T. Rossiter.

Register.

No. 93,350. Patented Aug. 3. 1869.

FIG 1

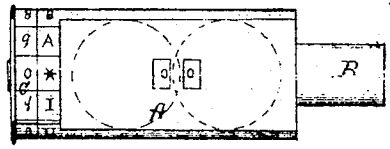


FIG 2

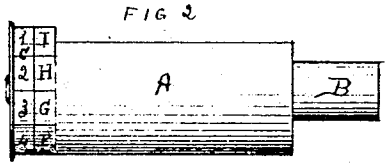


FIG. 3.

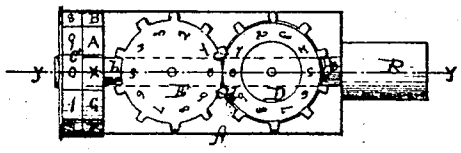
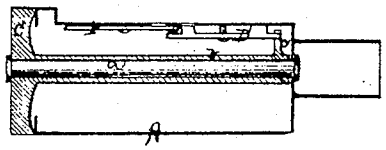


FIG 4



Witnesses

Rufus H. Lanford.

Frank Prescott

Thomas Rossiter

Inventor

United States Patent Office.

THOMAS ROSSITER, OF NEW HAVEN, CONNECTICUT, ASSIGNOR OF ONE-HALF INTEREST TO RUFUS H. SANFORD AND FRANK PRESCOTT, OF SAME PLACE.

Letters Patent No. 93,350, *dated August* 3, 1869.

IMPROVEMENT IN ADDING-MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, THOMAS ROSSITER, of New Haven, in the county of New Haven, and State of Connecticut, have invented a new and useful Adding-Machine; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 is a top or plan view of my improvement.

Figure 2 is a side view of the same.

Figure 3 is a partial section, to more clearly show the position and operation of the disks.

Figure 4 is a longitudinal section of the same, taken through line *y y*.

Similar letters of reference, when they occur in the separate views, indicate like parts.

My invention relates to an improvement in a device for readily and accurately computing the sum of a column of figures, and consists of two registering-disks or dials, operated by a shaft, connected to and revolved by an index-wheel, every revolution of which is recorded upon the said disks or dials, in a manner as will be hereafter described.

The object of my invention is to provide some simple machine for adding figures, in order to take the place of the complicated and expensive machines now used for that purpose, as I propose to construct my improvement of such a size that it may be joined to a lead-pencil, or conveniently carried in the pocket.

To enable others skilled in the art to make and use my invention, I will proceed to describe the construction and operation of the same with reference to the accompanying drawings.

A is the frame or case of the machine, provided with a socket, B, for the reception of the pencil.

C is an index-wheel, which is placed at one extremity of the machine. It is held in position by means of the rod *a*, and is securely attached to and revolves with the hollow shaft *b*.

In each of ten equal divisions of the circumference of this wheel is placed one of the numerical characters, commencing with zero, and extending, in regular order, to the figure nine.

In corresponding divisions upon the frame A (the first of which is filled by a star) are placed, in order, nine letters, A, B, C, D, E, F, G, H, I, the use of which involves a different method of computing from that when the index-wheel alone is used, and will hereafter be more fully described.

D is a registering-disk or dial, which is held upon the upper or flat surface of the frame, in such a manner as to allow its free revolution.

The periphery of this disk or dial is furnished with teeth or notches, to correspond with the ten equal divisions of its upper surface, where figures or characters are placed, in order, as upon the index-wheel.

A pin, *c*, upon the shaft *b*, meshes into the said notches or teeth with every revolution of the shaft, and by this means the said disk D is operated.

E is another registering-disk or dial, similar to the disk D, but placed a little above it, and is operated by means of a pin, *d*, upon the said disk D, instead of directly from the shaft *b*.

Through the surface of the frame A, I place two holes or apertures, of any given size, each exposing one of the numbers on the disks D and E.

This completes the construction of my improvement. The operation is as follows:

To prepare the machine for use, the zero on each disk must (by turning the index-wheel backward or forward, as the case may require,) be brought under the apertures. The zero upon the index-wheel C must also be placed opposite the star upon the frame, as shown in fig. 1.

The work of adding is commenced by revolving the index-wheel until the figure corresponding to the first figure in the column to be added is brought opposite the star upon the frame. The next figure in the column is then taken.

If the sum of these two figures does not exceed ten, the number upon the index denoting the said sum is placed opposite the star. If the sum exceed ten, the ten is registered upon the disk D by the operation of the pin *c* and shaft *b*, and the figure denoting the excess is brought opposite the star, as before described. The next figure in the column is added in the same manner, and so on, until the column is finished.

If the sum of the column should exceed one hundred, the disk E is carried forward by the pin *d*, upon the disk D, thus registering the hundred, while the disk D again commences at zero, to register the tens.

Another method of using my machine, and one, in some cases, preferable, is as follows:

The machine must be first prepared for use in the same manner as before described.

Place the figure upon the index-wheel corresponding to the first figure in the column opposite the star, the same as in the other case; then turn the machine around, and note the letter opposite which the zero of the index stands; bring the figure of the index corresponding to the next figure of the column opposite this letter; again turn the machine, and note

the letter opposite zero, and bring the next figure of the column opposite it, as before, and so on, until the column is finished.

In both these methods, the answer will be found by referring to the apertures, counting the number upon the disk E as hundreds, that upon the disk D as tens, and the one opposite the star upon the index-wheel as units.

Having thus fully described my invention,

What I claim as new and useful, and desire to secure by Letters Patent, is—

The arrangement of the index-wheel C, hollow shaft *b*, registering-disks D and E, actuated by the pin *c*, contained within the case A, constructed as shown and described.

This specification signed and witnessed, this 26th day of May, 1869.

THOMAS ROSSITER.

Witnesses:

WM. OLMSTEAD,

GEO. H. LARNED.