No. 648,125. Patented Apr. 24, 1900.

W. HEINITZ.

OPERATING DEVICE FOR CALCULATING MACHINES, CASH REGISTERS, &c.

(Application filed Dec. 8, 1899.)

(No Model.)

Fig. 1.

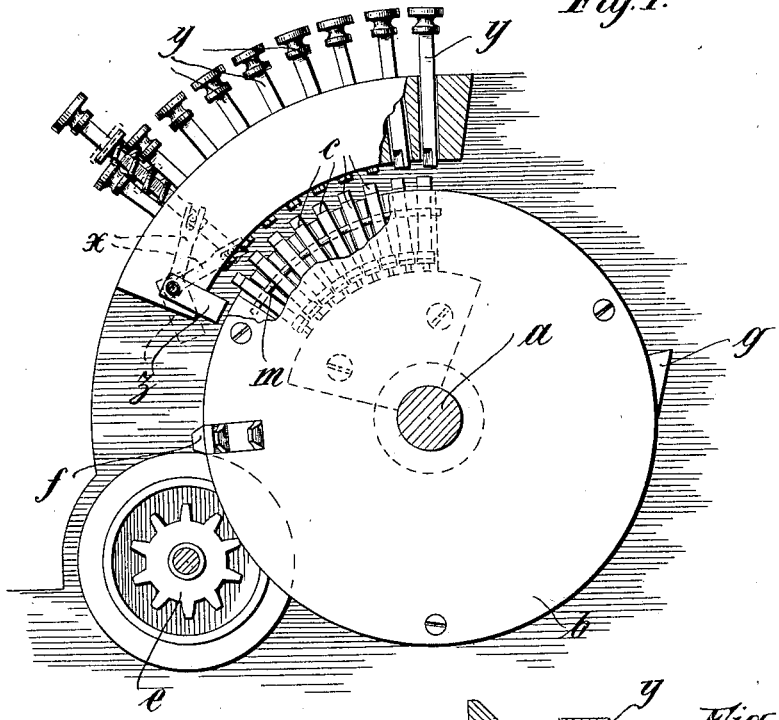


Fig. 5.

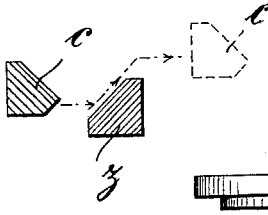


Fig. 4.

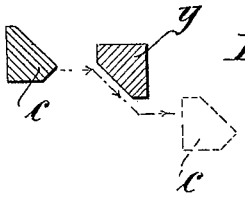


Fig. 2.

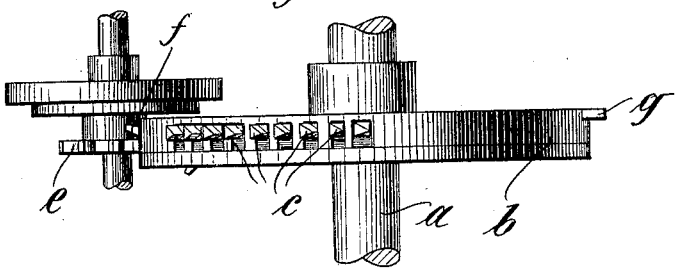
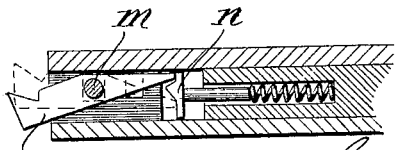


Fig. 3.



Witnesses:

Richard Scherpe

Curt Gesell

Inventor:

Woldemar Heinitz

by Carl Weichert

Attorney.

UNITED STATES PATENT OFFICE.

WOLDEMAR HEINITZ, OF DRESDEN, GERMANY.

OPERATING DEVICE FOR CALCULATING-MACHINES, CASH-REGISTERS, &c.

SPECIFICATION forming part of Letters Patent No. 648,125, dated April 24, 1900.

Application filed December 8, 1899. Serial No. 739,735. (No model.)

To all whom it may concern:

Be it known that I, WOLDEMAR HEINITZ, a citizen of the Kingdom of Saxony, and a resident of Dresden, (whose post-office address is Bergmannstrasse No. 23,) in the Kingdom of Saxony, German Empire, have invented certain new and useful Improvements in Operating Devices for Calculating-Machines, Cash-Registers, &c., of which the following is a specification.

The object of the present invention is to provide an operating device for cash-registers, calculating-machines, and the like; and it consists in an operating-disk bearing nine pins to operate a toothed wheel connected with the counting mechanism and nine keys governing said pins. Besides this there is a key-lever to bring the pins back into starting position.

In the accompanying drawings, Figure 1 shows the device in side elevation; Fig. 2, the same in plan. Fig. 3 shows the manner in which the pins are fastened into the rim of the wheel. Fig. 4 explains the action of the end of the keys on the pins of the wheel, and Fig. 5 the action of lever on same.

a is the axle of the disk *b*, bearing in a slot nine pins *c*, radially arranged, so as to project from its circumference. The pentagonal heads of these pins are shaped as shown in Figs. 3, 2, 4, and 5, while the heads of the keys *y*, arranged opposite to the pins, have a similar shape, but are in a different position, the pentagon being turned by one hundred and eighty degrees. The pins *c* turn on the axle *m*, so as to lean over to the right or to the left side of the disk, and are held in one or the other position by means of spring-governed catches *n*, Fig. 3. The axle *a* being turned around, the heads of the pins *c* pass near the toothed wheel *e* without touching it; but as soon as one of the keys *y* corresponding to the number to be registered is depressed its sloping head will stand in the way of the similarly-shaped pin-heads and will cause the pins to lean over to the other side. The pins passing the said key are thus brought to gear with the teeth of the toothed wheel *e* as soon as the handle is turned around and will cause the wheel to rotate in a degree corresponding to their number. The throwing into and out of gear with the pin-heads by aid of the keys is shown in Figs. 4 and 5, where the pin-head *c* is seen moving directly toward the head of the key *y* and gliding along its oblique side until it assumes the position indicated by dotted lines. The keys *y* are reset by aid of a triangular prominence *g* on the rim of the disk, while for the resetting of the pins *c* a key-actioned lever *x z* is used. While in position, arm *z* of this lever stands in the way of the pins and causes them by means of its obliquity to return to their primary position; but whenever the same number has to be registered twice the lever is swung out of the way of the pins by depressing its key, and the pins may pass underneath it and gear again with the toothed wheel.

f is a movable tooth of well-known construction for transferring the tens to the next counting-drum.

The movable pins may as well be arranged at the side of the disk and be movable up and down. In this case the position of the keys will have to be slightly altered.

Having thus described my invention, what I claim is—

In a registering mechanism for calculating-machines, cash-registers or the like the combination with a disk having radially-arranged pins movable sidewise and provided with pentagonal heads, keys with triangular heads arranged in a row opposite said pins, a registering-drum, arranged in such a way that the pins mesh with it when in one position, but pass freely when in the other, of a key-pressed lever which by means of its obliquity presses the pins back to their original position and means for swinging said lever out of the way of the pins, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

WOLDEMAR HEINITZ.

Witnesses:
HENRY HASPER,
WOLDEMAR HAUPT.