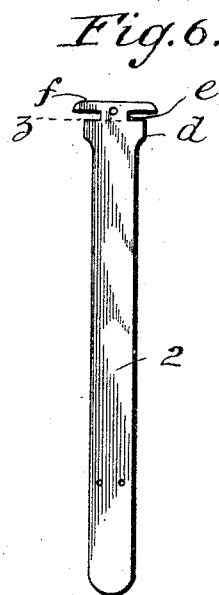
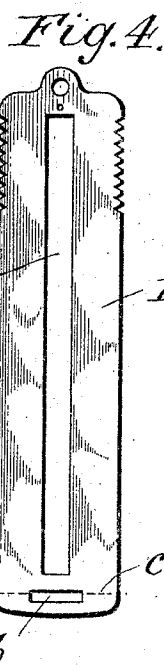
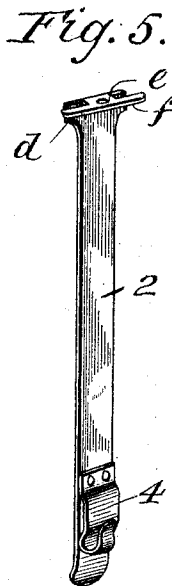
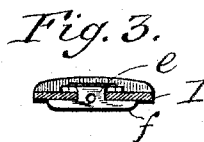
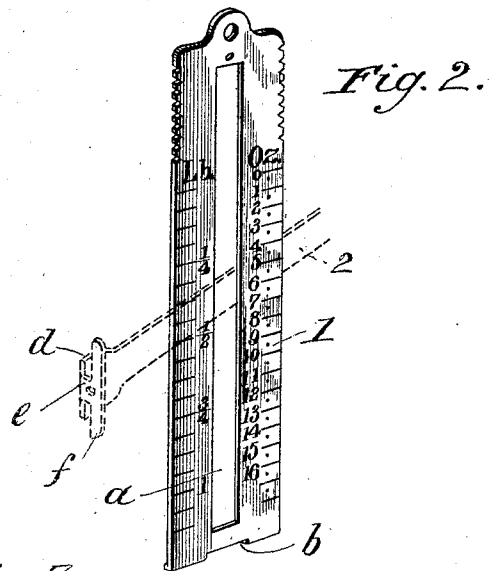
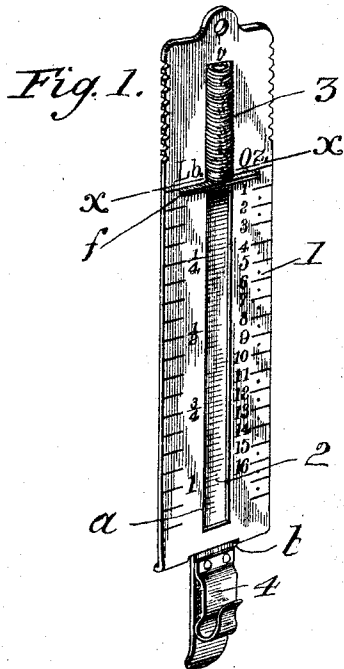


H. T. GAY.  
 SPRING BALANCE.  
 APPLICATION FILED FEB. 20, 1909.

946,822.

Patented Jan. 18, 1910.



WITNESSES

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# UNITED STATES PATENT OFFICE

HERMAN T. GAY, OF BALTIMORE, MARYLAND.

## SPRING-BALANCE.

946,822.

Specification of Letters Patent. Patented Jan. 18, 1910.

Application filed February 20, 1909. Serial No. 479,261.

To all whom it may concern:

Be it known that I, HERMAN T. GAY, of the city of Baltimore and State of Maryland, have invented an Improved Spring Balance or Scale, of which the following is a specification.

This invention consists in a peculiar construction of the various parts of the scale whereby they may be cheaply produced, and easily assembled as will hereinafter fully appear.

In the further description of the said invention which follows, reference is made to the accompanying drawing, forming a part hereof, and in which,—

Figure 1 is a perspective front view of the complete scale. Fig. 2 is a similar view of the face plate of the scale, together with a dotted delineation of a vertically sliding plate forming a part of the scale, illustrating one way of assembling the said parts. Fig. 3 is a section of Fig. 1 taken on the dotted line  $x-x$ . Fig. 4 is a front view of the face plate in the first state of its manufacture, or before its lower and transversely slotted end is bent backward at a right angle, as shown in Figs. 1 and 2. Fig. 5 is a perspective front view of the completed vertically sliding plate before referred to, together with the attachment whereby letters and other small articles can be suspended during the act of weighing, and Fig. 6 is a face view of the said vertically sliding plate before its upper end is bent forward at a right angle as shown in Figs. 1, 3 and 5.

Referring now to the drawing, 1 is the graduated face plate of the scale which is first stamped into the shape shown in Fig. 4, in which it is shown as provided with the central vertical slot  $a$  and the transverse slot  $b$  near its lower end. The upper portion of the face plate 1 is roughened at its edges as shown, to prevent the plate sliding through the fingers when the scale is held by hand in the act of weighing; and its lower end is bent backward at a right angle on the dotted line  $c$ .

2 is the vertically sliding plate before referred to, which is first stamped out flat as shown in Fig. 6. It will be seen that the breadth of this plate is greater than that of the slot  $a$ , that at its upper end it is provided with lateral projections  $d$ , that above the said projections is a neck  $e$  having a width which is slightly less than that of the

slot  $a$ , and that above the neck, is a perforated bar or head  $f$ . The vertically sliding plate as described is then bent on the dotted line  $z$  so as to bring the bar  $f$  and its neck  $e$  forward at a right angle as shown in Fig. 5, when the device is in a condition for attachment to the face plate 1. This attachment may be accomplished by passing the bar  $f$  and neck  $e$  while the former is in a vertical position through the slot  $a$  from the back of the face plate, and then turning the device into its correct position shown in Fig. 1 after which it is raised until its lower end will enter the slot  $b$  when it may be allowed to drop; or it may be inserted through the slot  $a$  from the front of the face plate, as shown by its dotted delineation in Fig. 2.

3 is a coiled spring having a diameter less than the width of the slot  $a$ . Its upper end is hooked through a hole in the face plate 1, and its lower end similarly attached to the perforated bar  $f$ ; and the length of the spring is such that when the scale is not in use the bar  $f$  will register with the zero point of the graduation marks on the face of the plate. After the sliding plate is placed in position as described, the spring hook 4 for holding parcels to be weighed, is riveted to the plate; and in order that the scale may be adapted to weigh letters, the hook 4 is offset and placed above the extreme end of the plate, as shown in Fig. 1, the letters being forced between the hook and the plate as will be readily understood.

I claim as my invention,—

1. In a spring balance, a graduated face plate having a central vertical slot, and a transverse slot at its lower end across which the face plate is bent backward at a right angle, combined with a vertically sliding plate having a width which is greater than that of the vertical slot in the face plate, an offset horizontal indicating bar at its upper end the said plate being situated in the rear of the face plate with its lower end extending through the transverse slot in the same and its transverse indicating bar in the front of the face plate, and a coiled spring which forms the connection between the horizontal bar and the face plate, substantially as specified.

2. In a spring balance, a graduated face plate having therein a vertical slot, and a sliding plate which is applied to the rear

side of the face plate, having a neck and a transverse bar which project horizontally therefrom, and which are integral therewith, the neck being within the vertical slot  
5 and the bar in front of the face plate, combined with a spring which connects the said transverse bar with the upper portion of the

face plate, and which is situated within the vertical slot, substantially as specified.

HERMAN T. GAY.

Witnesses:

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