H. E. GOLDBERG.

CALCULATING MACHINE.

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1,029,678. Patented June 18, 1912.

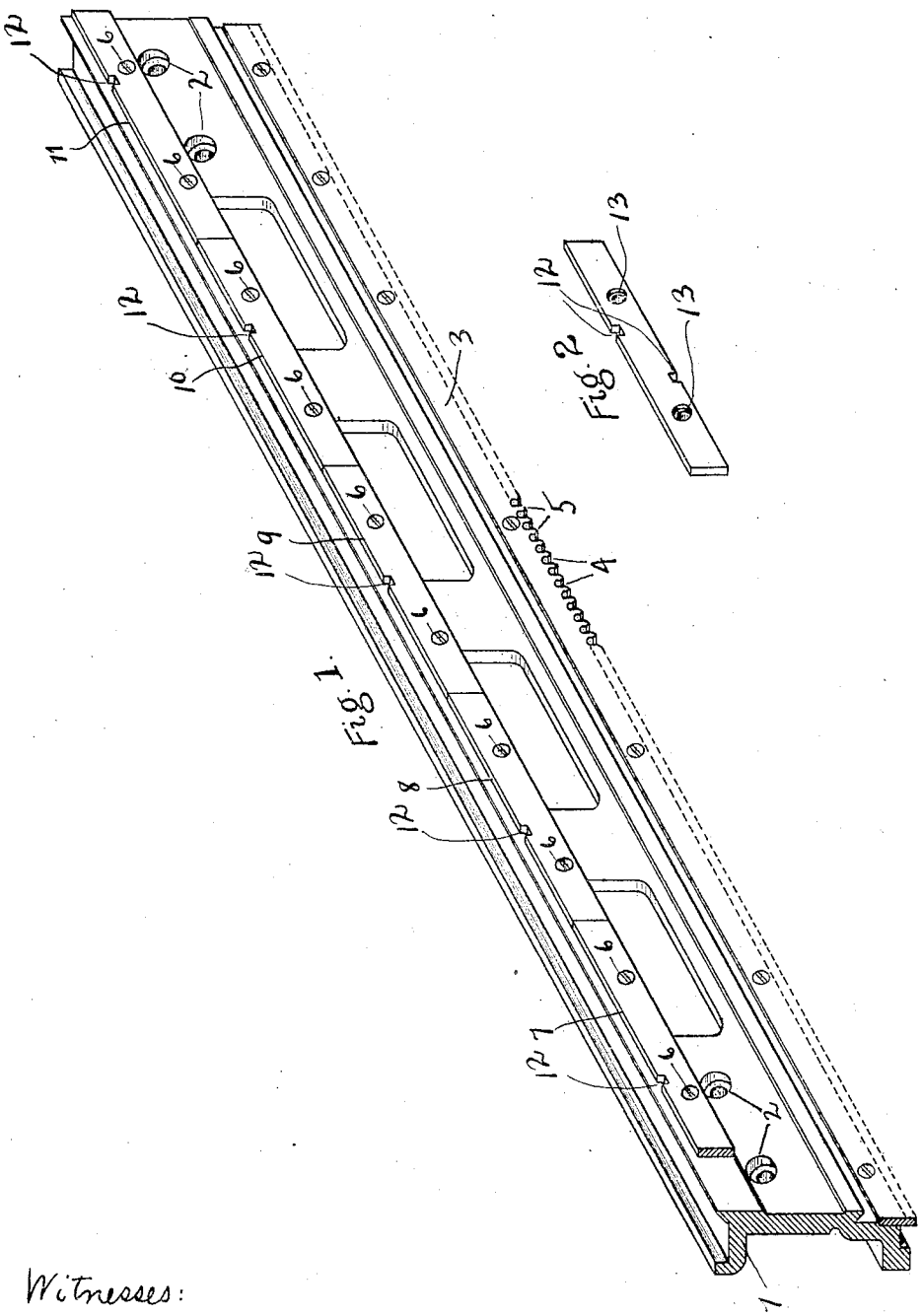

Fig. 1.

Fig. 2.

Witnesses:

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CALCULATING-MACHINE.

1,029,678. Specification of Letters Patent. Patented June 18, 1912.

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To all whom it may concern:

Be it known that I, HYMAN ELI GOLDBERG, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Calculating-Machines, of which the following is a specification.

My invention is an improvement in calculating machines, and refers more particularly to typewriter attachments such as are illustrated in Patent No. 893719, issued to John C. Wahl July 21, 1908. In said patent there is shown a bar which travels with the carriage of a typewriter in its letter-space movements. Mounted upon said bar is a totalizer, which totalizer can be adjusted upon the bar so as to be in any one of a number of positions, which positions are usually one-tenth of an inch apart. This is accomplished in the above patent by providing the bar with a rack having a series of spaces cut therein one-tenth of an inch apart, and by providing the totalizer with a latch capable of being inserted into any one of said spaces to thereby lock the totalizer in the desired position upon said bar.

In a great many cases it is superfluous to have the possible locking points of the totalizer upon the bar in such number as shown in the above cited patent. It is very often desirable to be able to locate the totalizer in very few locations only, in which case the multiplicity of locking spaces provided in the construction of the above mentioned patent is an annoyance, as the operator has to be quite careful in which space the latch of the totalizer is inserted. To avoid this annoying construction is one of the main objects of my invention.

This invention is illustrated by one sheet of drawings, in which,—

Figure 1 represents the totalizer holding bar; and Fig. 2 represents a locking plate, both in isometric perspective.

The bar is composed of the main body 1, usually made of cast-iron or similar material, and is provided at its ends with holes 2—2, which serve for the insertion of screws, by means of which it is fastened to the carriage of the typewriter, as illustrated in the cited patent. It is provided on its lower edge with a rack 3, which has therein a series of spaces 4 and teeth 5, which teeth and spaces serve to locate the bar in the proper position during the operation of the calculating machine, as is thoroughly described in the cited patent. Attention is drawn to the fact that these spaces 4 are not the ones which serve to lock the totalizer to said bar. The bar is also provided with screws 6, whereby plates 7, 8, 9, 10 and 11 are fastened to the upper portion thereof, and these plates are the means which serve to locate the totalizer in reference to said bar. Each of these plates is provided with one or more spaces 12 cut therein. These spaces 12 serve for the reception of the totalizer latch, as previously mentioned. Upon examination of the drawing, it will be seen that the plates 7, 8, 9, 10 and 11 are not identical in shape, the location of the space 12 in each of said plates being different. These plates are supposed to be of standard length, and each of them is pierced with two holes 13 for the reception of the screws 6, whereby these plates are fastened to the bar 1. The position of the space 12 in the plate 8 is one-tenth of an inch (or one carriage typewriter step) removed from the position of said space in plate 7. Similarly for plates 9, 10 and 11. It will thus be seen that by means of a sufficient number of plates, which are kept in stock, any desirable adjustment of spaces 12 relative to each other can be brought about, particularly as in ordinary commercial work it is very seldom necessary to have the locking spaces 12 very close together.

In operation, if the totalizer is located on the bar that is latched by any one of the spaces, and it is desired to move the totalizer to the next adjacent space, it is necessary and quite sufficient to remove the totalizer latch from its space and to slide the totalizer until its latch will snap into the next space. This, as above explained, could not be accomplished with the form of locking bar shown in the cited patent.

It will be seen that in the plates 7, 8, 9, 10 and 11, the spaces are at different distances from the ends of the plates. This requires quite a number of the plates in order to be sufficient for all possible requirements, but each plate can be fastened to the bar 1 in two positions, namely in the position illustrated in Fig. 1, and also fastened in another manner, namely by turning the plate end for end, and thus bringing the notch the same distance from the right end of the

plate that it was previously from the left end thereof. The total number of plates required is thus halved. It is also possible to again halve this already halved number of plates by constructing each plate as shown in Fig. 2, which shows a modification. Each plate is here provided with two spaces cut therein, which spaces are non-symmetrically located in reference to the ends of said plate. This plate can therefore be fastened to the bar 1 in four distinct positions, thus bringing its locking space in four distinct operating positions. Because of this construction, the number of varieties of plates becomes comparatively limited and well within commercial requirements.

I claim:

1. In a calculating-machine totalizer-holding bar, the combination of the bar, and a set of independently removable holding plates, said holding plates being provided with holding spaces for the reception of a totalizer latch, said holding spaces being dissimilarly located upon said holding plates.

2. In a calculating-machine totalizer-holding-bar, a holding plate provided with a space for the reception of the totalizer latch, and means for fastening said holding plate to said bar in either of two or more positions to thereby change the relative location of said holding space in reference to said bar.

3. In a calculating-machine totalizer-holding-bar, a holding plate provided with two or more spaces therein for the reception of the totalizer latch, and means for fastening said plate to said bar in a plurality of positions to thereby locate said holding space on said bar in a corresponding plurality of positions.

4 In a calculating-machine totalizer-holding-bar; a holding plate provided with two spaces therein for the reception of the totalizer latch, and means for fastening said plate to said bar in any of four positions, to thereby locate said holding space on said bar, in any of said four corresponding positions.

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