

No. 661,522.

Patented Nov. 13, 1900.

W. HEINITZ.
LOCKING DEVICE.

(Application filed Feb. 7, 1900.)

(No Model.)

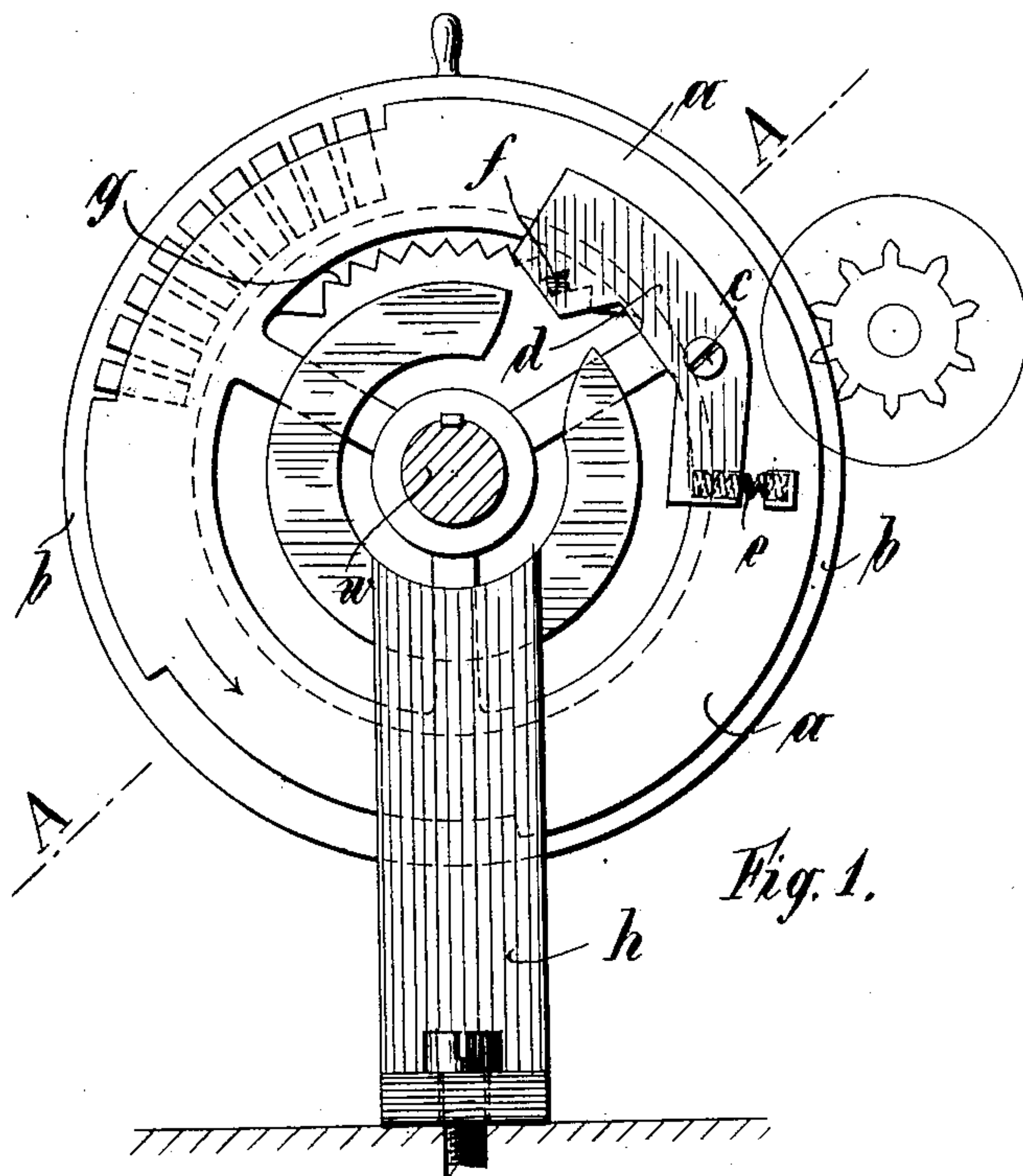


Fig. 1.

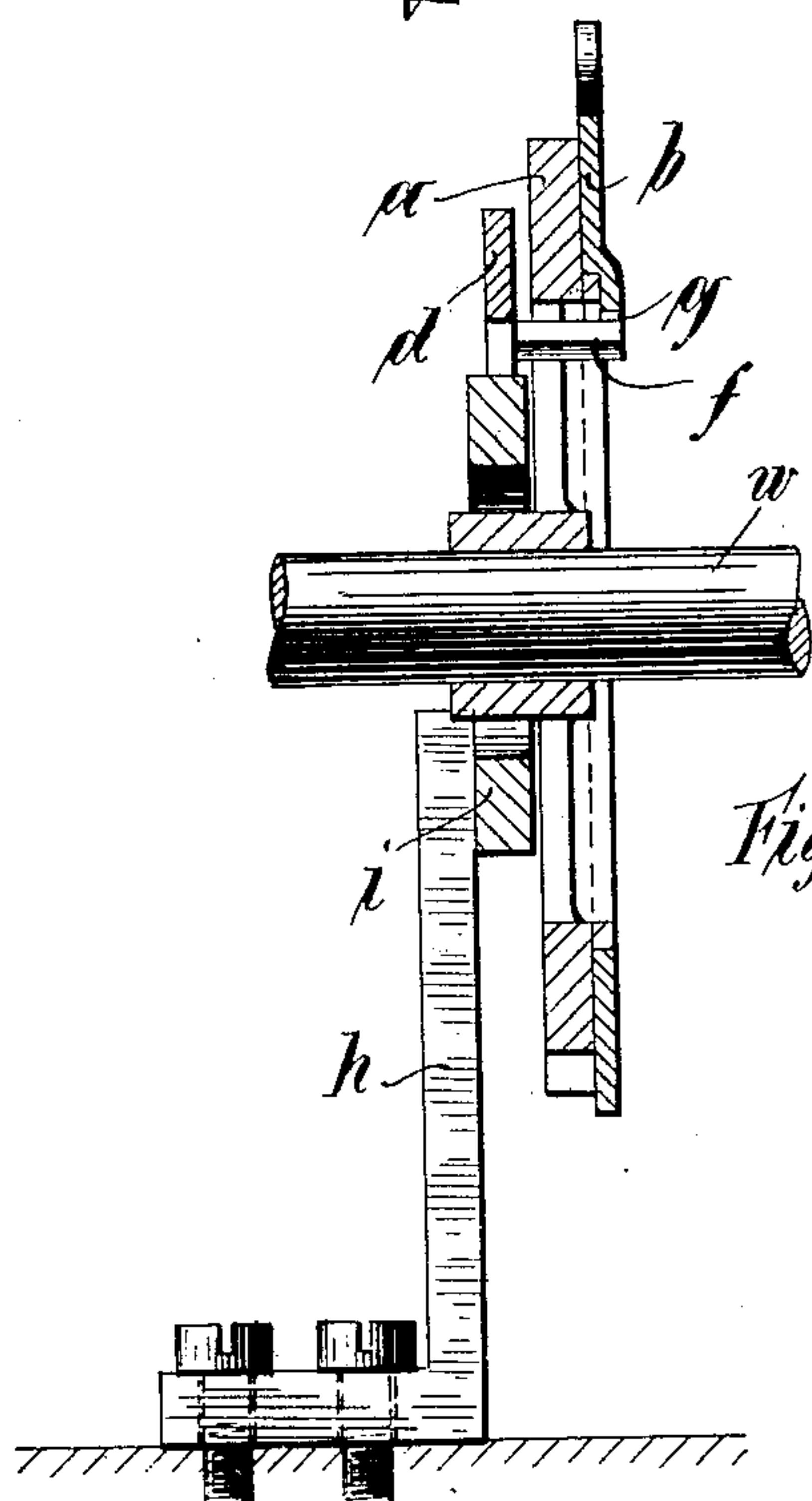


Fig. 2.

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UNITED STATES PATENT OFFICE.

WOLDEMAR HEINITZ, OF DRESDEN, GERMANY.

LOCKING DEVICE.

SPECIFICATION forming part of Letters Patent No. 661,522, dated November 13, 1900.

Application filed February 7, 1900. Serial No. 4,371. (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, Saxony, Germany, (whose post-office address is Dresden, Bergmannsstrasse, No. 23,) have invented certain new and useful Improvements in Locking Devices for Calculating-Machines, of which the following is a specification.

10 My invention relates to an automatic locking device for the setting-wheels of calculating-machines, and is intended to remedy the faults of former machines, consisting in an inaccurate setting of the numbers whenever
15 quick working had to be gone through and in the stopping of the setting-teeth in an intermediate position. Besides, the possibility of setting the figure-keys while turning the setting-wheel gives place to errors, this even
20 happening as soon as the spring retaining the catch has grown somewhat slack.

My invention makes an intermediate position of the figure-keys nearly impossible, or if they should assume such a position they
25 will be pressed down automatically into the right position. This is effected by compelling the catch from the beginning of the turning movement to glide along the circumference of a fixed ring-shaped rail, thus driving
30 it well between the teeth and hindering its leaving this position before the turning movement has been completed.

Of the accompanying drawings, Figure 1 is a view of a setting-wheel provided with the safety device in question, while Fig. 2 shows
35 a cut through same following the cut A A.

The setting-wheel consists of two parts, generally the one *a* being fixed to a shaft *w*, the other, *b*, being fastened to *a* in such a way
40 as to be movable on it around the common axle. This movement of *b* on *a* effects the setting and returning of the teeth, as usual. To make any displacement of these parts relative to each other impossible during the
45 turning of shaft *w*, a two-armed lever *d*, oscillating on a pin *c* on the outer side of *a*, is retained at one end by a spiral spring *e*, the

other end, bearing the catch *f*, passing through the disk *a* and catching between the teeth *g* of disk *b*. Next to the disk *a* a post *h* is fixed
50 upon the bottom of the box and ending in a ring *i*, parallel to the disk *a* and not fully closed. The lever *d* when not at work is located opposite to the opening in the circumference of this ring and is free to move at
55 will; but as soon as the shaft *w* is turned around the lower oblique part of *d* is compelled to rise by encountering the front edge of ring *i*. By this upward movement the catch *f* is
60 pressed firmly between the respective teeth of disk *b*. If, perchance, this disk had been in an intermediate position, the sloping edges of the catch and the teeth would cause it to return to the right position. During the whole
65 of the turning movement now following the front part of lever *d* glides on the circumference of ring *i*, the latter making a slipping of the catch *f* from between the teeth of disk
70 *b* and a change of position of *a* and *b* relative to each other impossible. Only after the turning movement is completed and the front part of lever *d* has again reached its former position opposite the opening in ring *i* a
75 change of position in the setting-wheel may be effected.

Having thus described the nature of my invention, what I claim as new is—

In a setting-wheel for calculating-machines the combination with a disk fixed upon a shaft, a second disk bearing teeth and being mov-
80 ably fastened to the former disk and a two-armed spring-action lever on the first disk bearing a catch passing through said disk and engaging between the teeth of the second disk, of a ring-shaped partly-open rail below
85 said lever, substantially as shown and described.

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

WOLDEMAR HEINITZ.

Witnesses:

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