

(No Model.)

L. R. WITHERELL.  
PLANTATION WEIGHING SCALE.

No. 373,326.

Patented Nov. 15, 1887.

Fig. 1.

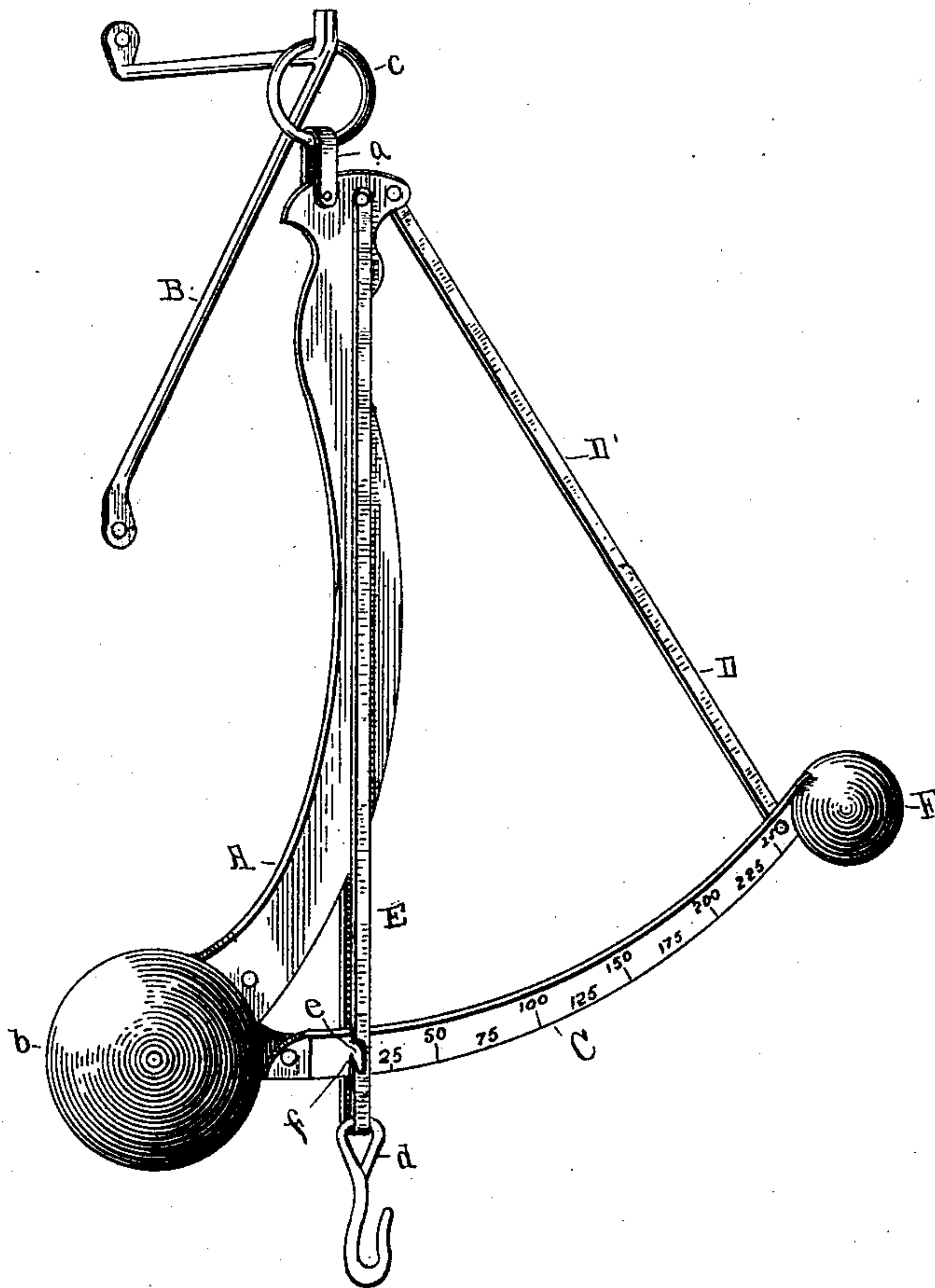
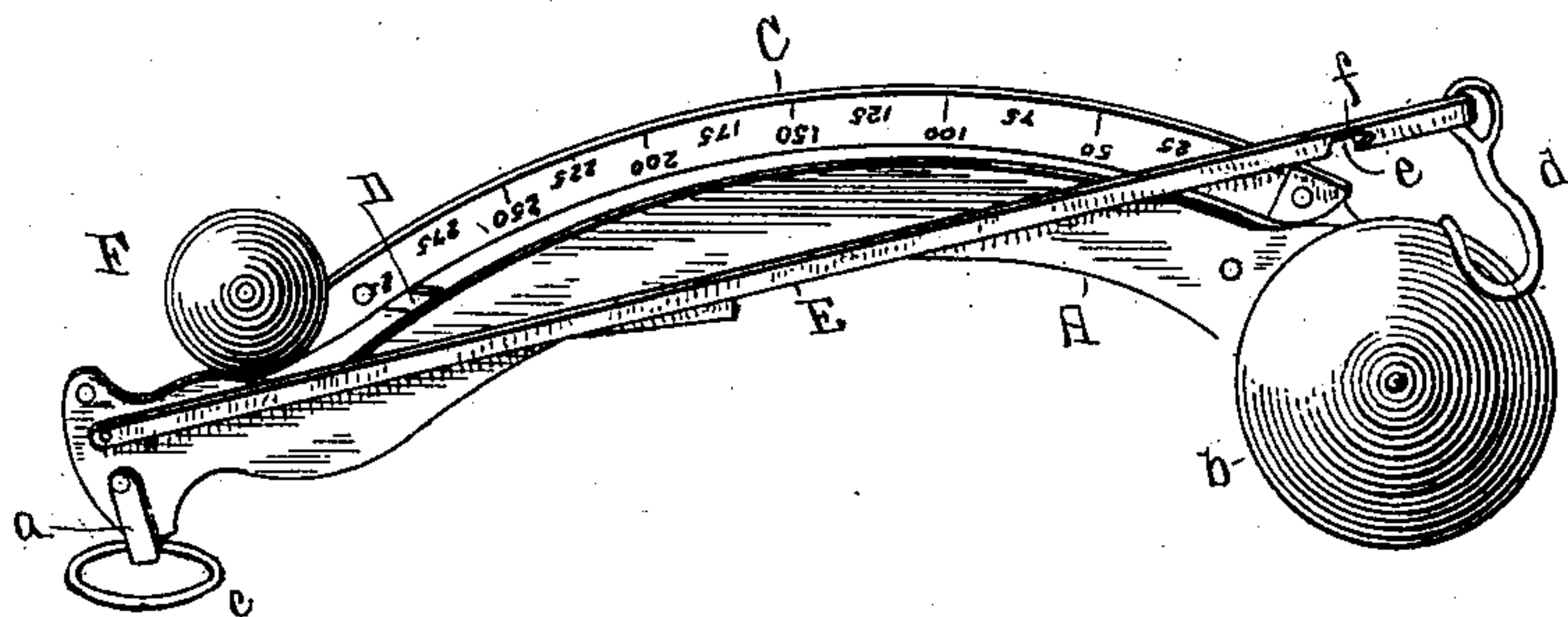


Fig. 2.



WITNESSES.

Horris A. Clark.  
Hugh D. Kealy.

INVENTOR  
Loren R. Witherell

By *[Signature]*  
Attorney.

# UNITED STATES PATENT OFFICE.

LOREN R. WITHERELL, OF DAVENPORT, IOWA.

## PLANTATION WEIGHING-SCALE.

SPECIFICATION forming part of Letters Patent No. 373,326, dated November 15, 1887.

Application filed November 16, 1886. Serial No. 219,034. (No model.)

*To all whom it may concern:*

Be it known that I, LOREN R. WITHERELL, a citizen of the United States, residing at Davenport, in the county of Scott and State of Iowa, have invented certain new and useful Improvements in Plantation Scales; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improved weighing apparatus, its object being to obtain a device of the character described which will be strong and durable, will accurately weigh articles from one to two hundred and fifty pounds, or even more, and which will be so constructed as to provide for folding it in a small compass, thereby rendering its transportation easy and convenient.

Reference will be made to the accompanying drawings, in which Figure 1 represents in perspective the apparatus when ready for use, and Fig. 2 a view showing the same when folded.

The same letters refer to the same or like parts in each view.

In the drawings, A represents an arm suspended upon a fulcrum-loop, *a*, located to one side of its center, and carrying on its lower end a weight, *b*, so arranged that normally this arm will hang vertically. The loop *a* is provided with a suitable ring, *c*, by means of which the apparatus is suspended upon a suitable bracket, B, secured to the wall of the barn or outhouse, or at any other suitable point. Hinged to a small extension or projection formed upon the lower end of arm A is a curved arm, C, provided with a graduated scale, as clearly shown. At its opposite end arm C is pivoted to an arm, D, which in turn is pivotally connected with an arm, D', this last-named arm being pivoted at its upper end to the upper end of arm A.

By the arrangement of parts as thus far described it will be seen that the apparatus is arranged to form an arc-shaped frame, one arm of which normally occupies a vertical position, with the remaining arms at suitable angles thereto. Pivoted to the upper end of

the arm A is the index-strap E, so arranged that it will mark or indicate zero as long as the arm A retains its vertical position. To the lower end of this index-strap, the hook *d*, or any suitable tray for holding the article to be weighed, is secured. At that point where this strap passes the arm C, said arm being provided with the scale, as described, it is cut away, as shown at *e*, this cut in the strap being so formed as to leave a pointer, *f*, which indicates the exact weight.

The operation of the device is as follows: The parts being suspended, as shown in Fig. 1, the article to be weighed is suspended from the weighing-hook or placed upon the tray, if such is used, whereby, because of the arrangement of the index-strap with respect to arm A, the weighted end of said arm is elevated and the arm provided with the scale moved past the index-strap, this continuing until the weight of the article is indicated by the pointer *f*, when the parts will remain in a fixed position. By having the several arms of the apparatus pivoted to each other in the manner described I am enabled to fold the device, as shown in Fig. 2, and thereby arrange it in convenient form for transportation.

In the drawings, in addition to the weight secured to arm A, a smaller weight, F, is shown affixed to the opposite end of arm C as a counter-balance.

What I claim is—

The combination of the arm A, provided with the suspension loop and ring at its upper end, the weight *b* at its lower end, having a short lateral arm or extension, the curved graduated and weighted arm C F, hinged to said extension, the pivoted jointed arm D D', connecting the arm C F and the arm A, the index-strap E, provided with the pointer *f*, and the hook *d*, loosely connected to the lower end of the index-strap, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

LOREN R. WITHERELL.

Witnesses:

C. L. RICHARDS,

LOUIS H. R. KARNATH.