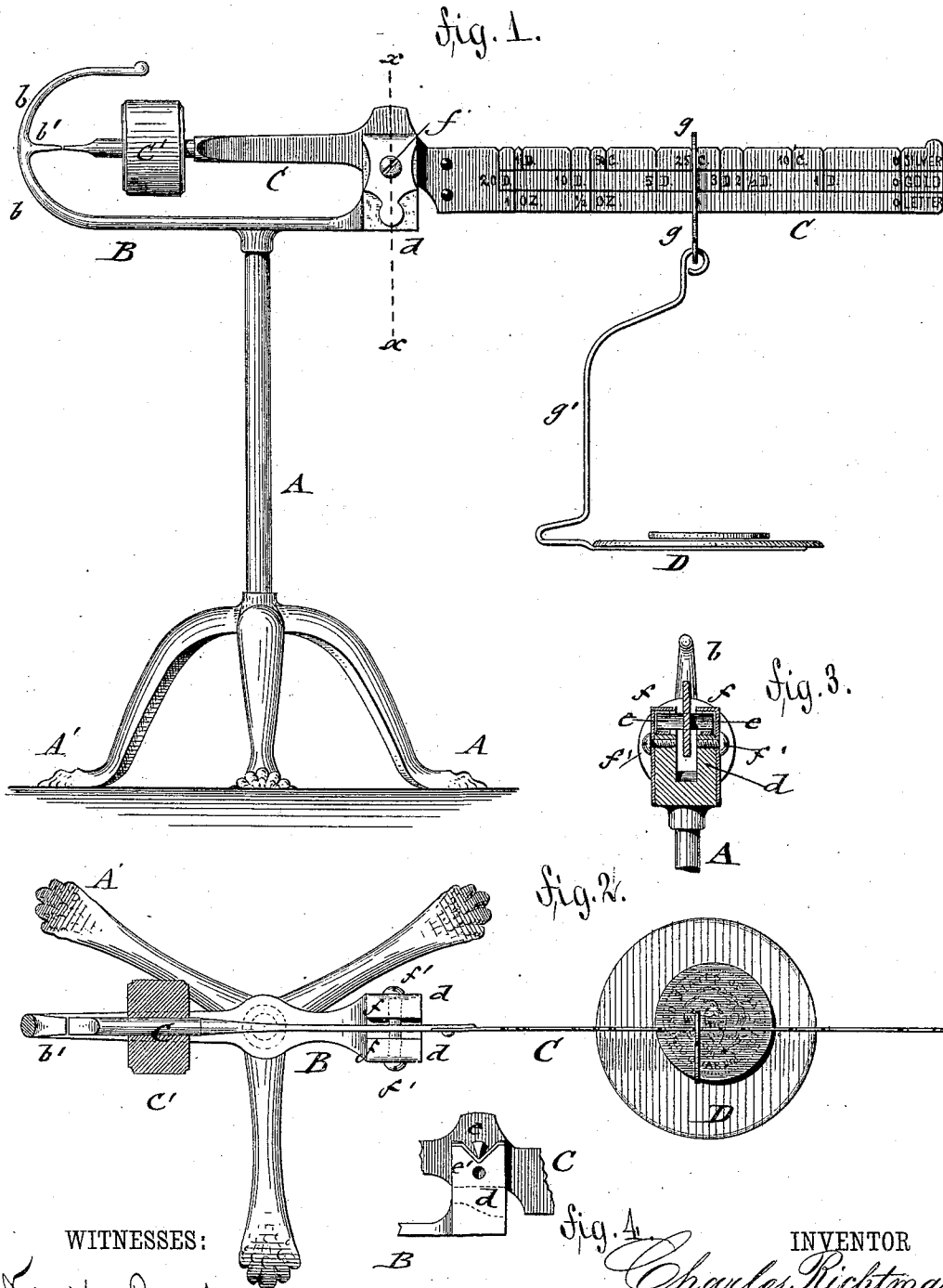


(No Model.)

C. RICHTMANN.
COIN AND LETTER SCALE.

No. 295,809.

Patented Mar. 25, 1884.



WITNESSES:

For N. Rosenbaum
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INVENTOR

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UNITED STATES PATENT OFFICE.

CHARLES RICHTMANN, OF NEW YORK, N. Y., ASSIGNOR TO H. RICHTMANN
& CO., OF SAME PLACE.

COIN AND LETTER SCALE.

SPECIFICATION forming part of Letters Patent No. 295,809, dated March 25, 1884.

Application filed October 11, 1883. (No model.)

To all whom it may concern:

Be it known that I, CHARLES RICHTMANN, of the city, county, and State of New York, have invented certain new and useful Improvements in Coin and Letter Scales, of which the following is a specification.

This invention has reference to an improved coin and letter scale, which, in contradistinction to the letter-scales heretofore in use, is made with one fulcrum only and capable of a high degree of accuracy.

The invention consists of a supporting-standard having a horizontal bar that has a hooked-shaped guard at one end, provided with a central index-point for the inner weighted end of the oscillating scale-beam, and that has at the other end bearings for the knife-edge pivots of the same. The outwardly-extending opposite end of the scale-beam is provided with graduations and notches for coins and letters of certain weights, which graduations extend inwardly from the outer end toward the fulcrum, while the notches serve for recessing the sliding link of a scale-pan suspended from the beam.

In the accompanying drawings, Figure 1 represents a side elevation of my improved coin and letter scale. Fig. 2 is a plan of the same, partly in section. Fig. 3 is a detail vertical transverse section on line *x x*, Fig. 1; and Fig. 4 is a detail side view, showing the bearings and knife-edged pivots of the beam-scale.

Similar letters of reference indicate corresponding parts.

A in the drawings represents an upright supporting-standard, which is supported on feet *A'* or on a suitably-weighted base.

To the upper end of the standard *A* is applied a horizontal arm, *B*, which is bent at one end into the shape of a semicircular hook or guard, *b*, at the center of which is arranged an inwardly-extending index or pointer, *b'*. At the opposite end of the horizontal arm *B* are arranged vertical bearings *d d* for the knife-edged pivots *e e* of a scale-beam, *C*, which is made tapering at the end adjoining the index *b'*. A weight, *C'*, is arranged at the inner end of the scale-beam *C*, which is adapted to oscillate vertically between the end of

the hook or guard *b* and the horizontal arm *B*, which acts thereby as stops to limit the oscillations of the scale-beam. The bearings *d d* are provided with tapering recesses *e'* for the knife-edged pivots or fulcrum *e* of the scale-beam, which pivots are retained in said recesses *e'* by angular cap-plates *f f*, which are secured by fastening-screws *f'* to the outside of the bearings *d d*, their upper ends lapping over the bearings *d d* and the pivots *e e* of the scale-beam, as shown in Fig. 3. By this arrangement the scale-beam is retained in position, and cannot be removed from the horizontal supporting-arm *B*. The outer end of the scale-beam *C* is provided with a series of graduations or scales extending from the zero-line near the outer end of the beam toward the fulcrum thereof. The upper series or scale, *C'*, is arranged to indicate the weights of silver coins, the middle scale, *C''*, to indicate the weights of gold coins, and the lower scale, *C'''*, is graduated to serve as a letter-scale. The graduations of the upper scale are marked, respectively, "10 c." for ten cents, "25 c." for twenty-five cents, "50 c." for fifty cents, and "1 D." for one dollar, and the upper edge of the scale-beam is provided with notches corresponding with these graduations. The graduations of the middle scale are marked "1 D." for one gold dollar, "2½ D." for a quarter-eagle, "3 D." for a three-dollar gold-piece, "5 D." for a half-eagle, "10 D." for an eagle, and "20 D." for a double-eagle, and the upper edge of the scale-beam is provided with notches to correspond with these graduations. The graduations of the lower scale are marked "½ oz." for one-half ounce, "1 oz." for one ounce, and the upper edge of the beam is provided with notches to correspond with these graduations. A slotted slide-link, *g*, is placed on the beam, and a suspension-arm, *g'*, supporting a scale-pan, *D*, is attached to the lower end of said slide-link. If the slide-link be placed in the notch of the graduating-line indicating a half-eagle, and one of the latter be placed in the scale-pan, the beam will remain balanced, if the half-eagle be a genuine one, the index *b'* serving to indicate the slightest deviation. If any other gold coin or a silver

coin or a letter be placed on the scale-pan and the slide-link adjusted to its proper position, according to the article being weighed, the beam will respond in a very accurate manner, 5 the tapering end of the beam, in connection with the index b' , being in alignment when the beam is balanced.

Having thus described my invention, what I claim as new, and desire to secure by Letters 10 Patent, is—

A scale for coins and letters, comprising a supporting-standard, a horizontal supporting-arm attached to said standard, provided with a hook-shaped guard having an inward pro- 15 jection or index at the center of the hook, a

scale-beam pivoted in said bearings, one end of which is provided with a weight and adapted to oscillate within the hook-shaped guard, being in alignment with the index thereof when balanced, the outer end of said beam being graduated, a slide-link on said scale-beam, and a scale-pan suspended from said link, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses. 25

CHARLES RICHTMANN.

Witnesses:

PAUL GOEPEL,
SIDNEY MANN.