

PATENT SPECIFICATION



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COMPLETE SPECIFICATION

Improvements in Calculating Apparatus

We, VEB TRIUMPHATOR-WERK, of Svalin-strasse 17, near Leipzig, Germany, a German Company, do hereby declare the invention for which we pray that a patent may be granted to us and the method by which it is to be performed to be particularly described in and by the following statement:—

The present invention relates to cam-disc and pin wheel calculating machines, and more particularly to a device for the retransfer to the setting mechanism of the values indicated in the result register. The retransfer is usually made by rocking in a retransfer shaft having wheels in constant mesh with wheels on an intermediate shaft associated with the results register, the retransfer wheels and shaft being rocked in to engage further wheels associated with the setting mechanism.

Forms of construction are already known in which the rocking action is effected by a lever secured directly to the change-over shaft. In such an arrangement the setting lever must participate either in an angular movement of considerable extent or in a radial and axial movement of the back transfer wheels, a fact which is a nuisance in operation.

The invention accordingly provides a device for use in calculating machines of the type referred to, characterised in that rocking in of the retransfer shaft is effected by a push-button, which is disposed on the results register carriage and by which an intermediate lever is rocked, which brings the retransfer shaft from the position of rest into the working position.

The push-button is advantageously disposed on the right-hand end of the calculating machine carriage, where it can be operated conveniently by the hand operating the hand crank.

One embodiment of the invention will now be described by way of example with reference to the accompanying drawings in which:

Figure 1 shows part of a front elevation of the device according to the invention

Figure 2 shows a cross-section in which the retransfer shaft is in the position of rest

Figure 3 shows a cross-section with the retransfer shaft in the working position

A rocking lever 2 is adapted to pivot about a shaft 1, and is provided at its upper free end with a slot 4, slidably engaging a shaft 6, which carries a retransfer wheel 5. A pin 3 is fixed to said rocking lever between the pivot and its upper free end.

At the side of the rocking lever 2 is mounted a plate 7, which is provided with a vertical and horizontal limb. A slot 8 is provided in said plate, parallel with the sides of the horizontal limb and sliding on shaft 1. The upper end of the vertical limb of said plate is constructed in the form of a fork 9 which can engage with the pin 3. The horizontal limb of the plate 7, is guided in a guide plate 10, and a push-button 11 is fixed on the end of said limb. Said push-button extends through the machine cover 13 and is conveniently situated on the right-hand end of the carriage 12 as viewed from Figure 1 so that it can be operated with the same hand as that used for the operating lever of the machine.

The device operates in the following manner:—

In the position of rest the push-button 11 extends through the machine cover 13. If the retransfer shaft 6 has now to be shifted over, the operator of the machine presses the push-button together with the plate 7 so that the slot 8 slides over the circumference of the shaft 1. The fork-shaped end 9 of the vertical limb engages with the pin 3 and displaces the rocking lever, together with the retransfer shaft 6 in the direction of the arrow 14. Thus the retransfer wheels are brought into their working position.

The return of the retransfer shaft is effected in known manner by a tension spring after the transfer back has been completed.

What we claim is:—

1. A device for a calculating machine of the cam-disc and pin wheel type in which the retransfer to the setting mechanism of the values indicated in the result register is made

by rocking in a retransfer shaft having wheels in constant mesh with wheels of an intermediate shaft associated with the result register, characterised in that the rocking in
5 of the retransfer shaft is effected by a push-button which is disposed on the results register carriage and by which an intermediate lever is rocked which brings the retransfer shaft from the position of rest to the work-
10 ing position.

2. A device as claimed in Claim 1, wherein

the push-button is disposed on the right-hand end of the carriage of the calculating machine.

3. A device for a calculating machine of the type referred to wherein the rocking in of the retransfer shaft is effected substantially as
15 hereinbefore described with reference to Figures 1, 2 and 3 of the accompanying drawings.

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