(No Model.)

G. H. CHATILLON.

SPRING SCALE.

No. 444,093. Patented Jan. 6, 1891.

Fig. 1.

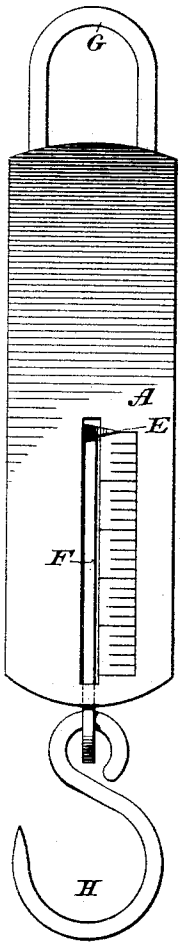


Fig. 2.

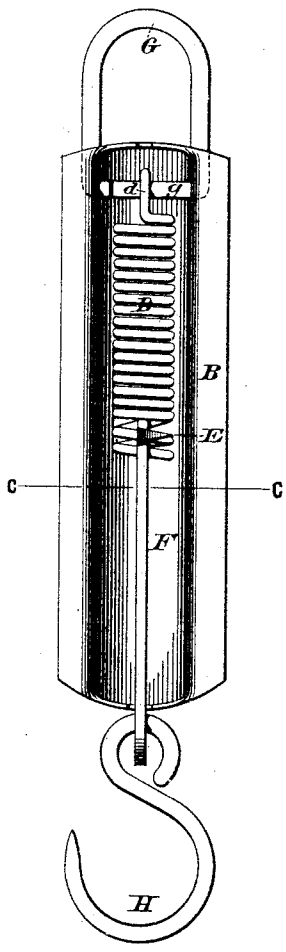


Fig. 3.

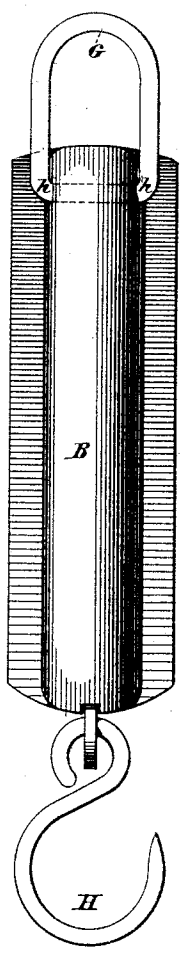
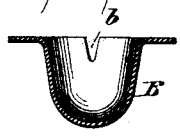


Fig. 4.



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

SPRING-SCALES.

SPECIFICATION forming part of Letters Patent No. 444,093, dated January 6, 1891.

Application filed September 9, 1890. Serial No. 364,440. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. CHATILLON, a resident of New York city, county and State of New York, have invented an Improvement in Spring-Balances, of which the following is a specification.

My invention relates to that form of spring-balance commonly known as a "straight spring-balance;" and it consists in certain details of construction and in combination of parts, that will be more fully hereinafter specified, reference being had to the accompanying drawings, forming a part hereof, wherein—

Figure 1 is a front view of the balance, showing the plate bearing the graduated scale. Fig. 2 is a face view of the same without the face-plate. Fig. 3 is a rear view of the same, and Fig. 4 is a cross-section of the back plate on the line *c c* of Fig. 2.

It has heretofore been customary in scales of this nature to form the back plate in two pieces riveted together in suitable manner, and to attach a loop at the upper end, and attach the spring to any suitable projection on the inside of the back plate. By my invention the entire back plate is stamped in one piece, and then being perforated to receive the bail, the spring is attached to the inner portion of the bail.

In the drawings, the letter A represents the face-plate of the balance bearing the graduated scale.

B represents the back plate formed with a longitudinal bulge and side flanges, as in Fig. 4.

D is the spring usual in spring-balances of this nature.

F is an arm suspended from the spring and carrying the usual pointer E, and also a hook H, which is adapted to carry the article to be weighed. The said spring D is attached by a hook or loop *d* to the inner cross-bar *g* of the bail G. The bail G passes through suitable perforations *h h* in the back plate. At the lower end of the back plate B, in the edge thereof, a small slit *b* is cut to permit the arm F to slide freely in and out between the two plates A and B. It will be seen that no part of the weight on H is borne by the parts A and B.

Having described my invention, what I claim is—

In a spring-balance, the back plate B, having the bulge stamped integral therewith, combined with the bail G, said bail penetrating into the bulge and having an inner cross-bar *g* connected to and combined with the spring D, and the weight-carrying arm F, substantially as described.

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