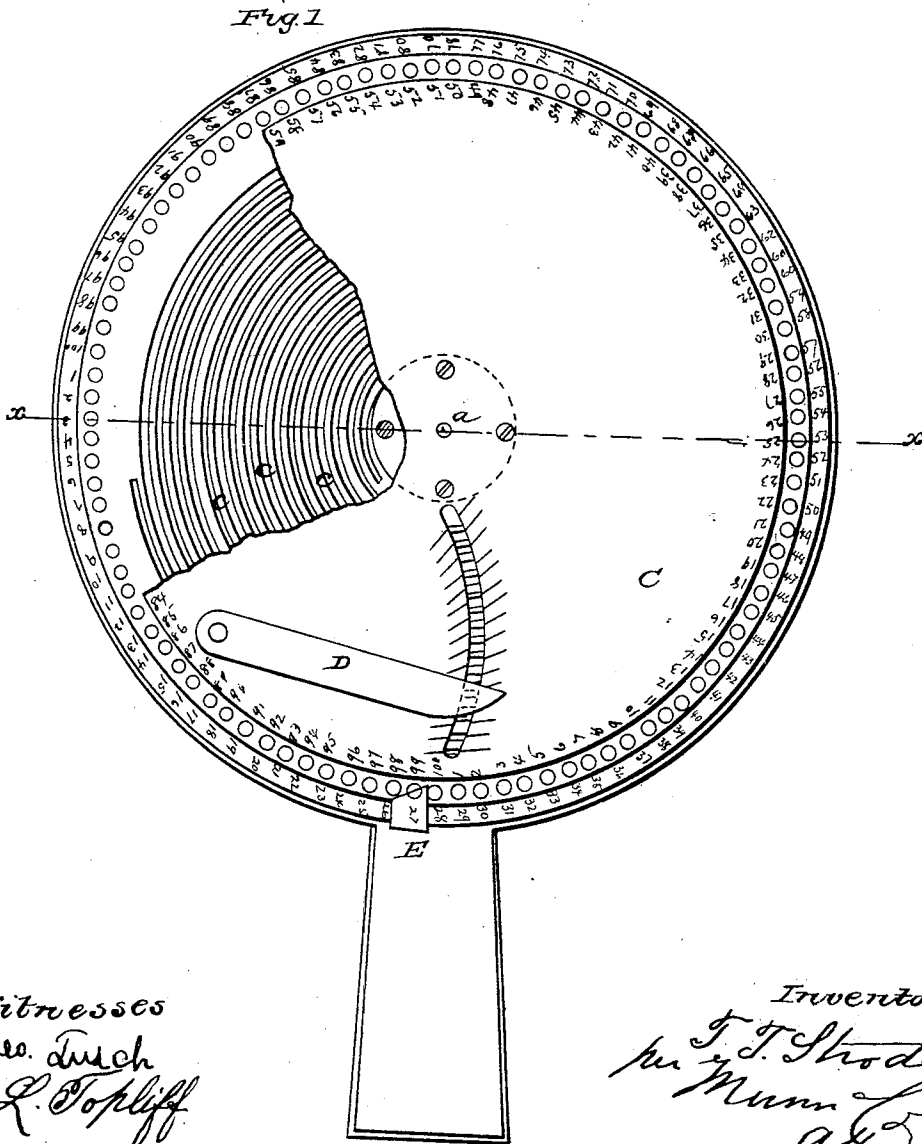
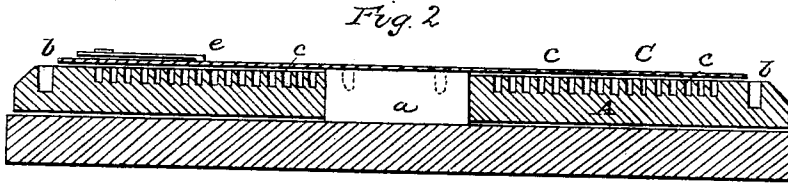


T. T. STRODE.

Adding Machine.

No. 49,168.

Patented Aug. 1, 1865.



Witnesses
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Inventor
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UNITED STATES PATENT OFFICE.

T. T. STRODE, OF MORTONVILLE, PENNSYLVANIA.

IMPROVEMENT IN ADDING-MACHINES.

Specification forming part of Letters Patent No. **49,168**, dated August 1, 1865.

To all whom it may concern:

Be it known that I, T. T. STRODE, of Mortonville, in the county of Chester and State of Pennsylvania, have invented a new and Improved Adding-Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a sectional plan or face view of this invention. Fig. 2 is a transverse vertical section of the same, the line *x x*, Fig. 1, indicating the plane of section.

Similar letters of reference indicate like parts.

This invention consists in the employment or use of a revolving disk marked on its rim with a series of figures, commencing at 1 and ending at 100, or any other figure, and provided with cavities to receive a pin by means of which said disk can be rotated, and with a helical or cam groove in its face to operate in combination with a stationary abutment, and with a hinged index and stationary dial marked with figures from 1 to 100 near its circumference, and with other figures, from 1 to 16, more or less, on the sides of a segmental slot, in which the index plays in such a manner that by inserting a pin in one of the cavities opposite to any desirable figure on the circumference of the dial, the revolving disk can be turned on its axis for a distance equivalent to the figure which was opposite the respective cavity, and at the same time the index moves in the cam-groove and the figure in question is registered, and by repeating the operation with the same or other figures said figures are added up and the sum registered on the dial and disk.

A represents a disk, made of wood or any other suitable material, which is attached to a bed-plate, B, by means of a central pivot, *a*, on which the same revolves freely. Said disk is marked on its circumference with figures from 1 to 100; or, if the same is large enough, still more figures may be added in consecutive order, and it is provided with a series of cavities, *b*, one opposite to each of the figures—or at least corresponding in number to the number of figures—marked on the

edge of the disk. The face of the disk is furnished with a helical or cam groove, *c*, and said disk revolves under a stationary dial, C. The diameter of this dial is such that its edge extends close to the cavities in the disk, as clearly shown in Fig. 1 of the drawings, and it is marked on its face, near its circumference, with a series of figures, from 1 to 100, more or less—one figure for each cavity.

D is the index, which is hinged to the dial C by means of a pivot, *d*, and a nose or lip, *e*, projects from this index through a segmental slot, *f*, in the dial into the cam-groove *c*. The sides of the slot are marked with figures from 1 to 16, more or less, and a stationary abutment, E, which projects over the edge of the disk, limits the rotary motion of the same or prevents a pin inserted into one of the cavities from being carried round and round. This abutment is opposite the figures 100 on the dial, or in such a position that by inserting a pin into a cavity—for instance, that opposite the figure 20—and carrying the same along until it strikes the abutment the motion thus imparted to the revolving disk corresponds to the figure 20.

The operation of my machine will be easily understood from an example. If it is desired to add up the following figures: 78, 89, 65, 56, 40, the disk A is turned back until the figure 100 marked on its edge is close to the abutment, and the index is moved back immediately after the disk by catching the finger-nail under its outer end and lifting said end up out of the grooves and then turning it back and dropping it into the first groove, and the pin is then inserted into the cavity opposite the figure 78 and the disk turned in the direction of the arrow marked on it in Fig. 1 until the pin strikes the abutment. Said pin is then withdrawn and inserted in the cavity opposite the figures 89 on the dial and the disk again turned until the pin strikes the abutment, &c., for each of the succeeding figures, 65, 56, 40, and the same is shown by the index and by the figure on the disk next the abutment. The index shows the hundreds and the figures on the disk the odds below 100. The sum is 328.

It will be noticed by the action of the cam-groove *c* the index is moved up in the segmental slot, so that for each 100 one of the figures marked on the sides of the slot is exposed un-

der the outer edge of the index. For instance, if the disk is turned for 100, the index moves in far enough to show the figure 1. If the disk is moved for 500, the index moves in far enough to expose the figure 5, &c.

It will be readily understood how by this machine any desired series of figures can be added up in the easiest and most convenient manner, and by increasing the diameter of the disk and dial the capacity of the machine can be increased to any desired extent.

I claim as new and desire to secure by Letters Patent—

The revolving disk A, marked with figures on its circumference, and provided with a cam-groove, *c*, and with cavities *b*, in combination with the slotted dial C and index D, constructed and operating substantially as and for the purpose set forth.

THOMAS T. STRODE.

Witnesses:

ROBT. B. STEEN,
JAMES WILSON.