April 9, 1940. J. P. CHAMBERLAIN 2,196,334

PLATFORM SCALE

Filed April 23, 1938

FIG. 1.

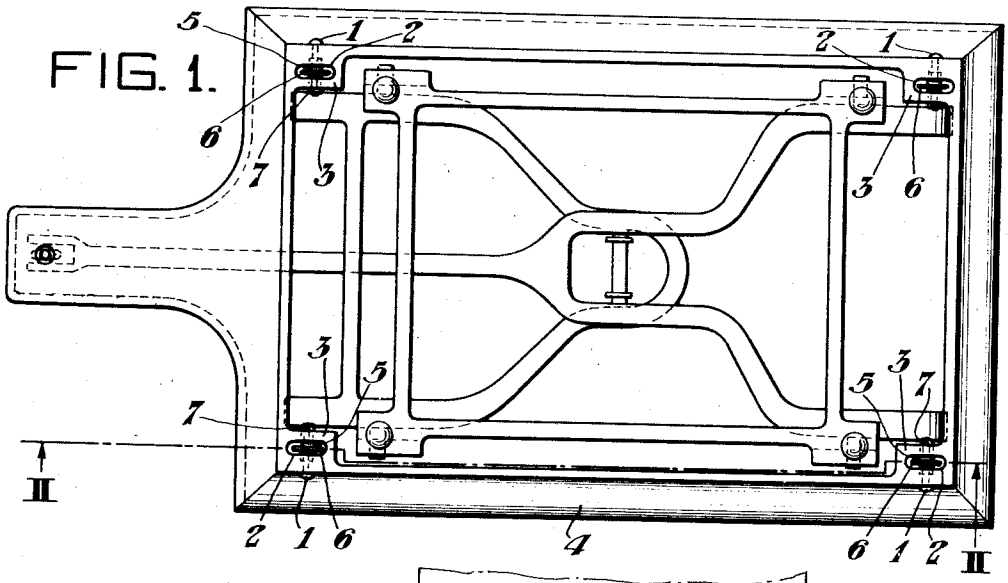


FIG. 2.

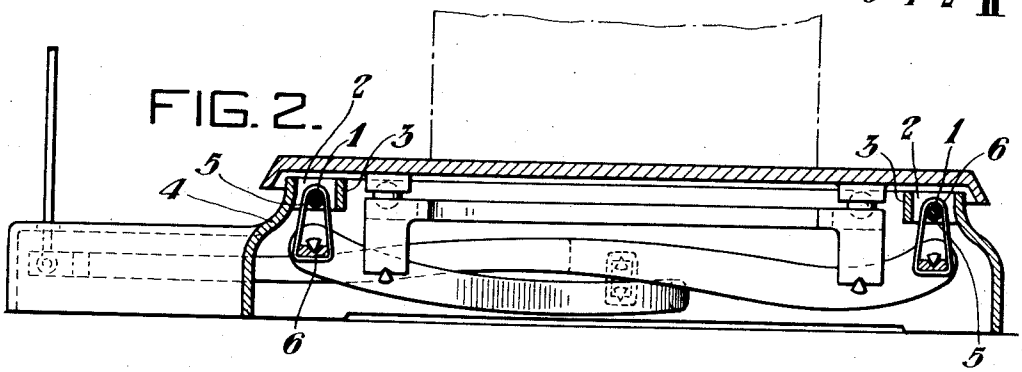


FIG. 3.

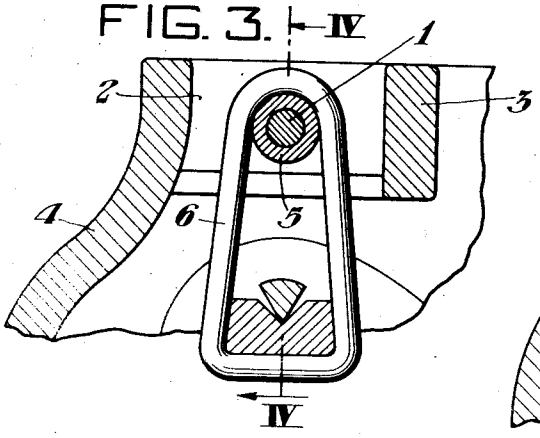
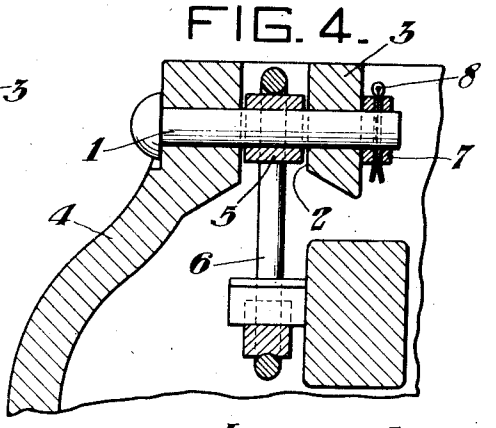


FIG. 4.



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PLATFORM SCALE

Julius P. Chamberlain, Homestead, Pa.

Application April 23, 1938, Serial No. 203,957

1 Claim. (Cl. 308—2)

It is common practice to suspend the lever system of platform scales by four corner links hung from four corner pins supported by a rectangular scale frame so that the lever system is capable of horizontal movement to some degree, it being understood that the scale platform is carried by the lever system.

The object of the present inventor is to improve the accurate life of such scales by reducing wear of these corner pins and corner links.

A specific example of the invention is illustrated by the accompanying drawing, in which:

Figure 1 is a top view of a platform scale embodying the principle of the invention, the platform being removed;

Figure 2 is a vertical section taken from line II—II of Figure 1;

Figure 3 is an enlargement from Figure 2; and,

Figure 4 is a section of Figure 3 taken from the line IV—IV of Figure 3.

More specifically, this drawing shows the aforementioned corner assembly as comprising in each instance a pin 1 horizontally mounted transversely through a slot 2 formed in a lug 3 at the corner of a scale frame 4. A bushing 5 is fitted on this pin 1, and the link 6 is suspended from this bushing.

The inside of the upper portion of the link 6 is shaped to closely fit the bushing 5 over a substantial area. The link is illustrated as being made from round wire with its upper portion semi-circularly looped to provide an inside arcuate surface having the same radius as that of the outside of the bushing 5. The inside diameter of the bushing 5 closely approximates the diameter of the pin 1, and this bushing has a length almost equal the width of the slot 2.

Due to the described construction, very large wearing surfaces are provided which greatly prolong the service life of the scale. However, wear does occur to some extent, and for this reason the pin 1 is fixed in the necessary pin holes in the lug 3 by quick-releasable means to permit ready replacement of the pin or bushing. This means consists of a washer 7 which encircles one end of the pin, the other pin end being headed, fastening being effected by a cotter pin 8 passed through registered transverse holes formed in the washer and unheaded end of this pin. The latter should be made of hardened steel to increase its resistance to wear.

It is to be understood that all four corner pins and corner links involve the features described. Since the links have their upper portions looped in semi-circular form, transverse rocking of the links can occur with the same freedom as it does in those constructions involving what are essential point contacts. Since the wearing areas are increased in size by the arrangement disclosed, wear of the parts discussed is reduced, the accuracy of the scale is prolonged and, therefore, the object of this inventor is attained.

I claim:

In a platform scale, a frame, a corner pin horizontally supported by said frame, a bushing on said pin and a corner link suspended from said bushing, the inside of the upper portion of said link being shaped to closely fit said bushing over a substantial area and said bushing having an inside diameter closely approximating the diameter of said pin, said frame having a slot through which said pin transversely passes and said bushing having a length almost equaling the width of said slot, said pin being positioned by quick-releasable means to permit ready replacement of said pin or said bushing.

JULIUS P. CHAMBERLAIN.