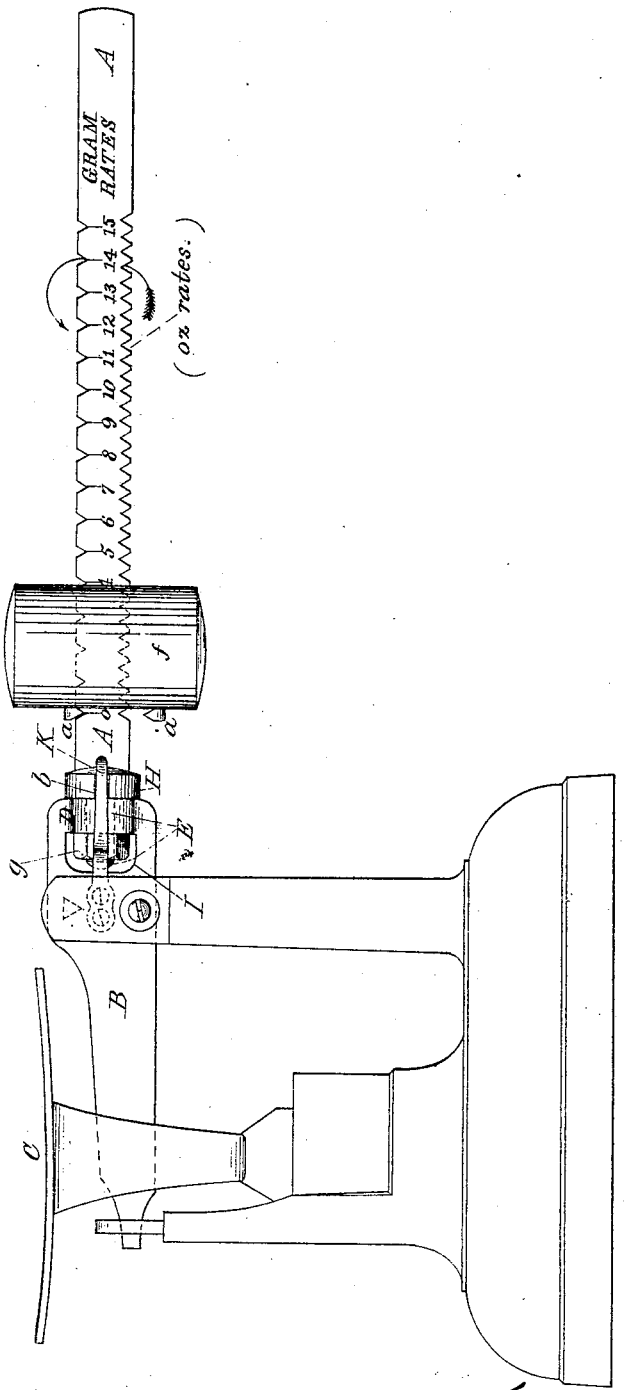
F. FAIRBANKS.
Weighing-Scale.

No. 203,902. Patented May 21, 1878.



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FRANKLIN FAIRBANKS, OF ST. JOHNSBURY, VERMONT.

IMPROVEMENT IN WEIGHING-SCALES.

Specification forming part of Letters Patent No. **203,902,** dated May 21, 1878; application filed March 4, 1878.

To all whom it may concern:

Be it known that I, FRANKLIN FAIRBANKS, of St. Johnsbury, Caledonia county, Vermont, have invented certain new and useful Improvements in Scales, of which the following is a specification:

My present improvement applies to the graduated-beam portion of the scale; and the object of the invention is more especially to provide a scale for postal purposes, &c., which, in a simple and effective manner, shall combine the graduations of both the English and the metric systems, or "ounce" and "gram" rates.

To this end my invention consists in a scale-beam provided with different graduations on its opposite sides, and formed in two longitudinal parts, jointed together between the extremities, the zero end of the graduated portion being socketed in the end of the fulcrumed portion, and rotatable thereon to bring either graduated side into view; also, in the combination, with a rotatable differently-graduated beam, of a sliding weight, rotatable with the beam, and provided with double-index points corresponding to each graduated side of the beam, which are adapted to engage with the required graduations by the act of turning the required graduated side into view.

The drawing annexed shows an elevation of an ordinary postal scale provided with my improvements.

Heretofore the scale-beam of postal scales has been made in one continuous piece, and provided with but one system of graduations. My improved beam, however, is divided into two longitudinal parts, A B, which are jointed together between the opposite extremities of the beam and near the zero-point, as shown at D E, A being the graduated portion of the beam, carrying the sliding weight *f*, and B representing the fulcrumed part, carrying the scale-pan C. The graduated portion A is graduated on both of its sides and edges, one side being divided, according to the metric system, into gram-rates, as shown in the drawing, while the opposite side is graduated in the English system of ounces and fractions thereof. The zero end of the graduated part A is socketed in the end of the fulcrumed part B, as shown at D E, so that the graduated part A is thus capable of rotation, to permit either edge being turned uppermost and either side forward, to bring either set of graduations into view, thus permitting the correct reading of the graduations, and the adjustment of the weight in ounce or gram rates, as desired.

The socket D is preferably formed on the extremity of the fulcrumed part B, which receives the rounded stem or journal E, formed on the zero end of the graduated part A, as shown. The journal E extends from a broad shoulder or disk, H, which terminates the graduated part A, and which rests snugly against the end of the socket D. An opening, I, in the side of the socket allows the screwing of a nut, *g*, on the end of the journal E, to retain the parts in position.

The sliding weight *f* is adapted to turn with the rotatable graduated part A, and is preferably provided with two index-points, *a a*, corresponding to each side of the beam, and separated sufficiently, as shown, so that when one is engaged the other will be free, while the act of turning the beam will cause the one point to fall out, and the proper point to fall into action.

The shoulder or disk H is provided with a notch, *b*, on its diametrically-opposite sides, the engagement of which with a spring-catch, K, fixed to the fulcrumed part B, indicates and insures the correct position of the graduated bar when rotated to either one side or the other.

I do not claim a differently-graduated rotatable beam, broadly considered; but

What I claim as my invention, and desire to secure by Letters Patent, is as follows:

1. A scale-beam formed in two longitudinal parts, A B, jointed together between their extremities, the zero end of the graduated part A being socketed in the end of the fulcrumed part B, and rotatable thereon, to bring either of its sides into view, substantially as and for the purpose herein set forth.

2. In combination with a rotatable differently-graduated scale-beam, a sliding weight, *f*, rotatable with the beam, provided with double index-points *a a*, corresponding to each graduated side of the beam, and adapted to engage with either graduated side by the act of turning the required graduated side into view, substantially as herein shown and described.

FRANKLIN FAIRBANKS.

Witnesses:

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