

No. 742,810.

PATENTED OCT. 27, 1903.

H. G. WHITE.  
ADDING REGISTER.

APPLICATION FILED JUNE 25, 1903.

NO MODEL.

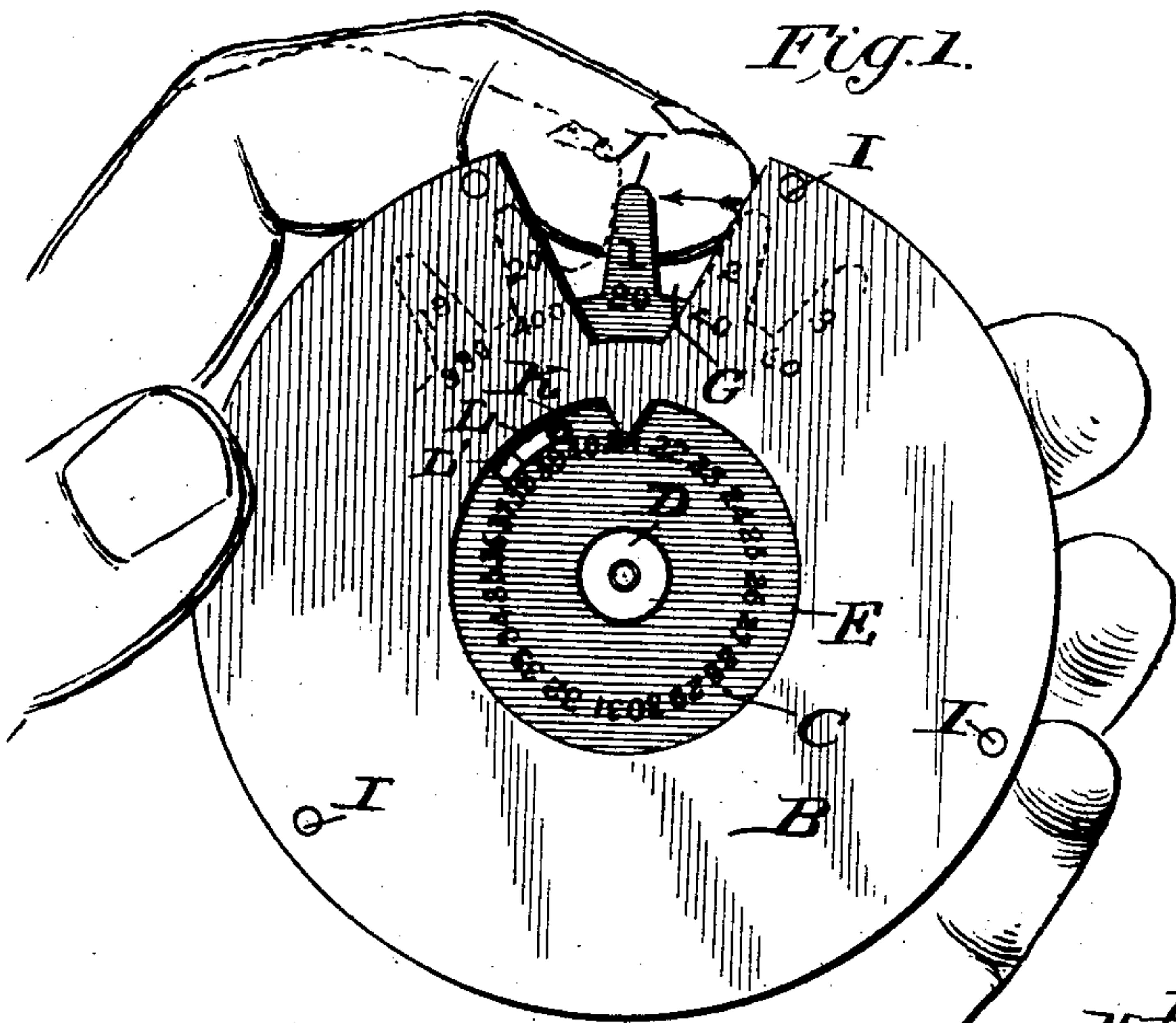


Fig. 1.

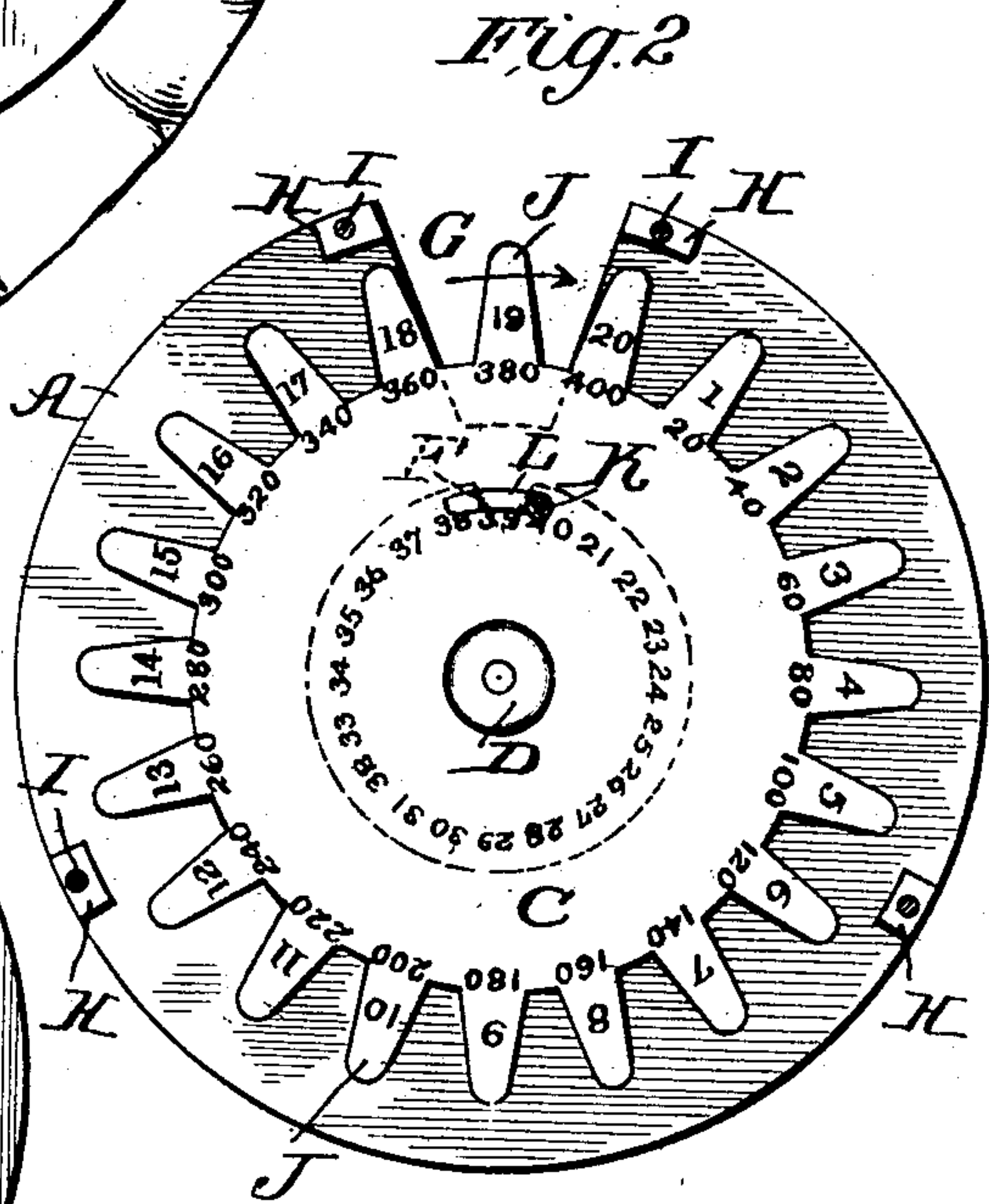


Fig. 2.

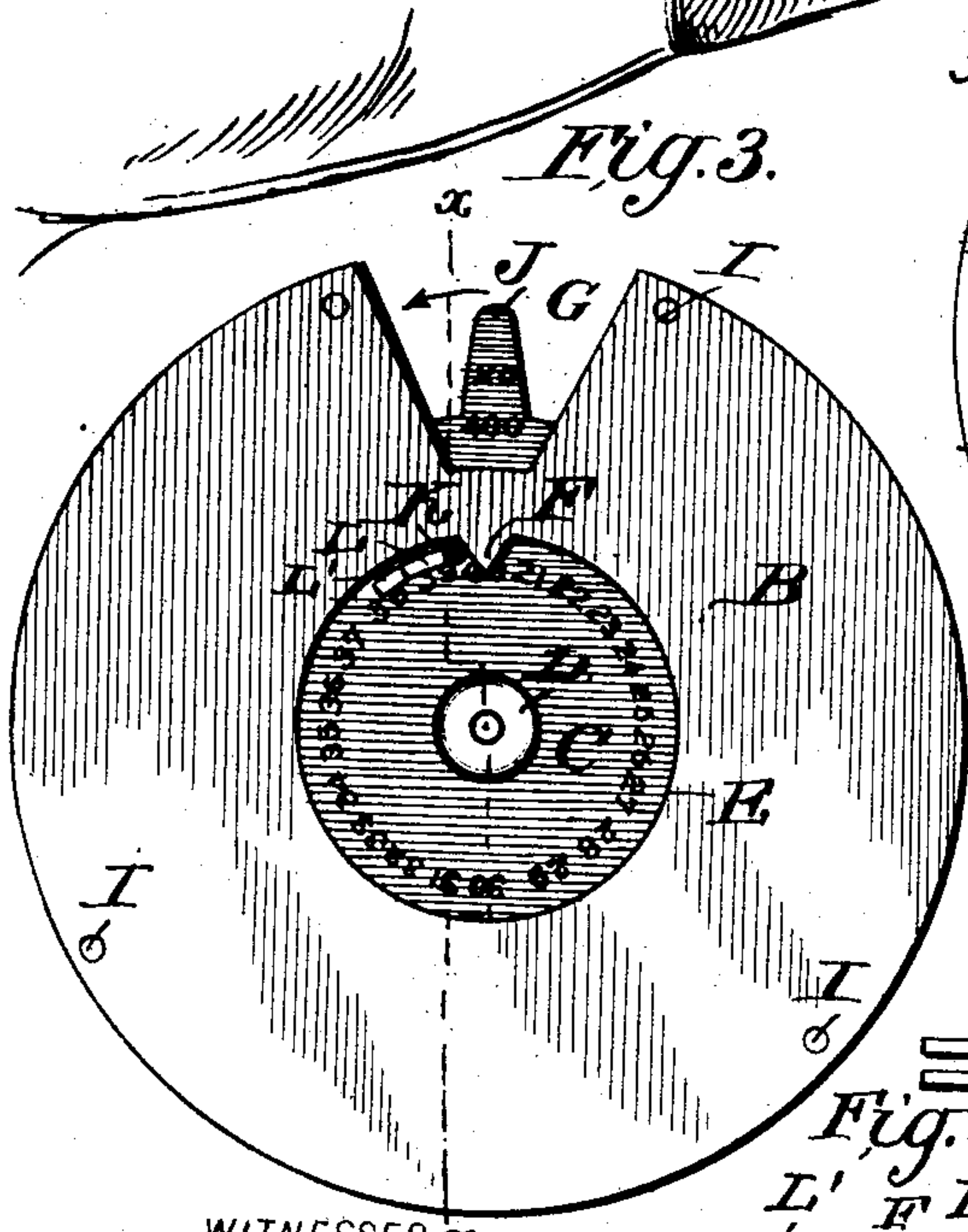


Fig. 3.



Fig. 4.

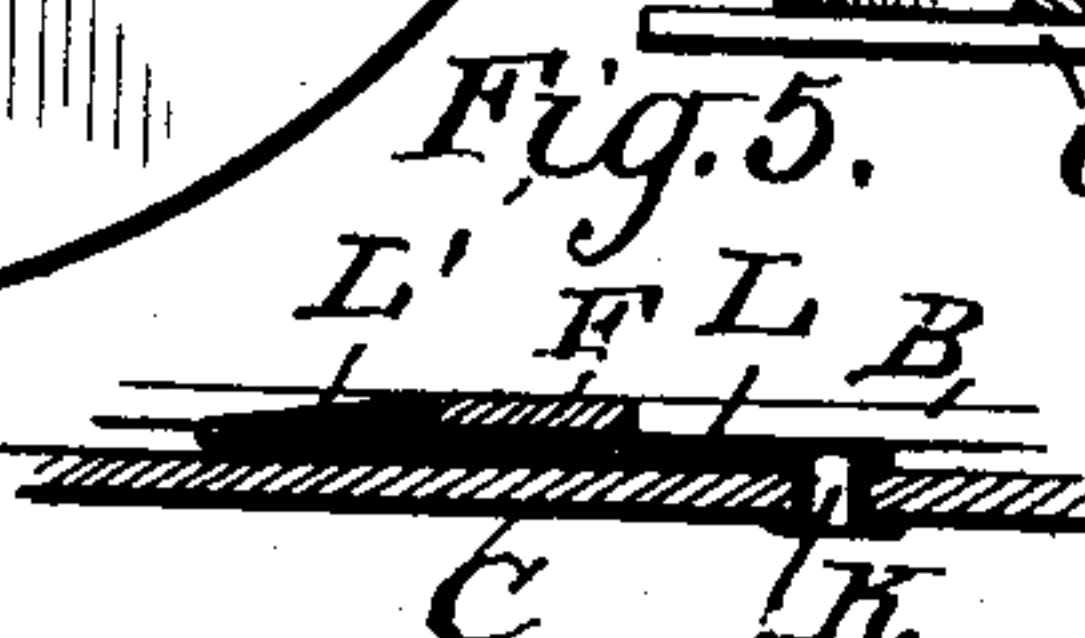


Fig. 5.

WITNESSES  
Joe. A. Ryan  
Harrison B. Brown

INVENTOR  
Hugh G. White.  
BY *Munn & Co.*

ATTORNEYS.



# UNITED STATES PATENT OFFICE.

HUGH G. WHITE, OF WAVERLY, MISSOURI.

## ADDING-REGISTER.

SPECIFICATION forming part of Letters Patent No. 742,810, dated October 27, 1903.

Application filed June 25, 1903. Serial No. 163,071. (No model.)

*To all whom it may concern:*

Be it known that I, HUGH G. WHITE, a citizen of the United States, residing at Waverly, in the county of Lafayette and State of Missouri, have invented a new and Improved Adding-Register, of which the following is a specification.

My invention has for its object to provide a register designed to facilitate the method of addition or adding columns of figures. The invention consists of the peculiar register which will be hereinafter fully described and the novel features thereof pointed out in the claims.

In order to enable others to make and use my invention, I will now proceed to describe it in detail with reference to the accompanying drawings, which form a part of this specification.

In the drawings, Figure 1 is a plan view illustrating my invention in use. Fig. 2 is a similar view with the front disk or plate removed. Fig. 3 is a view similar to Fig. 1 with the rotatable disk at adjusted position, and Fig. 4 is a central vertical sectional view taken on line *x x* of Fig. 3. Fig. 5 is a detail sectional view showing the spring-catch.

In carrying out my invention I employ a rear disk or plate A, a front disk or plate B, and a rotatable disk or plate C. The plate C is arranged between the plates A B and has turning movement on a suitable pin or rivet D, extended through or fixed to the plate A, substantially as shown.

The plate B is formed with preferably a concentric circular opening E, having an inwardly-projecting lip or pointer F. The plates A B are cut away, from their outer edges, forming a substantially V-shaped recess G, and held spaced apart to allow free movement of the plate C by blocks H and securing rivets or screws I. The plate C is formed with a series of teeth J, as best shown in Fig. 2.

It will be noticed that I provide the plate C with three circular arrangements of figures, the outer circle of which being located on the teeth J. The figures of the next or intermediate circular arrangement are located, one number, at the base of each tooth J, adapted for exposure in the recess G, as shown. The inner or smaller circular arrangement of figures is located

on the plate C, adapted to be seen through the opening E in the plate B, and near the inner end of the pointer F. It will be noticed that the figures on the teeth J range from "1" to "20" and that the figures of the smaller or inner circle begin with "21" and end with "40." The figures of the intermediate circular arrangement thereof begin with "20" and increase twenty units at each following figure to "400." (See Fig. 2.) The numbers in each circular arrangement above described may be extended or lessened and the plate C be provided with more or less teeth J. In the plate C, I provide a small recess K, adapted to receive the point of a pencil or other suitable instrument by which the plate C is rotated.

While I have shown the plates A B C constructed circular in form, obviously they may be variously modified without departing from the spirit of my invention.

In using my improved adding-register I proceed as follows and with the rotatable plate C in position, as shown by Fig. 1 of my drawings: Now suppose a column of figures—say "1," "3," "5," "7," "9," &c.—is to be added, I proceed adding the figures by tens and register each ten by moving the teeth J in direction of the arrow. (See Fig. 1.) By proceeding up the column to and including the figure "7" the sum will be sixteen, with six to carry. Tooth No. 1 is shoved in direction of the arrow and the remainder six added with the figures above. The next figure in the column being "9," obviously the remainder five, over ten, must be added with the next figures in line and No. 2 tooth shoved forward. Thus far in the operation the register will indicate two tens, which, with the known remainder five, makes the total twenty-five.

From the above it will be understood how my register facilitates the method of addition. By registering the several tens in the column total it is apparent that when the last figure in the column is reached the unit numbers on the teeth J will indicate the number of tens in the figures added. In using my register when twenty tens are registered the recess K in the rotatable plate C will stand just left of the pointer F, as shown in Fig. 3. Should the column of figures extend or contain more than twenty tens, registered as above de-



scribed, in proceeding further the inner circle of figures are used and the plate C turned in direction of the arrow. (See Fig. 3.) After forty tens have been added the disk may be returned to starting-point by inserting the point of a pencil in the recess K, rotating the disk in direction indicated by the arrow in Fig. 2.

In adding a column of figures and when it is desirable to proceed by registering twenties the intermediate circle ranging from "20" to "400" may be used, and the procedure is substantially the same as when registering by tens.

Two columns of figures may be added in substantially the same way as in adding by tens.

I employ a spring catch or click L on the rotatable disk having a yielding upturned end L', adapted to pass under the pointer F. The object of the catch or click is to indicate complete revolution of the disk.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. An adding-register, consisting of inner and outer spaced plates, and an intermediate

rotatable plate, the latter having spaced peripheral teeth and concentric arrangements of figures adapted for exposure, the inner and outer plates being suitably cut away, whereby the movement imparted to the rotatable plate is limited to one tooth and the space only on both sides of a tooth, substantially as described.

2. An adding-register consisting of inner and outer spaced plates, and an intermediate rotatable plate, the said inner plate having a substantially circular opening and inwardly-projecting pointer as specified, and a peripheral recess conforming with a similar recess in the outer plate, the rotatable plate having peripheral teeth adapted for engagement in the said peripheral recess of the inner and outer plates, and also three concentric arrangements of figures, the inner circle of which being a continuation of the outer circle of figures, and the intermediate circle of figures starting with and ranging twenty units apart, substantially as described.

HUGH G. WHITE.

Witnesses:

JOE P. MOTTE,  
ISAAC FULKERSON.