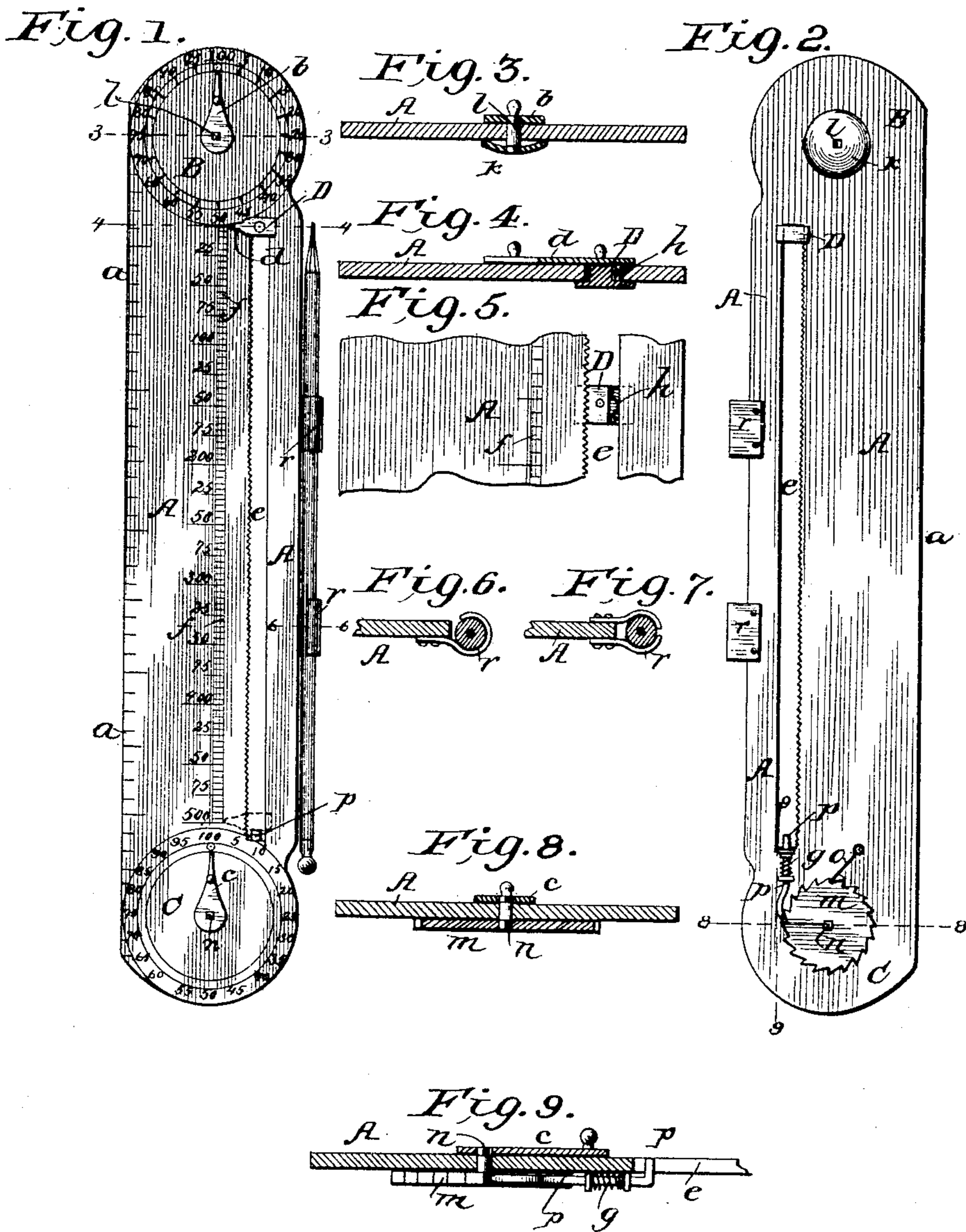


(No Model.)

J. L. BROWN.
POCKET CASH REGISTER.

No. 455,161.

Patented June 30, 1891.



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UNITED STATES PATENT OFFICE.

JAMES L. BROWN, OF BROOKVILLE, PENNSYLVANIA.

POCKET CASH-REGISTER.

SPECIFICATION forming part of Letters Patent No. 455,161, dated June 30, 1891.

Application filed August 18, 1890. Serial No. 362,352. (No model.)

To all whom it may concern:

Be it known that I, JAMES L. BROWN, of Brookville, in the county of Jefferson and State of Pennsylvania, have invented a new and Improved Pocket Cash-Register, of which the following is a specification.

My invention is a device adapted to be conveniently carried in the pocket and to indicate cash on hand and register cash paid out, as well as serve incidentally as a rule, straight-edge, and pencil-holder. The body of the device is a flat oblong plate having a dial cash indicator and register at its respective ends and an intermediate slide-register. One side edge of the plate is graduated to form the rule and the pencil-holder attached to the other.

The details of construction and arrangement of parts are as hereinafter described.

In the accompanying drawings, Figure 1 is a face view of the device. Fig. 2 is a plan view of the reverse side of the same. Fig. 3 is a cross-section on line 3 3 of Fig. 1. Fig. 4 is a cross-section on line 4 4 of Fig. 1. Fig. 5 is a plan view of a portion of the device, the index of the slide being detached. Fig. 6 is a cross-section on line 6 6 of Fig. 1. Fig. 7 is a sectional view showing a modification of the pencil-holder. Fig. 8 is a cross-section on line 8 8 of Fig. 2. Fig. 9 is a longitudinal section on line 9 9 of Fig. 2.

A indicates the body of the device, and *a* a measuring-rule.

B is a dial-indicator for cash on hand; C, a dial-register for cash paid out above the amount of five dollars. Intermediately of this indicator and register B and C is a register D, composed of a slide having an index that indicates on the body A of the device money paid out to any amount less than five dollars.

The body of the device is a thin flat oblong plate A, of metal, celluloid, or other suitable material, having one edge *a* graduated in inches and fractions of an inch of lineal measurement. This plate A is semicircular at each end, which is inscribed to form a graduated circle and provided with a revoluble pointer or index *b*. To adapt the part B to indicate "cash on hand," the graduations are accordingly numbered from "1" to "100" in the denomination of dollars. The correspond-

ing register C at the other end of plate A is for cash paid out, and is similarly inscribed with numbers from "1" to "100" and provided with a similar index *c*. Between these parts B C is arranged the register for cash paid out to any amount from five (5) cents to five (\$5) dollars. It consists of a slide D, having an index *d* and working in a lengthwise slot *e*, located near one edge of plate A, and a row *f* of numbered graduations inscribed on the face of the plate along its lengthwise middle. The index *d* of said slide D projects on the face of the plate toward the row of graduations. To hold the slide D fixed in any adjustment, and yet permit it to be moved easily and quickly, I adapt it to act as a spring-detent, Figs. 4 and 5, which engages corrugations or notches formed on one edge of the slot *e*, as shown. The slide is serrated on one edge in its channel or groove, and a spring *h* is arranged in the other groove.

When the slide D is adjusted and its index set opposite any graduation in the row *f*, it is held locked in such position by means of the spring, so that it is not liable to be accidentally displaced. By pressing the slide backward against the spring it may be moved along the slot without impediment.

The index *b* of indicator B might be attached and operated in various ways and by various means; but for sake of simplicity, cheapness, and avoidance of cumbrousness I prefer to employ the friction-clamp *k*, (shown in Figs. 2 and 3,) which is a small concavo-convex disk of thin spring metal and secured to a rivet or shaft *l*, which passes through it, the index *b*, and the plate A. This shaft should have its ends made polygonal and fitted in corresponding holes in the index and disk to prevent the latter two from turning independently. I may in some instances corrugate or roughen the under surface of the plate A, on which the disk *k* works, in order to increase the friction between said parts. The ends of the shaft *l* should be softened to enable them to be easily upset with a hammer or other suitable tool in case it becomes necessary to take up wear of the disk and plate.

The index *c* of the circular cash-register C is operated automatically by the slide D. To this end I attach a ratchet-plate *m*, Figs. 2, 8, and 9, to the shaft *n* of said index and pro-

vide a spring-detent *o* for holding it locked in any adjustment. The said detent is shown as a spring having its free end beveled for taking into notches of the ratchet *m*. Such construction obviously enables the detent to slide over the ratchet-teeth when a certain moderate degree of force is applied to the index *c* for turning it. A push-pawl *p* slides in keepers on the under side of the plate A and engages the ratchet *m*. It is held normally out of contact with the latter by means of a helical spring *g*, that encircles it, and its head projects into the slot *e*, so that when the slide D is moved down to the end of the latter (which happens when the aggregate sum of five dollars has been paid out) it will strike the pawl *p* and thus force it to engage and rotate the ratchet *m* the distance of one notch, thus carrying the index *c* over the space of one graduation, so as to register "\$5" on the dial C.

The manner of using the device practically is readily perceived. For example, at the beginning of a day or journey or shopping tour the index *b* of dial-indicator B is set to indicate the cash on hand and the indexes of the registers are set at zero. Then as successive amounts are paid out the slide D is employed to register them until they aggregate five dollars, when the index *c* of register C will be actuated by said slide to indicate that sum. Then the slide D is moved back to zero and the registration begun *de novo*. To that edge of the plate A which is adjacent to the slot *e* I attach one or more spring-clamps *r* to serve as a pencil-holder. This clamp is preferably made, as shown in Figs. 1 and 6, of a single elastic piece of thin sheet metal, which is riveted to the plate A at one edge and curved back upon itself, so that its rounded outer side will come in contact with the side of the pocket, yet without wearing it to any great extent; but the clamp might be made of two like spring-pieces, as shown

in Fig. 7. The pencil being arranged close to and parallel with the edge of plate A, it occupies minimum space, and may therefore be carried as an attachment of the plate without inconvenience.

It will be noted that while the semicircular ends of the plate A form part of the dial indicator and register B C they also avoid rapid wear of the pocket, which would result if the ends were of an angular or irregular shape.

The several indexes *b c d* project but slightly from the surface of the plate A, so that they are not liable to catch in the fabric of a pocket, yet they may be conveniently manipulated for the purpose of registration. The rule and straight-edge *a* is very useful in many ways.

The entire body of the device may be struck out of a metal or other sheet and impressed with graduations, &c., by a single operation of a cutting and stamping die.

What I claim is—

1. A pocket cash-register composed of the flat oblong metal plate A, having a lengthwise slot and rounded or semicircular ends graduated for indicator and register, respectively, and provided with indexes, and the slide D, working in said slot and having an index that coacts with a row of numbered graduations inscribed in the middle of the plate, as shown and described.

2. In a cash-register, the combination, with the plate A, having numbered graduations and a slot, one edge of which is serrated, of a slide having an index and serrations for engaging those of the plate, and a spring interposed between said slide and edge for holding the parts normally engaged, as shown and described.

JAMES L. BROWN.

Witnesses:

AMOS W. HART,
 SOLON C. KEMON.