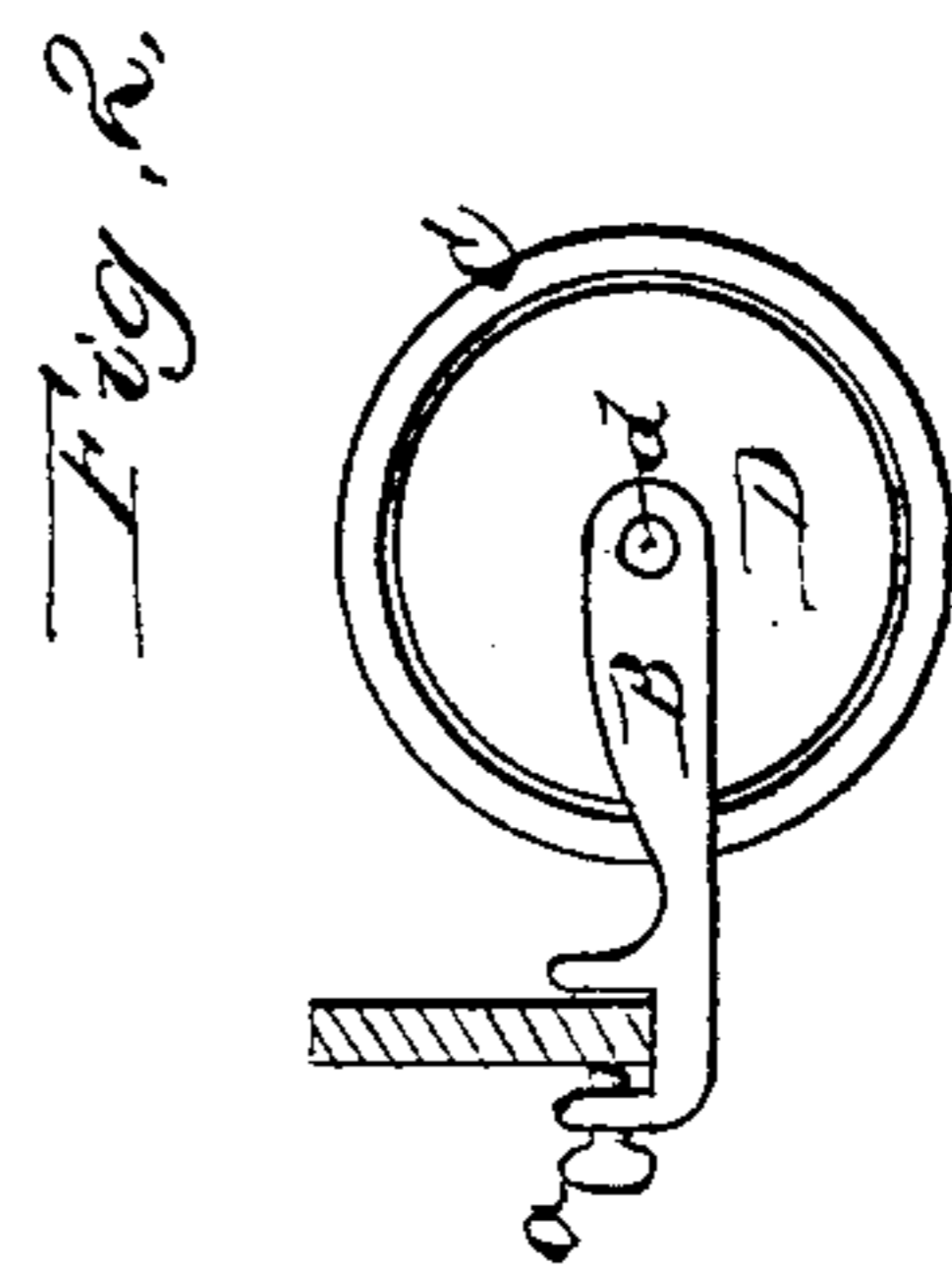
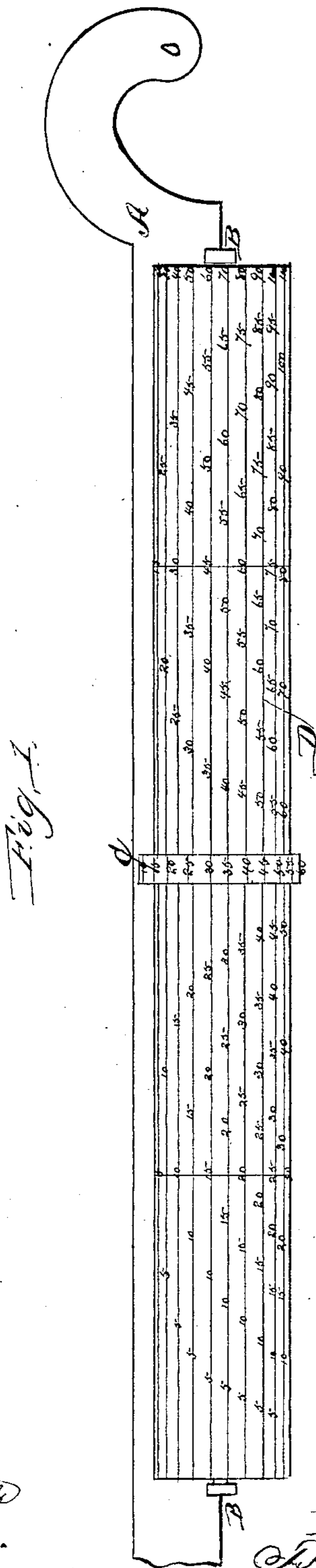


H. L. GRISELL. Scale-Beam.

No. 207,735.

Patented Sept. 3, 1878.



Witnesses:
H. C. McCutcheon
C. L. Ewert.

Inventor
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Per
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Attorneys.

UNITED STATES PATENT OFFICE

HIRAM L. GRISELL, OF PENNVILLE, INDIANA, ASSIGNOR TO HIMSELF AND LEWIS GRISELL.

IMPROVEMENT IN SCALE-BEAMS.

Specification forming part of Letters Patent No. **207,735**, dated September 3, 1878; application filed March 25, 1878.

To all whom it may concern:

Be it known that I, HIRAM L. GRISELL, of Pennville, in the county of Jay and State of Indiana, have invented certain new and useful Improvements in Scale-Beams; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

My present invention is intended as an improvement upon Letters Patent No. 178,629, granted to me June 13, 1876; and the nature of my invention consists in a revolving cylinder provided with calculating-tables on its surface, and mounted in arms that may be attached to the scale-beam of any scale, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a side view, and Fig. 2 an end view, of my invention.

A represents the scale-beam of any ordinary beam-scale. At or near each end of this beam is, by means of a set-screw, *a*, secured an arm, B, the outer end of which has a suitable perforation to receive the pivot *d* of an elongated cylinder, D. This cylinder is thus pivoted and rotates in the arms B B. The scale thus becomes a double-beam scale, and the cylinder may be arranged in hangers under the beam as well as in the arms on one side.

The cylinder D is, on its surface, provided with calculating-tables, substantially the same as in my former patent above referred to, or any other calculating-tables may be applied to or affixed thereon.

C is a movable ring placed around the cylinder, as shown, to balance the beam. This cylinder may be attached to either an equal-balanced or a beamed scale. Any side of the cylinder can be brought into view by revolving the same in its bearings.

Persons using scales can procure the latest improvement in a calculating-beam without purchasing a new scale.

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

As an improvement on Letters Patent No. 178,629, dated June 13, 1876, the rotating cylinder D, provided with calculating-tables on its surface, and hung by pivots *d d* in arms B B, which are detachably secured to an ordinary scale-beam, A, by means of set-screws *a a*, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

H. L. GRISELL.

Witnesses:

T. C. MEREDITH,
J. L. RIGBY.