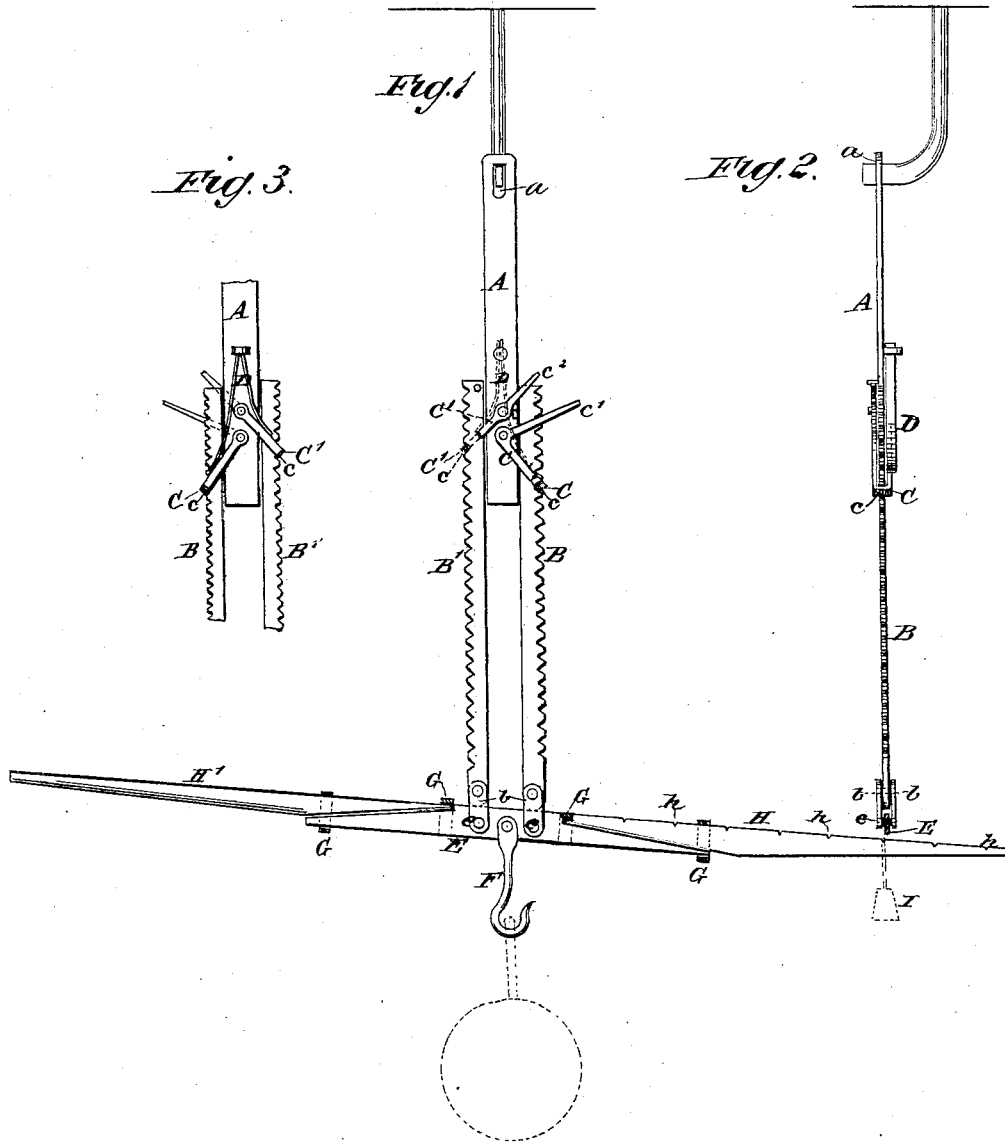


R. KIRKPATRICK.  
Weighing-Device.

No. 205,559.

Patented July 2, 1878.



WITNESSES:

*Francis McArdle*  
*C. Sedgwick*

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ATTORNEYS.

# UNITED STATES PATENT OFFICE.

ROBERT KIRKPATRICK, OF RICHMOND, (DEBEC P. O.), NEW BRUNSWICK,  
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## IMPROVEMENT IN WEIGHING DEVICES.

Specification forming part of Letters Patent No. **205,559**, dated July 2, 1878; application filed  
April 23, 1878.

*To all whom it may concern:*

Be it known that I, ROBERT KIRKPATRICK, of the Parish of Richmond, Debec P. O., in the county of Carleton, Province of New Brunswick, and Dominion of Canada, have invented a new and Improved Lifting and Weighing Device, of which the following is a specification:

The object of my invention is to provide a simple and convenient device for ascertaining the weight of articles too heavy for being placed on the scale by the hands alone, and so constructed that such articles may be elevated from the ground and weighed by the same device.

The invention consists in the combination of two lateral ratchet-bars with a central suspension-bar, having spring-pawls arranged to engage in the teeth of the said side bars, and with a lever pivoted to the ends of the side bars, and provided with a central hook and detachable handles, one of the latter being graduated to serve as a scale-beam, as will be hereinafter described.

In the accompanying drawing, Figure 1 represents a front view of my lifting and weighing device suspended on a hook and in position for use. Fig. 2 is an edge view of the same. Fig. 3 is a rear view of a portion of the device as shown in Fig. 1.

Similar letters of reference indicate corresponding parts.

A is the central bar, provided with a hook or an eye, *a*, at its upper end for attaching or suspending it. B B' are toothed bars arranged one on each of two opposite sides or edges of the bar A, and held against the same by the pawls C C', which are made in about the shape of a staple, pivoted with its two ends on opposite sides of the bar A by a pin going through them and the bar A simultaneously, and grasping the teeth of the bars B B' in the arch *c* of the staple.

The pawls C C' are held pressed in the teeth of the side bars by springs D upon the bar A, and are provided with handles *c*<sup>1</sup> *c*<sup>2</sup>, by which they may be raised out of the said teeth against the pressure of the springs when desired.

E is a lever connected by pivoting-pins *e* to the lower ends of the bars B B', either directly or by connecting-links *b*.

F is the hook to which the article intended to be raised and weighed is suspended, and is pivoted to the center of the lever E between the ends of the two bars B B'.

Each end of the lever E is surrounded by two metallic bands, G, secured to the lever at a distance from each other, and each having an opening suitable for inserting, and thus attaching to the lever E, the handles H H', by which sufficient leverage is gained to raise a heavy weight by oscillating the lever E upon the two pivots *e*, alternately, as fulcra, and thereby alternately supporting the weight on one of the bars B B', while the other is elevated in the grasp of its pawl to the height of one or more teeth. One of the handles H is made of metal and graduated with notches *h*, like an ordinary scale-beam for hanging a movable weight, I, for weighing the article suspended to the hook F. For this purpose the pawl C' is raised by depressing its handle *c*<sup>2</sup> out of contact with the teeth of the bar B', thereby causing the lever E to hang only upon the pivot *e* of the other bar B, while the weight of the article suspended to the hook F is ascertained by moving the weight I into the proper notch *h* of the graduated beam H to counterbalance it.

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

The combination of the two lateral ratchet-bars B B' with the central suspension-bar A, having spring-pawls C C' arranged to engage in the teeth of the said side bars, and with the lever E pivoted to the ends of the side bars B B', and provided with the central hook F and the detachable handles H H', one of the latter, H, being graduated to serve as a scale-beam, substantially as shown and described, and for the purpose set forth.

ROBERT KIRKPATRICK.

Witnesses:

A. W. ALMQVIST,  
C. SEDGWICK.