

(No Model.)

A. SHEPARD.
SPRING BALANCE.

No. 519,353.

Patented May 8, 1894.

Fig. 1.

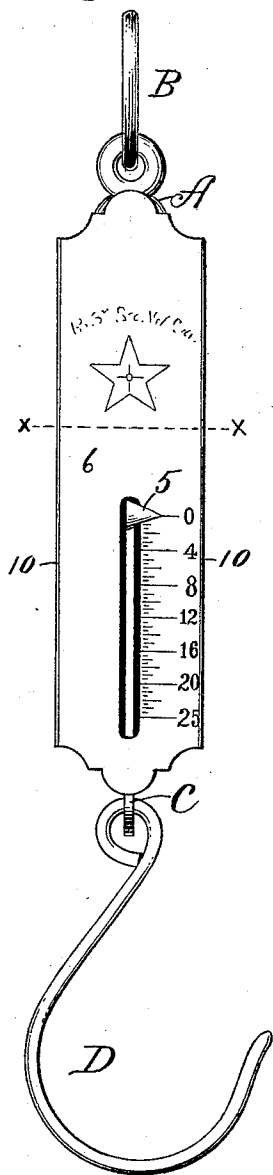


Fig. 2.

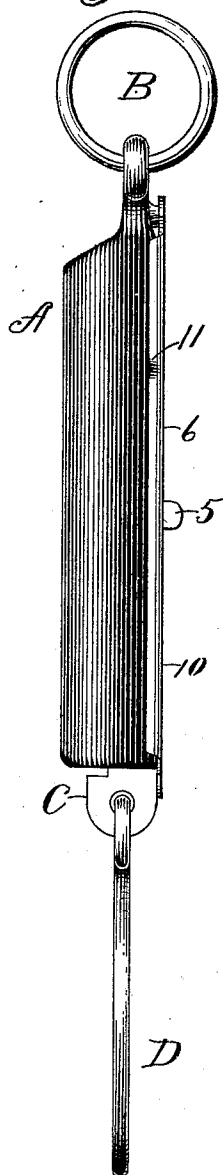


Fig. 3.

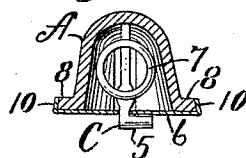
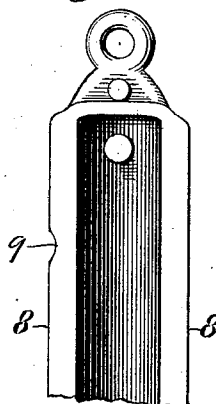


Fig. 4.



Witnesses

A. W. Stiefel

C. Darwin Loomis

Inventor

Amos Shepard,

By James Shepard
Atty.

UNITED STATES PATENT OFFICE.

AMOS SHEPARD, OF PLANTSVILLE, ASSIGNOR TO THE PECK, STOW & WILCOX COMPANY, OF SOUTHTON, CONNECTICUT.

SPRING-BALANCE.

SPECIFICATION forming part of Letters Patent No. 519,353, dated May 8, 1894.

Application filed September 7, 1893. Serial No. 484,974. (No model.)

To all whom it may concern:

Be it known that I, AMOS SHEPARD, a citizen of the United States, residing at Plantsville, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Spring-Balances, of which the following is a specification.

My invention relates to improvements in scales of the kind known as spring balances, and the chief object of my improvement is economy in production.

In the accompanying drawings: Figure 1 is a front elevation of my spring balance. Fig. 2 is a side elevation thereof. Fig. 3 is a transverse section on the line xx of Fig. 1, and Fig. 4 is a front elevation of a portion of the case.

A designates the case, B the handle or ring, C the pull or slide and D the hook. The pull or slide C is provided with a pointer or index 5 which moves over the scale on the face plate 6, said slide being suspended within the case by a spiral spring 7 in the ordinary manner of spring balances. Ordinarily the case has been provided with lateral lugs to which the face plate was secured by means of rivets. Instead of such lateral lugs, I provide the vertical side edges of my case B on each side of the trough shaped body that receives the spring 7 with straight edged flanges 8 the same being beveled backwardly both flanges projecting laterally in the same plane with their broad sides forming the front face of said trough shaped body as best shown in Fig. 3. In one or both sides of these flanges I form a notch or depression 9 as shown in Fig. 4. I make the face plate 6 with side flanges 10 which are bent over the straight edges of the flanges 8 of the case so as to hold said face plate in place and at the same time permit it to slide longitudinally on the case. The strength of the spring is then tested and instead of regulating the spring to a scale on a fixed plate, I slide the face plate longitudinally on the case to bring the scale to the proper point for the strength of the spring. When the position of the face plate is thus determined, an indentation is made in one of the flanges 10 directly opposite the recess 9 on the case as shown at 11, in Fig. 2, thereby fixing the face plate against longitudinal

movement on the case. By this construction I am enabled to adjust the scale more readily to the strength of the spring, and I produce the scale at less cost. I also save largely in stock by having less waste and substantially the entire length of the face plate is protected by the flanged edge of the case so that it is less liable to be defaced by bending.

While I prefer to make the indentation in the flange of the face plate, it is thought that the face plate with its side flanges could be driven or swaged upon the case firmly enough to stay in place without said indentation.

I claim as my invention—

1. The herein described spring balance having the case A provided with a trough shaped body and formed with straight edged side flanges projecting laterally from said body in one plane and having their outer edges beveled backwardly and the face plate 6 on the front face formed by said laterally projecting flanges and having side flanges 10 secured thereon by being bent over the backwardly beveled edges of the side flanges of the case, substantially as described and for the purpose specified.

2. A spring balance, the case of which is provided with side flanges one of which has a notch 9 in its edge, and having the face plate 6 provided with side flanges 10 bent over the edge of the flanges of the case and further secured against longitudinal movement by an indented portion 11 extending into the notch 9, from one of said side flanges, substantially as described and for the purpose described.

3. A spring balance having the case provided with side flanges that form its front face, the face plate 6 fitted to said front face and held thereon by side flanges of its own that extend over the outer edges of said side flanges of the case, and means for permanently locking said face plate to said side flanges of the case after said face plate is properly adjusted thereon, substantially as described and for the purpose specified.

AMOS SHEPARD.

Witnesses:

STEPHEN WALKLEY,
E. E. STOW.