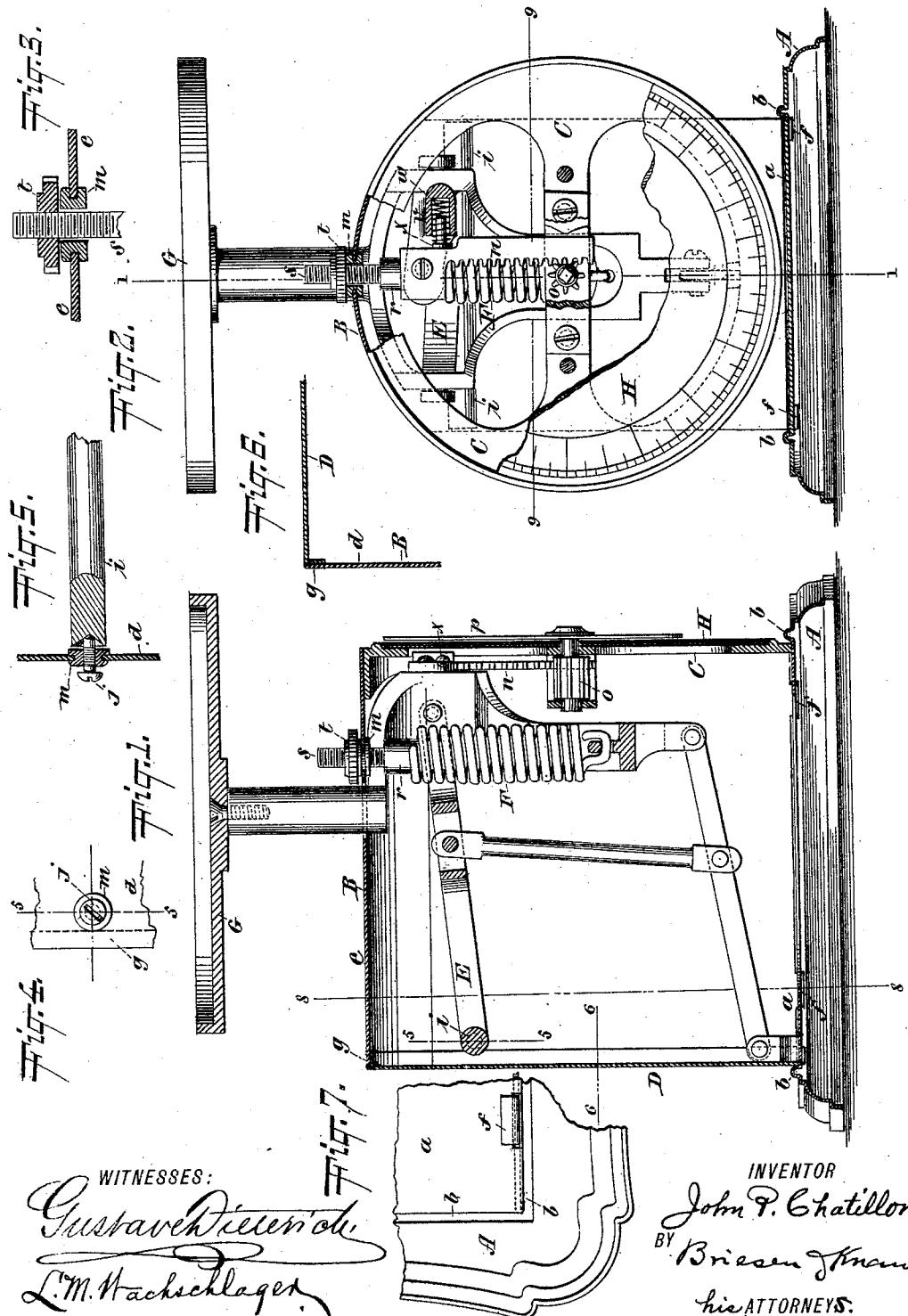
(No Model.)

2 Sheets—Sheet 1.

J. P. CHATILLON.
SPRING PLATFORM SCALE.

No. 469,024.

Patented Feb. 16, 1892.



WITNESSES:

Gustave Dierckx
L.M. Hachslager

INVENTOR
John P. Chatillon,
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his ATTORNEYS.

(No Model.)

2 Sheets—Sheet 2.

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FIG. 8.

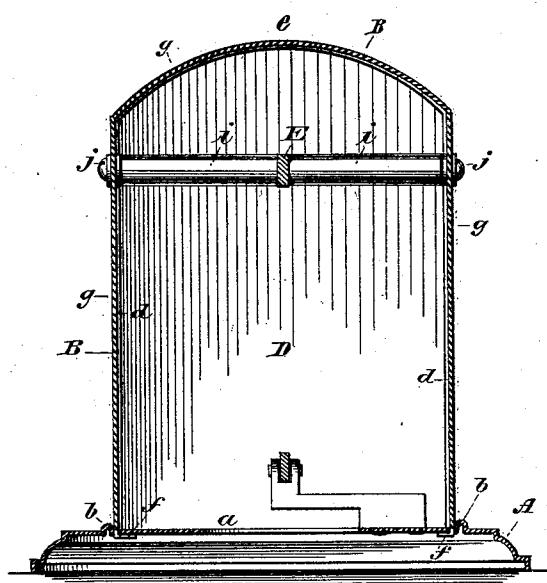
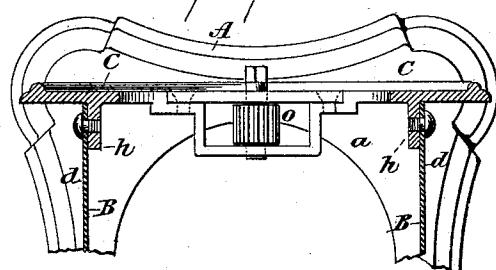


FIG. 9.



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UNITED STATES PATENT OFFICE.

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

SPRING PLATFORM-SCALE.

SPECIFICATION forming part of Letters Patent No. 469,024, dated February 16, 1892.

Application filed November 23, 1891. Serial No. 412,738. (No model.)

To all whom it may concern:

Be it known that I, JOHN P. CHATILLON, a resident of the city of New York, in the county and State of New York, have invented an Improved Spring Platform-Scale, of which the following is a specification, reference being had to the accompanying drawings, forming part hereof, in which—

Figure 1 is a vertical central section of my improved spring platform-scale, taken on the line 1 1, Fig. 2. Fig. 2 is a front view, partly in section, of the same. Fig. 3 is a detail vertical section of the tension-adjusting screw. Fig. 4 is a detail side view, and Fig. 5 a partial section, of the means for holding the beam-gudgeons. Fig. 6 is a detail horizontal section on the line 6 6, Fig. 1. Fig. 7 is a detail bottom view of one corner of the scale. Fig. 8 is a cross-section on the line 8 8, Fig. 1. Fig. 9 is a horizontal section of the front portion of the scale on the line 9 9, Fig. 2.

The main object of this invention is to construct a spring platform-scale of the lightest practicable material, so that for transportation and analogous purposes it may become less expensive than scales of like size as heretofore made.

The invention mainly consists in the peculiar construction of sheet-metal main body for the scale; also in other details of improvement that will be hereinafter more fully specified.

In the drawings the letter A represents the sheet-metal bottom of my improved scale, the same being struck up of a blank of sheet metal, so as to constitute an elevated platform a, on which the remaining parts of the scale are supported. On this platform is a quadrangular raised bead b, against which the vertical walls of the superstructure are placed, as in Figs. 1, 2, and 8, so that these four beads, meeting at right angles, keep the four upright walls of the superstructure from spreading at their lower ends. The superstructure is formed of three main parts—to wit, the central body B, the front plate C, and the back plate D. The central body B of this superstructure is arch-shaped, as in Fig. 8, forming the vertical sides d and the top plate or roof e in one single piece of sheet metal. The lower ends of the uprights d have lugs f, which, passing through holes in the platform a, are clinched

beneath said platform, as in Fig. 8, so as to keep the parts A B duly assembled. The back plate D is flanged, as at g, to lap around or under the top and sides of the body B, and is also provided with lugs passing through the platform a to keep it in position. The front plate C may be made of cast metal, its lower end resting against the front bead b. Inwardly-projecting lugs h on the front plate fit against the inner walls d of the body B and are screwed or riveted thereto, as in Fig. 9, so that thus the parts A B C D are firmly connected into a rigid structure incasing the mechanism of the scale. The scale-beam E carries a rear cross-bar i, the ends of which hang on gudgeons or pins j. These pins pass through the side walls d of the sheet-metal body B, and, as they would have but insufficient support in the sheet-metal walls d I place into the apertures of these walls that are provided for this purpose heavier metallic blocks m, (see Fig. 5,) which are upset against both sides of the walls d, eyelet fashion, and furnish broad supports for the gudgeons or pins j. The scale-beam connects in the usual or suitable manner with the spring F and with the platform G and carries at its front portion a toothed rack n, which engages a pinion o, which has its bearings in the front plate C. The arbor of the pinion o carries the usual pointer p in front of a scale H, which is affixed to the front of the plate C, all these parts being arranged in the customary manner for the purpose of moving the pointer p in front of the dial or scale whenever the platform G is depressed. The upper end of the spring F is tied or otherwise fastened to a block r, from which projects a screw s through the roof e of the body B. Above the roof e the screw s receives a nut t, which when turned will move the screw farther up or down and thereby strain the spring F more or less for setting the scale correctly.

For the purpose of forming a proper guidance for the vertical screw s I place through the dome e of the sheet-metal body B a block m, (see Fig. 3,) which in all respects is of the character of the block m shown in Fig. 5, and which is fastened eyelet fashion to the dome e, so as to form a longer guide for the screw s than the sheet-metal roof or dome e alone

could furnish. The rack *n* is not quite vertical, owing to the thickness or diameter of the pinion *o*. In order to nevertheless cause it to remain in proper contact with the pinion *o* during the absolutely vertical movements of the platform *G*, I have pivoted the upper end of this rack *n* by the pin *u* to the appropriate projection of the scale-beam and have formed a cavity *v* in the scale-beam nearly adjoining the upper part of this rack, but at some distance below the pivot *u*, and have placed into this cavity *v* a spring *w*, which gently crowds a pin *x* against the edge of the rack, thereby gently holding the rack in engagement with the pinion *o*, though the rack is not quite vertical in its position.

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

1. In a spring platform-scale, the scale-body 20 constructed of the sheet-metal bottom *A*, having quadrangular upwardly-extending beads *b*, the sheet-metal body *B*, forming side walls *d* and top *e*, said side walls having lugs *f*, that pass through apertures in the bottom *A* close 25 to the inner edges of the beads *b*, and the front plate *C*, having inwardly-projecting lugs *h*, that are secured to the side walls *d*, substantially as and for the purpose described.

2. The combination of the scale-beam *E*, 30 having cavity *v*, with the pivoted rack *n*, spring *w*, pin *x*, and the pinion *o* of the pointer or indicator, substantially as and for the purpose herein shown and described.

JOHN P. CHATILLON.

Witnesses:

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