

(No Model.)

T. STOCKER.
POCKET REGISTER AND INDICATOR.

No. 518,797.

Patented Apr. 24, 1894.

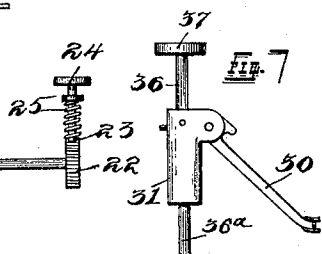
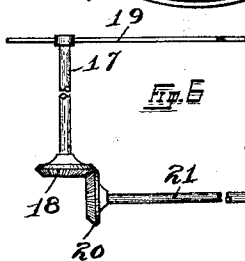
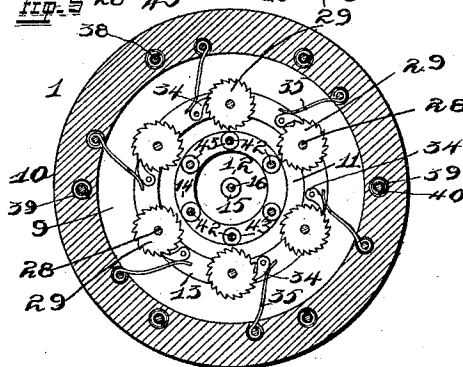
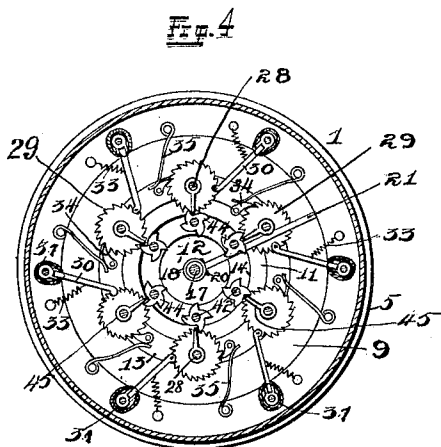
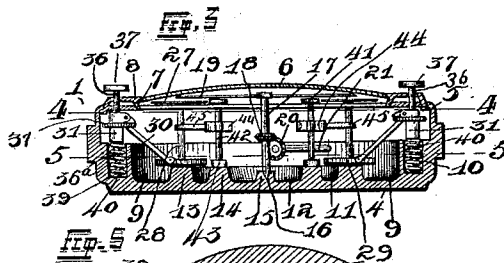
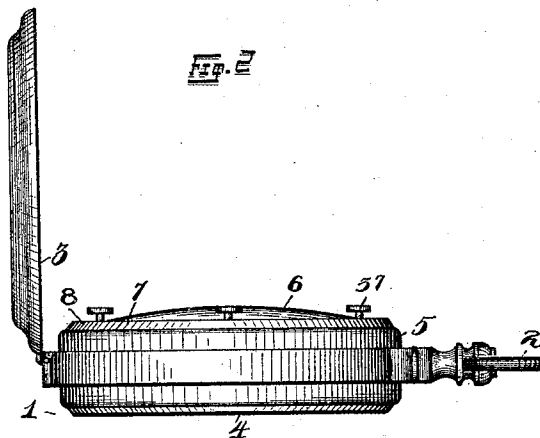
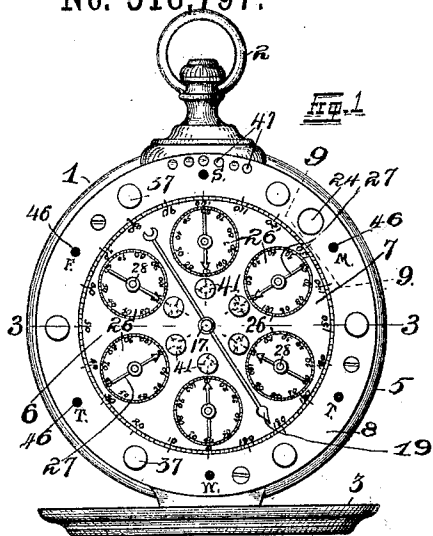


Fig. 6

Fig. 7

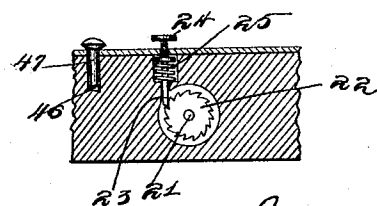


Fig. 8

Witnesses
Alfred E. Egan
Herbert L. Robinson.

Inventor:
Thomas Stocker
By Shydon & Shydon & Longden,
Attorneys

UNITED STATES PATENT OFFICE.

THOMAS STOCKER, OF ST. LOUIS, MISSOURI.

POCKET REGISTER AND INDICATOR.

SPECIFICATION forming part of Letters Patent No. 518,797, dated April 24, 1894.

Application filed March 20, 1893. Serial No. 466,814. (No model.)

To all whom it may concern:

Be it known that I, THOMAS STOCKER, of the city of St. Louis and State of Missouri, have invented certain new and useful Improvements in Pocket Registers and Indicators, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to an improved pocket-register and indicator and consists in the novel arrangement and combination of parts, as will be more fully hereinafter described and designated in the claim.

The object of my improvement is to construct a device preferably made in about the size and design of a watch, adapted to be carried in the vest or other pocket, and provided with means for registering different sums of money, indicating engagements for different dates, total aggregations of cost, or in fact anything to which it may be applied.

In the drawings: Figure 1 is a detail elevation of my invention with the face exposed. Fig. 2 is a side elevation of the same viewed when lying flat upon its back. Fig. 3 is a detail transverse sectional view taken through a line 3—3 in Fig. 1. Fig. 4 is a detail plan sectional view taken through a line 4—4 in Fig. 3. Fig. 5 is a detail plan sectional view taken through a line 5—5 in Fig. 3. Fig. 6 is a detail enlarged view of the mechanism which operates the larger indicator. Fig. 7 is a detail elevation of the means for operating the smaller pointers. Fig. 8 is a detail enlarged view of the pins made use of in carrying out my invention. Fig. 9 is a detail sectional view taken on a line 9—9 in Fig. 1, and showing a side elevation of a part of the mechanism for operating the larger pointer, and the opening for the insertion of the pin shown in Fig. 8.

Referring to the drawings: 1 indicates the case, which is similar in size and form to that of the ordinary style of watch-case so that the instrument can be readily carried in the pocket, the same being provided with a fob-ring 2 and a spring adjusted and controlled lid 3. The back 4 of the case is formed integrally with the rim 5, and it cannot open, as is the case in some watches. A transparent circular glass 6 shields nearly the entire dial 7 of the accounter, leaving a circumferential

portion 8 between the rim 5 and said glass cover 6, for the location of certain parts. The inner surface of the back 4 is provided with a circumferential depression 9 adjacent the side rim 10 in which certain parts are located; and located farther toward the center of the back than said depression 9 is an annular depression 11 and an innermost depression 12, thus leaving three raised portions 13, 14, and 15, respectively, said projection 15 being in the center of the case. The projection 15 is provided with a conical depression 16 in which is located the inner end of the shaft 17 which is provided intermediate of its length with a horizontal bevel gear 18, and upon its upper end and above the face or dial 7 with an indicating pointer 19 which projects both ways from the center of its axis. The bevel gear 18 meshes into a vertical bevel gear 20 upon the inner end of the shaft 21, whose outer end is provided with a ratchet wheel 22 located in the circumferential rim 5. This shaft extends radially. The ratchet teeth upon said wheel 22 are adapted to be engaged by a spring controlled pin 23 provided upon its upper end and exterior of the rim 8 with a button 24 by means of which the same is pushed downwardly. The spring which is coiled about and controls said pin 23 is located in an opening beneath said rim 8 and normally keeps said pin 23 at its outward limit, although continuously engaging the ratchet teeth. The pushing down of said pin 23 by pressing upon the button 24 causes said ratchet wheel 22 to be rotated or moved step by step, likewise its shaft 21 and the bevel gear 20, this movement being imparted to the bevel gear 18 upon the shaft 17, thus operating the pointer 19 and causing its pointed end to point to a series of numerical signs arranged around the outer circumferential edge of the dial plate 7.

The operator may set the large pointer in the morning so that it will stand opposite any of the marks or signs arranged around the edge of the said dial-plate, for the purpose hereinafter mentioned.

Arranged radially around the dial 7 and within its circumferential borders are a series of small dials 26, each of which in this instance have indicating marks arranged around their borders counting from ten to a

hundred units, and said sub-dials 26 are provided with registering pointers 27 mounted upon the outer ends of shafts 28. Said shafts 28 are provided intermediate of their length with ratchets 29 adapted to be engaged by the arm 30 pivotally secured in the boxing 31. The lower end of said arm 30 is provided with means for normally engaging said ratchets, a spring 33 also extending from said arm to a point in the rim of the case, and retaining said arm in such position. Located upon the opposite side of the ratchet wheels from the engaging point of the arms 30 and adapted to engage the teeth in an opposite direction, are detent pawls 34 controlled by springs 35 and adapted to keep the ratchet wheels from reversing. A rod 36 projects through the boxing 31 both above and below the same and is provided upon its upper end with a button 37, and the lower end 36^a of said pin and a portion of the boxing is adapted to operate in the opening 39 in the portion 10 forming a part of the back 4. Located upon the lower end 36^a of said rod 36 between the bottom of the opening 39 and the lower end of the box 31 is a spring 40 which normally keeps the rod 36, box 31, and attached parts at their outward limit. Pushing down upon the boxing 31 by the pressure upon the button 37 turns the ratchet wheel 29 and consequently the sub dial pointer 27. Located within the space inclosed by the sub-dials 26 and above the dial 7 are small rotating dials 41 upon which in this instance are indicated the numerals 1, 2, 3, and 4 indicating a like number of hundreds. The said rotating dials 41 are located one closely adjacent each of the small dials 26, so that the marks upon them may be read in connection with the marks upon the immediately adjacent small dial and the pointer thereof. The said rotating dials are not provided with separate pointers, as such are not needed. The said dials 41 are mounted upon pins 42 and upon said pins near their lower ends are provided collars 43 which control the upward movement of said pins. Mounted upon said pins intermediate of their length are ratchets 44 provided in this instance with only four teeth adapted to be engaged by the arm 45 secured to the upper sides of the ratchets 29. Said ratchets 29 are supposed to be provided with one hundred notches so that when they have made a complete revolution the arm 45 engages one of the teeth of the ratchet 44 and turns the sub-dial 41, thus indicating a hundred or more units.

As will be especially seen in Fig. 1, there are six sub-dials 26, six sub-dials 41 and consequently six rods 36 connecting with ratchets 29. The ratchets are arranged in radial order as well as the dials.

Six small openings 46 are placed at radial points around the rim of the plate 8 and are indicated by Roman letters which are presumed to stand for the different days of the

week, and into said openings 46 are adapted to be placed pins 47 which are normally located in openings adjacent the fob-ring 2, said pins being inserted in said openings 46 to remind the user of any engagements he may have upon the date indicated.

The device is extremely simple in its operation and durable in its construction, all of the dials, sub-dials, and indicators being located under the glass 6 and therefore not liable to become deranged by any contact with other parts therefore making the invention practically free from any breakage by meddling.

As above stated the device can be used for keeping accounts of sums of money, the number of pounds of any desired substance, the number of miles which a traveling man uses from his mileage book, and other numerous uses to which said device could be placed.

The number of sub dials and their necessary operating parts could be lessened or increased without in any way changing the material idea and scope of my invention. I propose to use five of the sub-dials, each having one hundred indicating marks to represent cents, to indicate the total of five dollars, and the remaining sub-dial I desire to use as indicating minutes of the day, and the large pointer 19 should be set to point toward the initial which stands for the day of the week upon which any event or engagement occurs, and also to indicate the day upon which certain things or accounts are recorded by the small pointers 27.

From the above it will be observed that there is a mutual interdependence between the large pointer 19 and its dial and the small pointers 27 and their dials, for the reason that the operator may set said large pointer in the morning to indicate any particular day of the week, and then make use of the smaller pointers and their dials and mechanism for the purpose of indicating different engagements, or registering different sums of money expended or made on that day. It will be further observed that I have provided an instrument of the class described, wherein there are a series of separate pointers, each provided with separate operating mechanism and capable of being moved step by step. Any one of the small pointers may be moved independently of the large pointer, and all the pointers are operated by a very simple movement of the operator's finger engaging push buttons. There is also a mutual interdependence between the small pointers 27 and the small rotating dials 41, for the reason that said small rotating dials are located one closely adjacent each of the small dials 26, so that the numerals marked upon said rotating dials may be read in connection with the marks immediately adjacent the small dial 26 and the pointer thereof. The rotating dial, which is immediately adjacent any one of the said small dials 26, is ro-

tated step by step progressively as movement is imparted to the immediately adjacent small pointer 27 of said dial 26.

5 Having fully described my invention, what I claim is—

10 An improved pocket register and indicator, comprising a casing of a size to be carried in the pocket, and provided with a large dial and a series of small dials, the latter being located in a circle and all of such dials fixed to said casing, said large dial having a circumferential portion 8 which extends around it, and said circumferential portion provided with marks indicating the consecutive days of the week, a large pointer mounted above said dial, a shaft 17 upon which the large pointer is mounted, a horizontal bevel-gear-wheel 18 fixed upon said shaft, a bevel-gear-wheel 20 meshing with said bevel-gear-wheel 18, a horizontal shaft 21 located within said casing beneath said large dial and extending radially to a point adjacent the mar-

ginal edge of said casing, and upon the inner end of which the said bevel-gear-wheel 20 is fixed, a vertical ratchet-wheel 22 fixed upon 25 the outer end of said shaft 21, a vertical push-pin 23 mounted in said casing so that its inner end may engage the teeth of said ratchet-wheel, a push-button mounted upon the outer end of said push-pin, a spring for retaining said push-pin at the limit of its outward movement, a series of small pointers mounted to rotate one above each of said small dials, and means for imparting movement to each of said small pointers independently of each 30 other and of said large pointer, substantially as herein specified. 35

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS STOCKER.

Witnesses:

HERBERT S. ROBINSON,
ALFRED A. EICKS.