T. N. HORNER.

REGISTER.

APPLICATION FILED MAR. 31, 1908.

925,636. Patented June 22, 1909.

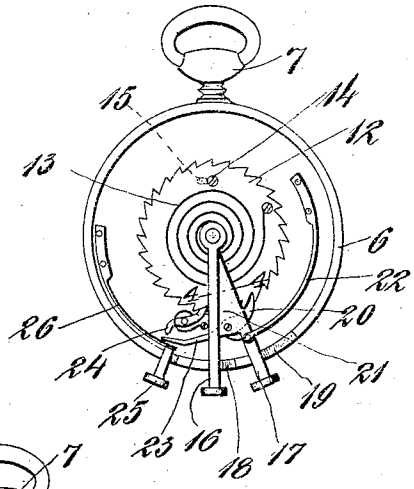


Fig. 3.

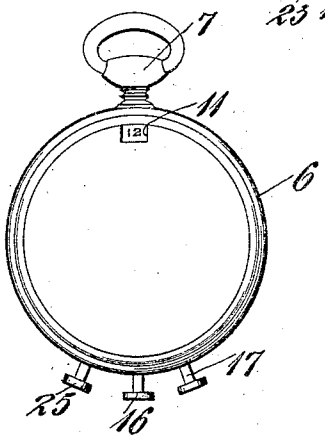


Fig. 1.

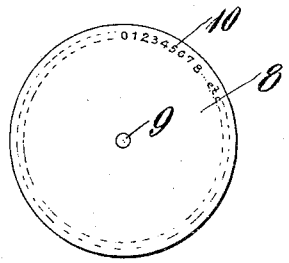


Fig. 2.

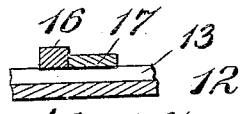


Fig. 4.

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Witnesses

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UNITED STATES PATENT OFFICE.

THOMAS NELSON HORNER, OF LAWTON, OKLAHOMA.

REGISTER.

No. 925,636. Specification of Letters Patent. Patented June 22, 1909.

Application filed March 31, 1908. Serial No. 424,435.

To all whom it may concern:

Be it known that I, THOMAS NELSON HORNER, a citizen of the United States, residing at Lawton, in the county of Comanche and State of Oklahoma, have invented certain new and useful Improvements in Registers, of which the following is a specification.

This invention relates to registers and comprises essentially a disk mounted to turn in a casing and provided with a series of numbers around the edge thereof, any one of which may be exposed through the casing, and an operating device is provided which may be worked by hand to advance the disk, a feature of the device being that the disk can be turned either one or two numbers at each operation, as selected. A release device allows the disk to turn back to zero.

The invention will be found particularly useful for accountants, who may desire to keep account of "10s" or "20s" in adding a long column of figures, but may be used whenever it is necessary to keep a register or account of numbers or articles.

The invention is illustrated in the accompanying drawings, in which,

Figure 1 is a front view of the device. Fig. 2 is a plan of the disk. Fig. 3 is a front view, with the front of the casing removed. Fig. 4 is a section on the line 4—4 of Fig. 1.

Referring specifically to the drawings, 6 indicates a circular casing which may be made somewhat similar to a watch case and provided with a stem 7 at one side whereby it can be readily held between the fingers. Within the casing is a rotary disk 8 mounted at the center upon a pivot pin 9 supported on the casing. This disk has a series of numbers 10 extending around the front edge thereof in position to be exposed through an opening 11 in the front of the case. The disk is fastened to a ratchet wheel 12 having teeth corresponding in number and position to the numbers on the disk. The disk is turned by means to be described, in resistance to the spring 13 coiled around the axis 9, and when released turns back to zero and is there stopped by means of a pin 14 which strikes against a lug 15 projecting from the back of the casing.

16 and 17 are two operating levers or devices which are fulcrumed at their inner ends on the pivot 9 and which extend respectively through slots 18 and 19 in the rim of the casing. The slot 19 is longer than the slot 18. The lever 17 carries a pawl 20 engageable with the teeth of the ratchet, and has an offset portion 21 which rests against the lever 16 when the parts are in normal position. A spring 22 is connected to the lever 17 and acts to return the same to normal position after each operation. The tail of the pawl 20 extends rearwardly as at 23, to position between a detent 24 and a push pin 25, the latter being supported by a spring 26. The detent 24 serves to normally engage the ratchet and prevent back slip thereof.

The disk is turned by movement of one of the levers 16 or 17. When the lever 16 is moved to the right it carries with it the lever 17 which carries the pawl 20 and causes the same to turn the ratchet accordingly; or the lever 17 may be moved to the right, alone, causing the ratchet to turn accordingly. The slots 18 and 19 are of such length as to permit the movement of the lever 16 to the right to move the ratchet wheel one tooth, and the movement of the lever 17 to the right to move the ratchet wheel two teeth. In either event the spring 22 returns the levers to original position as soon as they are released. When the push pin 25 is pressed in it strikes the tail of the pawl 20 and releases the same, which also presses on the tail of the detent 24 and disengages the same, allowing the ratchet wheel and disk to turn back to zero. When the push pin is released the pawl and detent again engage, each being provided with a spring for that purpose, and the device is then ready for the next operation. In adding a column of figures, for example, the addition may proceed mentally, and as each "10" is counted the lever 16 is moved, thereby turning the disk one space, which will register the number of "10s" contained in the column. When a column is counted by "20s" the lever 17 is manipulated in the same way, which will move the disk two spaces at each operation and thus show the number of "10s" contained in the column.

The invention is not limited to the exact form shown and described, since obviously various modifications may be made in the mechanical structure within the scope and principle of the invention.

I claim:

A register comprising a casing, a numbered

disk rotatable therein and having a ratchet wheel with teeth corresponding to the numbers, levers mounted to swing beside the wheel, one lever being located behind the other, the front lever having a pawl thereon engaging the ratchet and normally resting against the rear lever so as to move therewith, and means to limit the movement of the rear lever to less distance than that of the front lever

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

THOMAS NELSON HORNER.

Witnesses:

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W. R. QUINETTE.