W. A. Starratt.

Balance Scales.

No. 66,533. Patented Jul. 9, 1867

Fig. 1

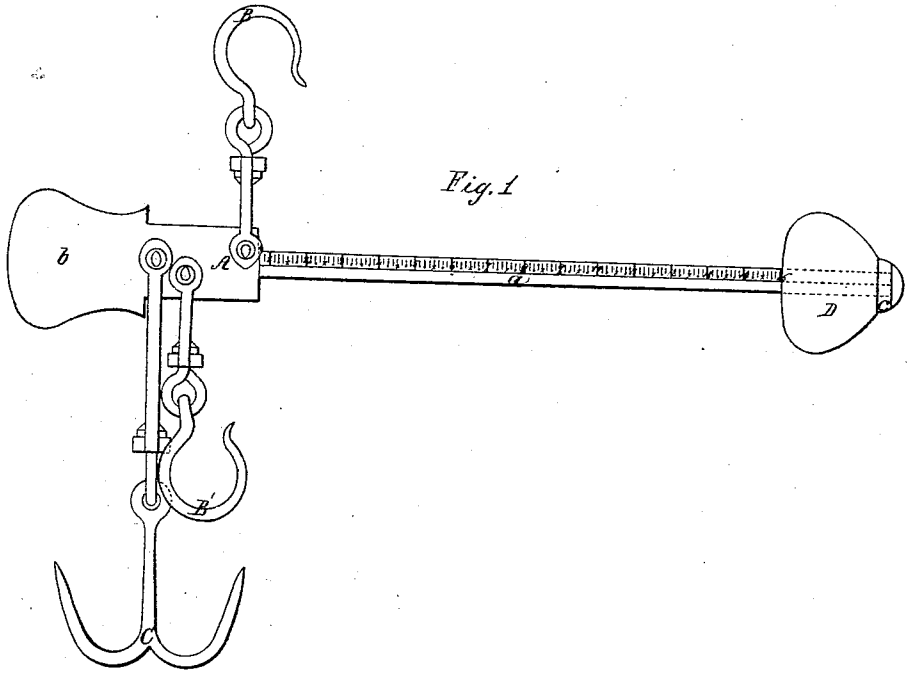
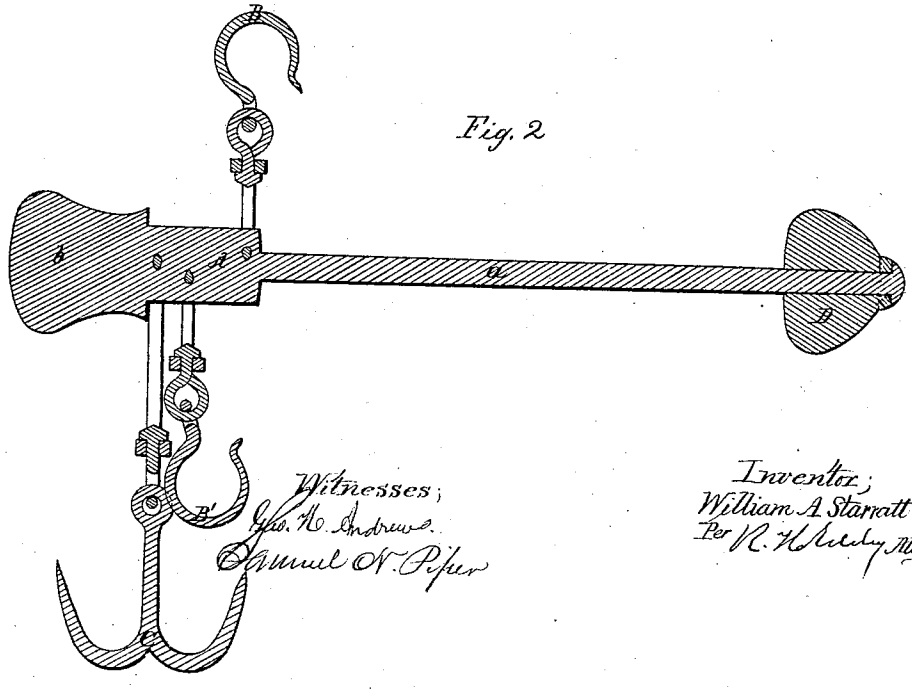


Fig. 2



Witnesses;
Geo. H. Andrews.
Samuel N. Piper

Inventor;
William A. Starratt
Per R. H. Ashley Atty

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United States Patent Office.

WILLIAM A. STARRATT, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 66,533, *dated July* 9, 1867.

IMPROVED STEELYARDS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL PERSONS TO WHOM THESE PRESENTS SHALL COME:

Be it known that I, WILLIAM A. STARRATT, of Boston, in the county of Suffolk, and State of Massachusetts, have invented a new and useful improvement in Steelyards; and do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a side elevation, and

Figure 2 a longitudinal section of a steelyard made in accordance with my invention.

Instead of constructing the weight arm of the steelyard-beam with a series of notches in its upper edge, and applying the weight thereto by a hook, or a ring to rest in either of such notches, as is customary, I form the said arm of the beam plain, or without any such notches, and I apply to it a weight so as to encompass it, and be capable of sliding or being moved freely on it lengthwise. And furthermore, I apply to such beam, and against the head of its indexical arm, an elastic cushion or collar of vulcanized India rubber, whose purpose is to break the fall of the weight, or prevent the weight from falling against the said head, and being so battered or bruised thereby as to be contracted so as to bind on the arm. The object of the cushion is also to prevent the blows of the weight from causing injury to the head, or its separation from the arm. On removing a body from the hook of the steelyard, after such body has been weighed, the weight-arm of the steelyard will almost always be caused by the weight to fall into a vertical position, the weight, under such circumstances, bringing up with a heavy blow against the head. Were it not for the elastic cushion or collar applied to the arm, the weight, as well as the head, would be liable to injury, as hereinbefore set forth. By having the weight slide freely on the arm we avoid the necessity of notches in the arm, and for the hook of the weight, as commonly employed, and thus we save the wear of the notches and the hook consequent on their use; and, besides, we are enabled to weigh an article to better advantage and with accuracy; whereas, with the notches, the weight can only be approximately ascertained.

In the drawings, A denotes the steelyard-lever or beam, B B′ the supporting hangers, and C the hooked hanger by which an article to be weighed is sustained. The longer arm *a* of of the lever is represented as made smooth, without any notches in its upper edge, but with figures and weight marks, or divisions, formed on it in the usual manner. The weight represented at D is a ball, which encompasses and slides freely on the arm *a*. The head of the arm *a* is shown at *b*, and the elastic cushion at *c*, as resting against the head and going around the arm transversely.

I claim the combination of the elastic cushion *c* with the head *b* of the weight arm, and with the weight D arranged to slide on such arm in manner and under circumstances substantially as specified.

WILLIAM A. STARRATT.

Witnesses:

R. H. EDDY,

F. P. HALE, Jr.