M. J. HENOCH.

ADDING DEVICE.

APPLICATION FILED JULY 10, 1912.

1,211,581. Patented Jan. 9, 1917.

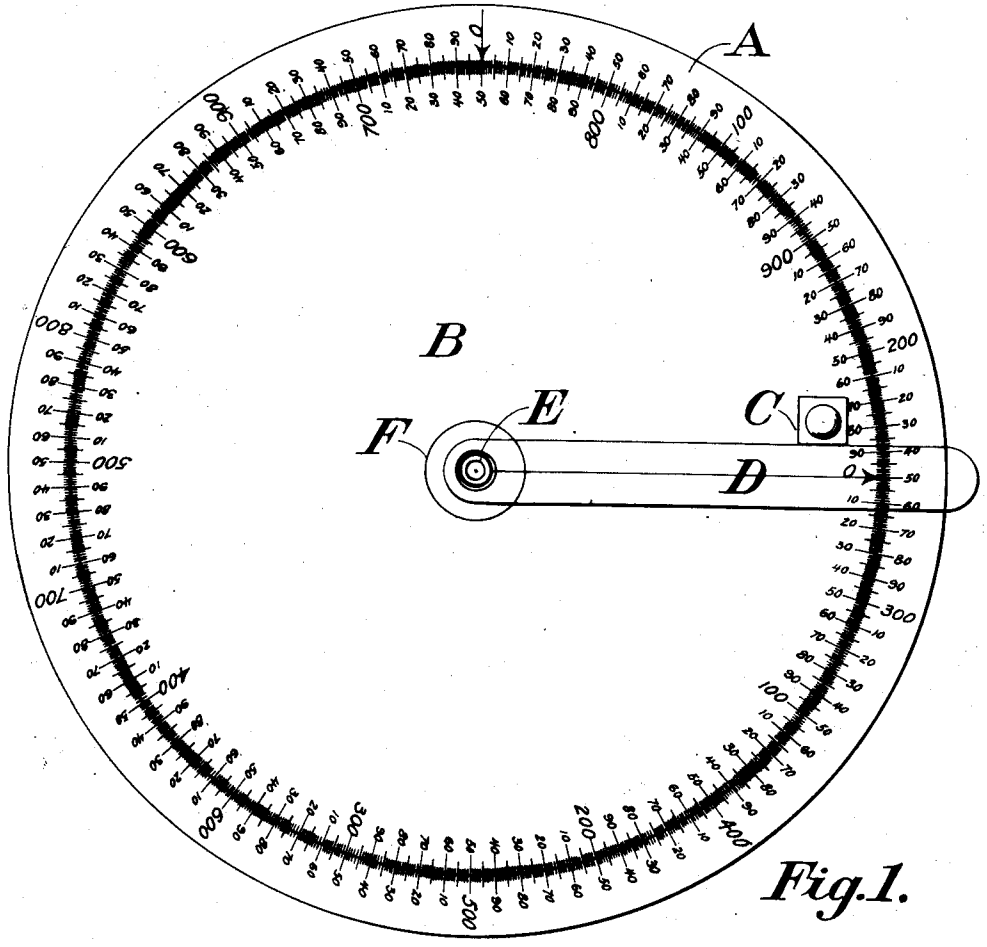


Fig. 1.



Fig. 2.

WITNESSES:

Wm. A. Jackinson

F. Reamy Kelly

INVENTOR

Milton J. Henoch,

BY

Richard Bowen

HIS ATTORNEY

UNITED STATES PATENT OFFICE.

MILTON J. HENOCH, OF SIOUX CITY, IOWA.

ADDING DEVICE.

1,211,581. Specification of Letters Patent. Patented Jan. 9, 1917.

Application filed July 10, 1912. Serial No. 708,705.

To all whom it may concern:

Be it known that I, MILTON J. HENOCH, a citizen of the United States, residing at Sioux City, in the county of Woodbury and State of Iowa, have invented new and useful Improvements in Adding Devices, of which the following is a specification.

My invention relates to adding devices, and more specifically to an adding device composed of two graduated disks one being smaller than the other, and a guide revolving about a common center.

With the above and other objects in view, my invention relates to such details of construction and in the arrangement and combination of the several parts as will be hereinafter fully described and specifically pointed out in the appended claim.

In describing my invention in detail reference will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the several views, and in which:—

Figure 1 is a plan view of my invention, and Fig. 2 is a cross sectional view thereof.

The letter A in the drawings designates the body portion of my invention which consists of a comparatively large disk provided with graduations, divided into one thousand equal parts, each tenth division bearing figures indicating its number from the starting point, which is indicated by an arrow or other suitable mark. A second disk B is provided which is graduated in the same manner as is the disk A, the different graduations being adapted to correspond exactly when the disks are in a certain position in relation to each other. The disks are pivoted about a rivet E and are revolubly supported independent of each other. Also supported by the rivet E and operated upon the upper face of the disk B is a transparent guide member D, which guide member extends to the outer edge of the larger disk and carries on its under surface an indented or other indicator—an arrow or line.

For the purpose of permitting the free movement of the disks in relation to each other, and the ready manipulation of the guide D, washers F are interposed about the rivet E. I desire it to be understood that the washers which are provided may be of any suitable form and that the construction thereof is not claimed, or made a part of this invention.

A stop C is disposed upon the disk B and held in rigid relation thereto by any suitable means. It is apparent that when the disk B is rotated that the stop will engage the guide in the manner clearly shown in Fig. 1. The method of operation in adding a column of figures is as follows: The zero mark on the disk B is placed in a line with the first figure of the column on the disk A. The guide D is then moved to coincide with the second figure of the column on the disk B. The disk A and guide D are now held rigid and the disk B is moved until the stop C contacts with the side of the guide. The zero mark on the disk B will than be pointing to the sum of the two numbers on the disk A. Next move guide D until the indicator points to the third figure of the column on disk B, move stop C to contact with guide D and the zero mark of disk B will point to the sum of the three numbers on disk A. Continue the operation each time setting the indicator at the next succeeding number on disk B and moving stop C up into contact with the guide D. The sum will be indicated by the figure on disk A opposite the zero mark on disk B.

I desire it to be understood that I may make slight changes in the construction and in the arrangement and combination of the several parts, provided such changes fall within the scope of the subjoined claim.

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

In a manually held calculating device, first and second superposed disks, the lowermost disk adapted to directly rest in the hand or rest on a support, means fastening said disks together for rotation independently of each other, one of said disks being of less diameter than the other, each disk being provided with graduations adjacent

its outer edge, an indicator rotatable over and independently of said disks and projecting beyond the edge of said disks whereby both the larger disk and the indicator can be readily grasped by one hand and held against movement, and means on said second disk serving as a handle to facilitate adjustment of said second disk substantially as described.

MILTON J. HENOCH.

Witnesses:
W. A. JENKINSON,
D. C. BROWNING.