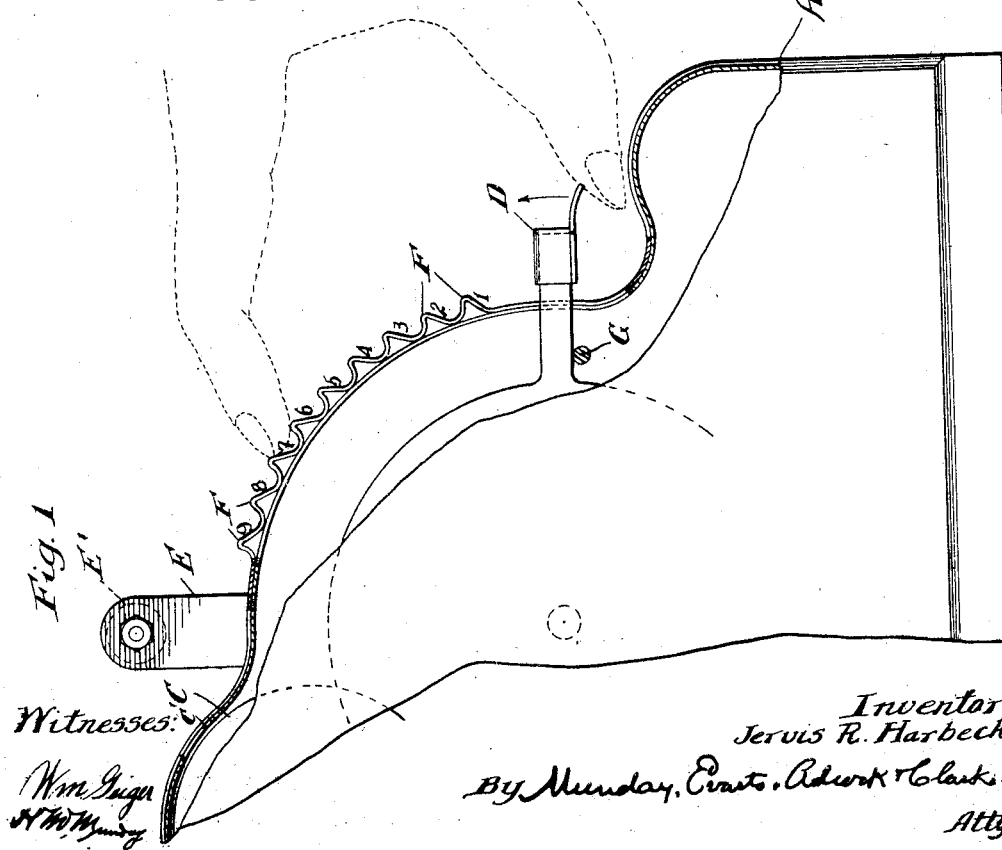
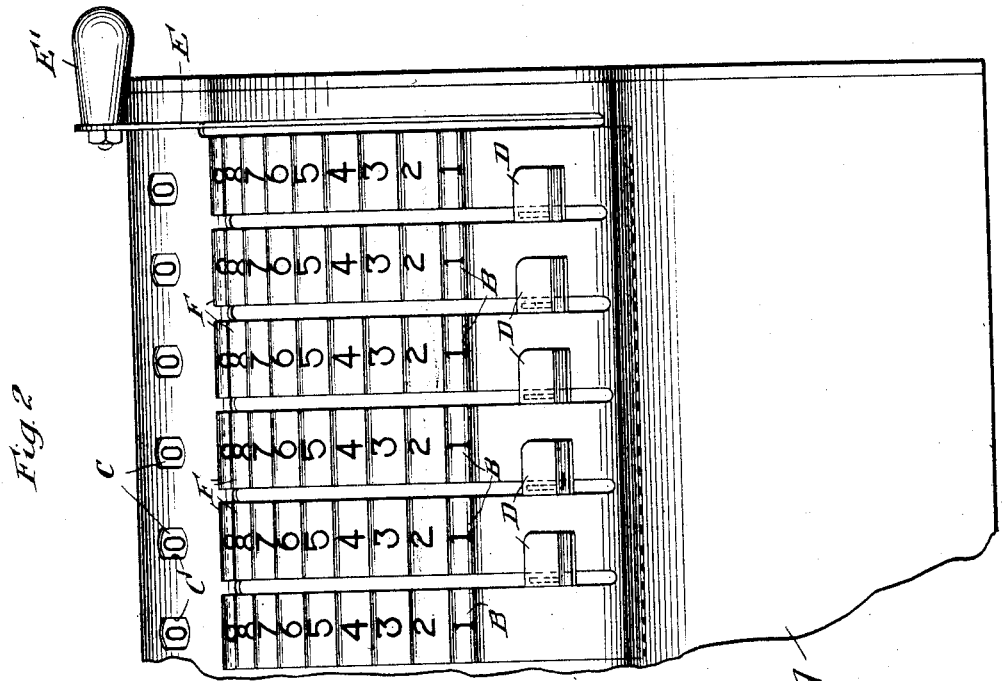


J. R. HARBECK.
 ADDING MACHINE.
 APPLICATION FILED APR. 10, 1912.

Patented Aug. 27, 1912.

1,036,614.



Witnesses:

Wm. Guign
 H. W. Munday

Inventor:
 Jervis R. Harbeck
 By Munday, Evans, Adcock & Gluck.
 Attys

UNITED STATES PATENT OFFICE.

JERVIS R. HARBECK, OF CHICAGO, ILLINOIS, ASSIGNOR TO CHARLES W. SHONK COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF NEW JERSEY.

ADDING-MACHINE.

1,036,614.

Specification of Letters Patent.

Patented Aug. 27, 1912.

Application filed April 10, 1912. Serial No. 689,710.

To all whom it may concern:

Be it known that I, JERVIS R. HARBECK, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Adding-Machines, of which the following is a specification.

This invention relates to an improvement in adding machines, and particularly to that class of adding machines in which a series of numeral wheels are operated, each by its own actuating lever, which actuating lever is first set to represent the digit required, and subsequently moved through an arc to a fixed stop or point. And the invention consists in applying to such machines, a graduated finger hold to facilitate the setting of the actuating lever at any desired digit, so that the finger of the operator may be utilized as a variable stop or guide to the movement of said lever.

In the accompanying drawing which forms a part of this specification, Figure 1 is a fragmentary side view of an adding machine containing my invention, and illustrating its method of operation, and Fig. 2 is a fragmentary front view of the same machine.

Adding machines of the general kind to which this invention is applicable are already so well known, that description and illustration of the adding mechanism is deemed unnecessary for the full illustration of the present improvement. Generally stated, such machines consist of a series of numeral wheels, upon the periphery of each of which is marked the Arabic numerals from 1 to 0, there being one or more sequences of such digits upon each numeral wheel. Concentric with these numeral wheels is ordinarily a casing made in the form of a segment concentric with the numeral wheel, and upon this casing is marked a single sequence index of digits for each numeral wheel. Also for each numeral wheel is provided an actuating lever which may be moved freely in one direction through any stated arc and positioned or set to any required digit on the casing, without causing movement of its numeral wheel, but which lever, when moved in the other direction, will cause the numeral wheel to rotate through an arc equal to the movement, whereby digit after digit in column after column is accumulated and indicated

at a window through which the numeral wheel is visible. One of the difficulties encountered in the operation of machines of this kind, is the liability of the operator to make mistakes in setting the actuating lever to the right digit. He is extremely likely to push said actuating lever a little too far or allow it to fall a little short, so that its pawl or seizing mechanism takes the numeral wheel at the wrong point.

The object of the present invention is to remedy this difficulty, which is accomplished by so constructing the machine that the finger of the operator may be employed as a variable indicator or stop in the setting of the actuating lever.

In the drawings forming a part of this specification, the casing and some parts of such a machine are illustrated. Thus, in said drawing, A represents the casing of the adding machine.

B, B, B, B, B and B are the several indexes of digits from 1 to 9, corresponding to each numeral wheel.

C, C,—seen through the windows C¹ C¹,—are the numeral wheels.

D, D, etc., are the actuating levers and E is the adding lever provided with the handle E¹. The digit indexes B, in the present invention, are provided with graduated finger holds F, there being one of these holds F to each digit in the sequence. These holds are of such size and shape that one of the fingers of the hand may easily be placed to rest upon the hold, while the thumb of the same hand may be placed on the lever D. When working the machine, the operator who desires, for example, to add 6 units or six tens, places his fore-finger upon the finger hold, for instance, above the digit 6, and simultaneously his thumb beneath the actuating lever D of that column, then closing his thumb and finger together, brings the actuating lever into position opposite the said digit 6, so that when said actuating lever is moved again in the opposite direction to its normal stop G, 6 will have been added, after the manner of such machines. Because the operator does not require to hesitate or slow up his movement, this arrangement of finger hold stops greatly facilitates and hastens the operation, for he can rapidly set upon the machine in succession all the figures of any certain amount to be added, and feel sure that in no case

has he fallen short or exceeded the required arc in the case of any one of the actuating levers thus set.

5 This invention is specially applicable to that class of adding machines in which all of the digits of an entire amount may be first set up and then added by the down-stroke of the adding lever, though it is also
10 useful in those machines in which the actuating levers are moved to rotate the wheels in succession or in a certain order instead of simultaneously in the act of adding.

In Fig. 1, the thumb and finger of the operator are shown in the act of setting an
15 actuating lever of the machine, the finger

being in position to act as a stop or guide to determine the amount of upward movement of the lever.

I claim:—

The combination with an adding-machine- 20 numeral-wheel-actuating-lever and its index of digits of a series, corresponding to the digits, of spaced finger-holds against any one of which the operator's finger may rest to serve as a variable determinant stop in 25 the manipulation of said lever.

JERVIS R. HARBECK.

Witnesses:

RALPH H. DRAKE,
A. M. SIEGEL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."