

JOSEF PALLWEBER IN MANNHEIM.

Uhr mit Zahlenwechsel durch Herabfallen doppelseitig bezifferter Tafelchen.

Fig. 1.

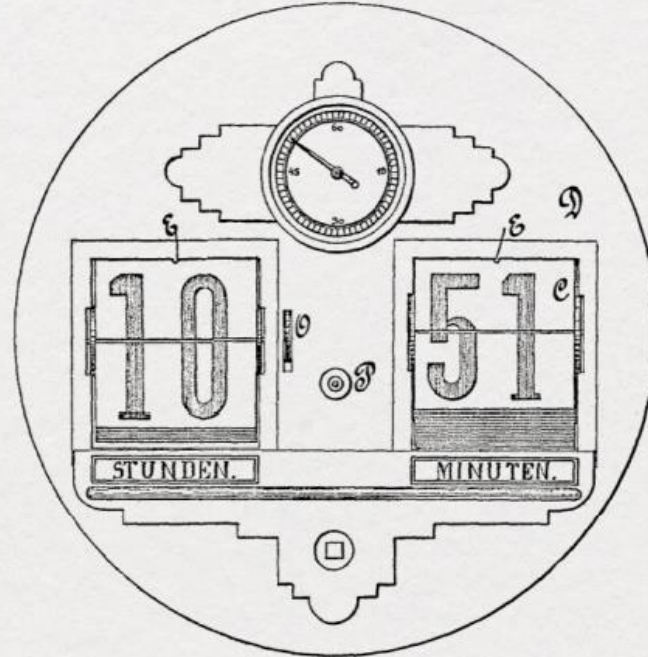


Fig. 2.

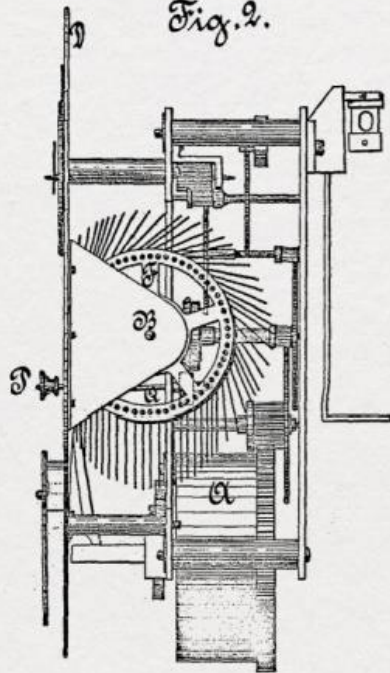


Fig. 3.

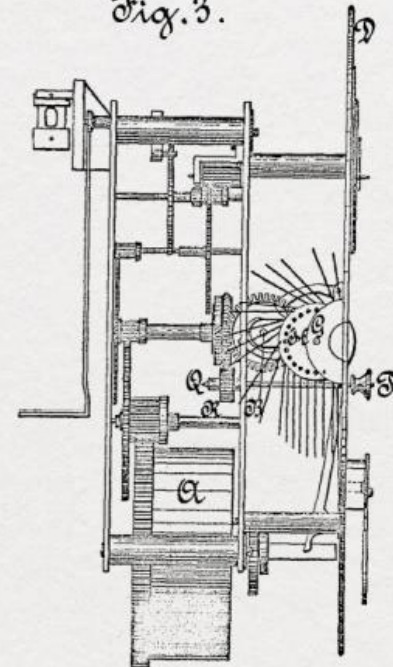


Fig. 4.

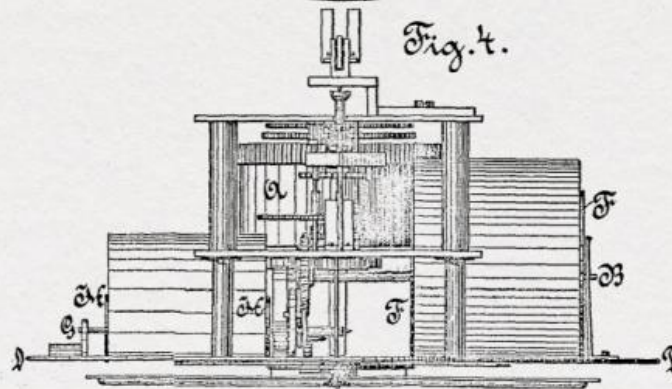


Fig. 5.

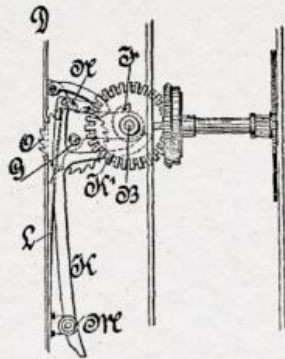
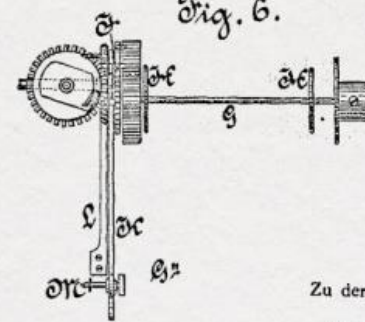


Fig. 6.



Zu der Patentschrift

№ 54093.

JOSEF PALLWEBER IN MANNHEIM.

Clock with numbers changing by falling double-sided numbered tablets. - Patented in the German Empire on February 28, 1890

The subject of the invention is a clock in which the hour and minute numbers appear put together on metal plates in two halves, without this being recognizable at some distance.

The drive A drives the minute drum attached to shaft B by means of a gear ratio (Fig. 2), in which 60 leaves are suspended, which carry the upper half of a number on one side and the lower half of the following number on the other so that the two sides of two successive leaflets add up to an integer if one leaflet is up and the second hangs down, as can be seen from FIG. B. the upper leaflet C carries the upper half of the number 51 and rests with its edge above the edge of the cutout of the plate or disk D and the tip E of the same until the rotation of the shaft B with the drum has advanced so far that the leaf C slides past the tip E and falls down, so that the back of the same with the lower half of the number 52 becomes visible, while the following upright leaf bears the upper half of the number 52, and so on.

The minute drum consists of two perforated disks F, the rings of which are pierced by 60 holes each, in which the pegs of the leaves hanging in between are easily movable. In the same way, the drum of the number of hours (Fig. 3) consists of two disks H, fixed on the axis G, with 24 holes each, in which the 24 leaves hang easily movable, which carry the number of hours twice. The shafts B and G are mounted on the disk D.

Every time after the shaft B has made one turn, the shaft G has to make a $1/24$ turn and then has to stand still for that long. For this purpose, a disk with a nose J, Fig. 5, sits on the shaft B, which pushes the arm K1 of the lever K inwards with one revolution of the shaft B and then suddenly releases it as soon as the nose J over the end of the same has slipped away, so that the spring L then pulls the lever K, which rotates around the pin M, against the disk D and thereby the shift hook N attached to the end of the lever K turns the shifting wheel O sitting on the shaft G so that the next hour ahead becomes visible by means of the leaflets.

The ratchet wheel O, Fig. 5, protrudes with a few teeth in front of the disk D, Fig. 1, to turn it with the nail of a finger and the. Being able to set the number of hours correctly; Furthermore, a button P is attached in front of the disk D, which sits on the axis Q, the gear wheel R of which engages in a wheel of the minute drum (Fig. 3), so that the shaft B can be turned from the outside in one direction and the number of minutes set correctly can.

A perpendicular is attached to the back of the clock, and the second hand is set in motion by a gear ratio.

PATENT CLAIMS: 1. For clocks to display the hours and minutes, the arrangement of a pair of disks (F) that are turned evenly

Sheet metal panels, which are held upright by a nose (E) in the reading opening until the number changes and then fall down, and which have the upper half of a digit or several digits on one side and the lower half of the digits on the other side wear the following number so that a hanging and an upright leaf together form a complete number that is visible through the opening.

2. The device characterized by claim 1. for displaying the hours and minutes in the version in which the movement from the minute shaft (B) to the hour shaft (G) by means of a nose J attached to the shaft (B) Disc is transferred, which with each rotation pulls the arm K1 of the spring-loaded lever K carrying the pawl N and then lets it fall off its nose, by means of the pawl N around one tooth of the ratchet wheel (O) attached to the hour shaft (G) to turn.

For this purpose 1 sheet of drawings.