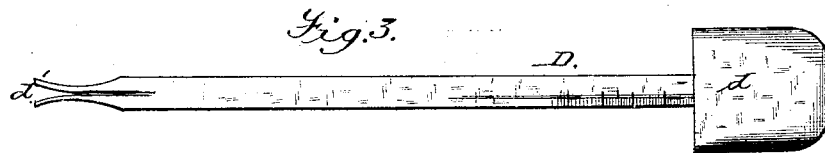
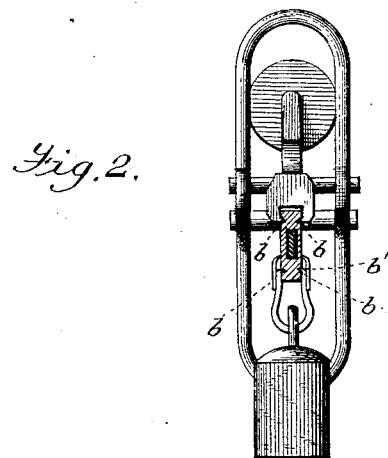
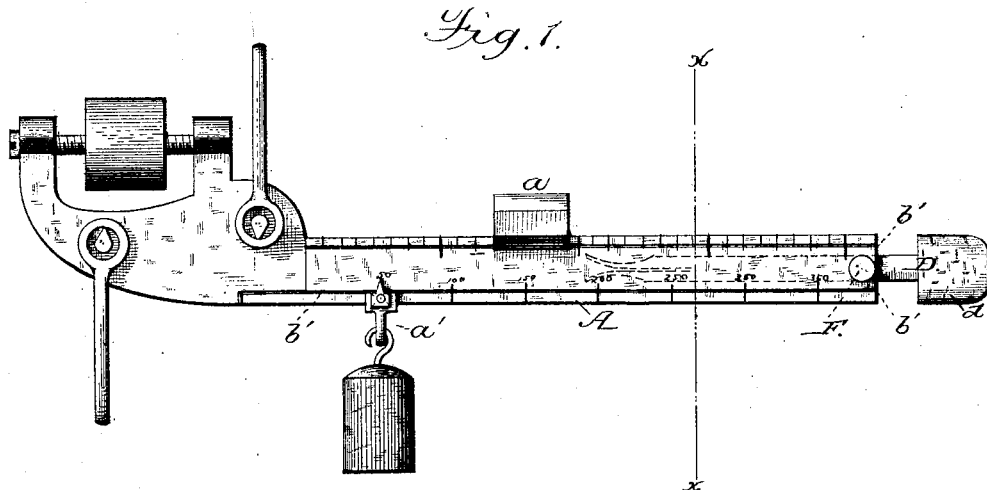


J. T. TILLMAN.
Scale-Beam.

No. 224,972.

Patented Feb. 24, 1880.



Attest;
T. William Fowler,
R. K. Evans

Inventor;
John T. Tillman,
by his attys
A. H. Evans & Co

UNITED STATES PATENT OFFICE.

JOHN T. TILLMAN, OF SPARTANBURG, SOUTH CAROLINA.

SCALE-BEAM.

SPECIFICATION forming part of Letters Patent No. 224,972, dated February 24, 1880.

Application filed January 21, 1880.

To all whom it may concern:

Be it known that I, JOHN T. TILLMAN, of Spartanburg, South Carolina, have invented new and useful Improvements in Scale-Beams; and I hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a front elevation of a scale-beam with my improvements attached. Fig. 2 is a cross-section through *xx*. Fig. 3 is a separate view of tare-beam.

My invention relates to scale-beams having two poises running the beam; and it consists of the combination of devices hereinafter described and claimed.

To enable others skilled in the art to make and use my invention, I will proceed to describe the exact manner in which I have carried it out.

In the drawings, A represents a beam, on which the poises *aa'* slide, with the tongues *b* working in the grooves *b'*, formed in the sides of the beam. The beam may be graduated or scaled in any desired manner.

By my method of working the poises by means of the tongues and grooves I am enabled to readily pass them on the beam, the poise *a* running in grooves above the poise *a'*, whereby either poise can be run to the outer end of the beam without interfering with the other.

In weighing many articles an allowance has to be made for the package in which it is contained. The practice is to weigh the package and deduct it from the whole weight; but this

requires a calculation which is frequently troublesome. To determine the "tare" by my new device it is only necessary to draw the graduated tare-beam D out of the hollow beam A until, by means of the weight *d*, the beam comes to an equipoise with the package, thus ascertaining the exact tare. Then the desired quantity of the article to be weighed is put in the package and the weight determined without reference to the weight of the package. This is a very simple device for counterbalancing the tare or weight of the package, and is called the "tare-beam."

As the frequent sliding of this beam within the beam A would necessarily wear it away more or less and render the tare-beam loose, I provide at the end of the latter beam a bifurcation, *d'*, with a slight spring, so that a compensation for the wear of the beam is easily obtained by widening the prongs of the bifurcation.

F is a thumb-screw for holding the tare-beam in position.

Having thus explained my invention, I claim as new and desire to secure by Letters Patent—

The hollow beam A, provided with grooves *b'*, and the poises *aa'*, provided with the tongues *b*, in combination with the tare-beam D, provided with the weight *d* and bifurcation *d'*, and sliding within the beam A, substantially as and for the purpose set forth.

JOHN T. TILLMAN.

Attest:

WM. F. MORSELL,
JNO. L. CONDRON.