E. LUEDERS.
Coin-Tester.

No. 205,492. Patented July 2, 1878.

Fig: 1

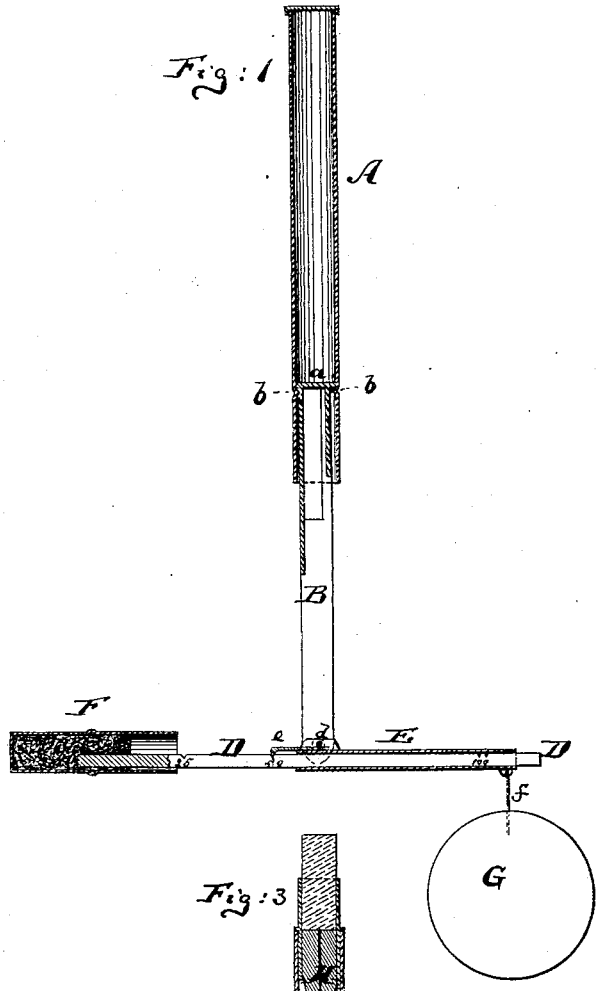


Fig: 2

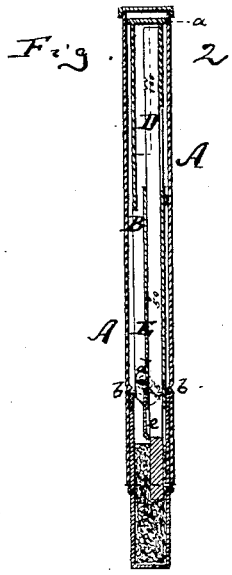


Fig: 3

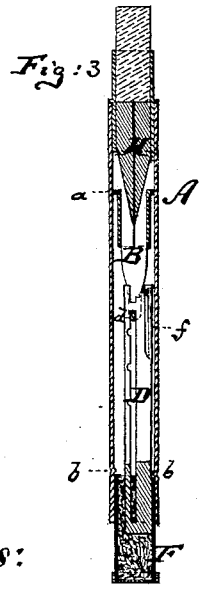


Fig: 4

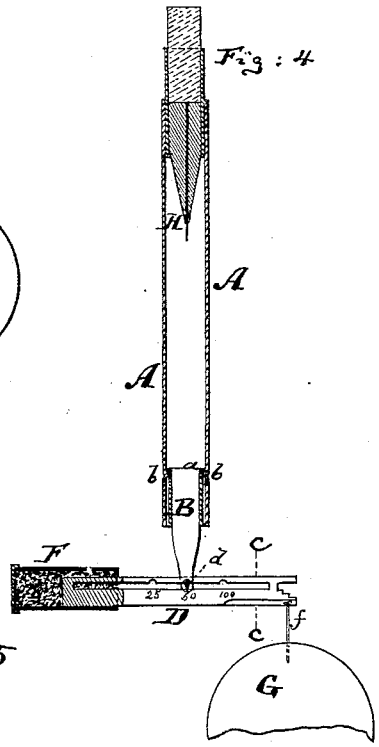
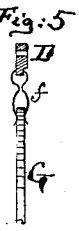


Fig: 5



Witnesses:
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UNITED STATES PATENT OFFICE.

EMIL LUEDERS, OF WEST HOBOKEN, NEW JERSEY.

IMPROVEMENT IN COIN-TESTERS.

Specification forming part of Letters Patent No. **205,492**, dated July 2, 1878; application filed April 19, 1878.

To all whom it may concern:

Be it known that I, EMIL LUEDERS, of West Hoboken, in the county of Hudson and State of New Jersey, have invented an Improved Specie-Scale, of which the following is a specification:

Figure 1 is a vertical central section of my improved specie-scale, showing it extended for use. Fig. 2 is a vertical central section of the same, showing it contracted and folded together. Fig. 3 is a vertical central section of a modification thereof, showing the same folded together. Fig. 4 is a vertical central section of a modification thereof, showing it extended in condition for use. Fig. 5 is a detail cross-section on the line *c c*, Fig. 4, showing the clasp for holding the coin.

Similar letters of reference indicate corresponding parts in all the figures.

This invention has for its object to produce in the most convenient form a pocket-scale for weighing coins, and for distinguishing genuine from counterfeited coins.

The entire instrument can be folded or pushed into a shell, the same as a pocket-pencil, and can be carried in the pocket without inconvenience, and is yet always ready for use when desired.

The invention consists principally in combining, with the inclosing case or shell, having inwardly-projecting stops or pins, a slide having a head, and a scale-beam pivoted to said slide, so that it can be swung at right angles thereto.

The invention also consists in providing said beam at one end with a weight, and at the other end with a clasp for holding the coin to be weighed, and in other details of improvement, hereinafter more fully specified.

I will first describe the instrument as shown in Figs. 1 and 2. In these figures the letter A represents a shell made of sheet metal, hard rubber, or other suitable material, of cylindrical or other proper form, within which shell is contained a slide or piston, B, which can be pushed entirely into the shell, as in Fig. 2, or partly withdrawn therefrom, as in Fig. 1, its head *a* being, in the last-mentioned position, supported on inwardly-projecting pins or stops *b* that are formed within the shell A, as shown.

The lower end of the slide B is forked, and adapted to receive the pivot *d* of the scale-beam D. In the construction shown in Fig. 1, the scale-beam D proper slides within a sleeve, E, which sleeve is, by the pin *d*, pivoted to the slide B. The sleeve E carries, in this instance, a projecting spring-catch, *e*, which engages into notches formed on the edge of the beam D, to regulate the several positions of the latter. One end of the beam D carries a weight, F. The opposite end of the sleeve E carries a wire clasp, *f*, of the kind more clearly shown in Fig. 5, for holding the coin G to be weighed.

The beam D in Fig. 1 is shown to be provided with four notches. That nearest the weight F is for defining its position in weighing quarter-dollars; that next thereto, and in which the spring *e* is shown to engage in Fig. 1, defines the position of the scale-beam in weighing half-dollars. The third notch is intended to weigh the so-called silver "legal-tender" dollars; and that next thereto, the trade-dollars; but other notches may be supplied for weighing other kinds of coin, even gold coin, if desired.

When the instrument is not required for use, the sleeve E and beam D are folded into the forked slide B and pushed into the shell A, as in Fig. 2, in which case the cylindrical weight F will close the formerly open end of the shell, as also shown in Fig. 2.

The modification shown in Figs. 3 and 4 differs from the apparatus shown in Figs. 1 and 2 substantially only in that the sleeve E is dispensed with, the beam D being slotted instead, and the slot supplied with a series of notches, as clearly shown in Fig. 4, so that the beam may be directly adjusted on the pivot *d* in lieu of adjusting it within the sleeve E.

In this case the clasp *f* is directly attached to the non-weighted end of the beam D, as shown in Fig. 4. The construction shown in Figs. 3 and 4 is less expensive than the other, and more convenient in admitting of a shorter slide, B; but in other respects the operation is exactly the same.

The shell A may, if desired, be used for holding a pencil, H, as in Figs. 3 and 4, or a pen or other convenient device.

I do not claim to have invented a pocket-scale consisting of a shell, slide, and weighted

scale-beam pivoted to said slide, and carrying a clasp for suspending the coin, all arranged so that the scale-beam is at right angles to the slide when the scale is used; but

I do claim—

1. The shell A, made with inwardly-projecting stops or pins *b*, and combined with the slide B, having head *a*, and with the scale-beam D, pivoted to said slide so that it can be swung at right angles thereto outside of the shell, substantially as herein shown and described.

2. The combination of the pivoted sleeve E with the notched beam D, carrying weight F, and with the spring-catch *e*, for operation substantially as specified.

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