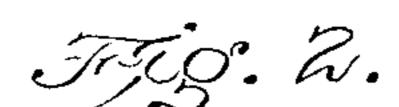
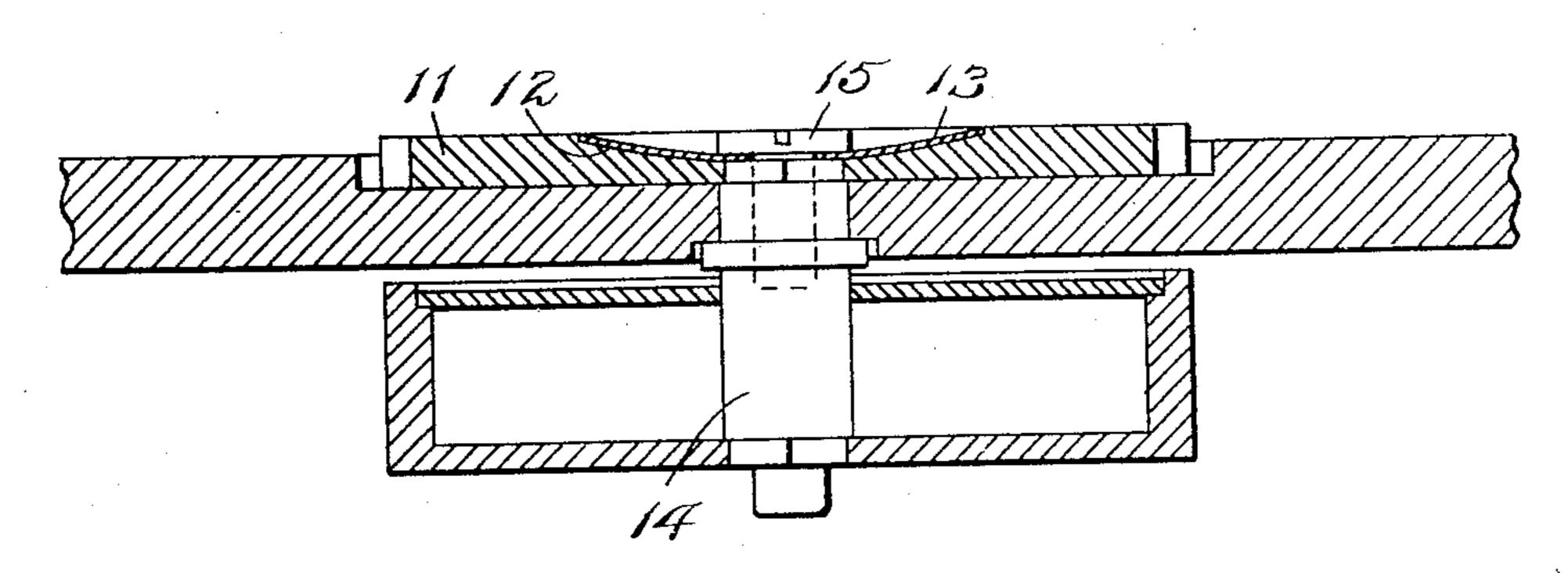
O. OHLSON.

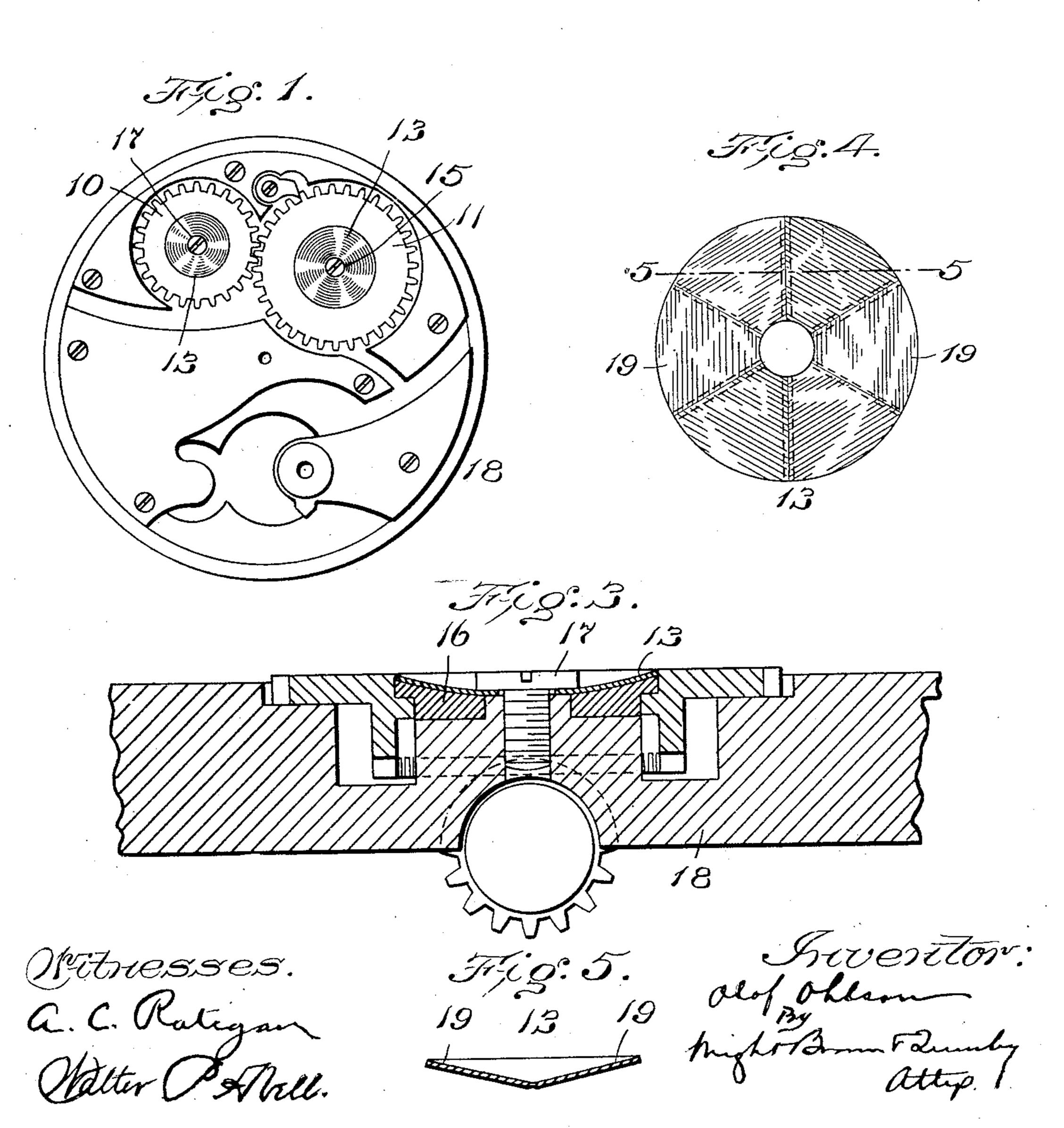
ORNAMENTATION OF EXPOSED WINDING WHEELS OF WATCH MOVEMENTS.

APPLICATION FILED SEPT. 21, 1903.

NO MODEL.







United States Patent Office.

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ORNAMENTATION OF EXPOSED WINDING-WHEELS OF WATCH-MOVEMENTS.

SPECIFICATION forming part of Letters Patent No. 754,600, dated March 15, 1904.

Application filed September 21, 1903. Serial No. 173,940. (No model.)

To all whom it may concern:

Be it known that I, Olof Ohlson, of Waltham, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Ornamentation of Exposed Winding-Wheels of Watch-Movements, of which the following is a specification.

This invention relates to an improved means for obtaining a brilliant light-reflecting surface in watch-movements, particularly on the exposed winding-wheels thereof. In order to effect this result, at present it is common to ream out the centers of the winding-wheels, either the wheel itself or the broad pillar in the center thereof, and then to polish the reamed portion, so as to form a brilliant scintillating concaved surface. The polishing of a concaved surface is a somewhat expensive operation; and it is the object of the present invention to reduce the expense and also to attain other advantages, as will appear.

Of the accompanying drawings, Figure 1 represents a plan view of a watch-movement plate, showing the winding-wheels ornamented according to this invention. Fig. 2 represents a section of the winding-wheel on the spring barrel-arbor. Fig. 3 represents a similar section of the crown-wheel enlarged. Fig. 4 represents a plan view of a modified form of ornamentation. Fig. 5 represents a section on line 5 5 of Fig. 4.

The same reference characters indicate the same parts in all the figures.

In the drawings, 10 is the crown-wheel, and 11 the barrel-arbor wheel, of the winding-movement. In Fig. 2 it will be seen that the winding-wheel 11 is dished or concaved at 12 on its upper surface to form a dished bed, this being effected by an ordinary reaming operation. To this bed is fitted or conformed a flexible sheet-metal plate or disk of suitable material, such as steel, which will take a high polish. The upper surface of the plate is highly polished to form a brilliant light-reflecting surface, which is rendered more scintillating by the dishing or concaving of the

plate. Originally the plate 13 when applied to the concavity of the wheel 11 is flat, the polishing of a flat surface being a simpler and less expensive operation than the polishing of 50 a concave surface. The plate is dished or concaved by screwing home into the spring barrelarbor 14 a screw 15, whereby wheel 11 is secured to said arbor, the head of said screw abutting the edges of the central opening of 55 the plate. The screw maintains the concavity of the plate, and the latter being somewhat springy also acts a friction device, which prevents the screw from working loose.

In Fig. 2 the plate 13 rotates with the wind- 60 ing-wheel; but this is not essential, as the plate may be applied to a stationary pillar, as the broad pillar 16 of the crown-wheel 10, as shown in Fig. 3, the plate being concaved by a screw 17, which holds the pillar 16 to the 65 movement-plate 18.

In Figs. 4 and 5 the plate 13 is provided in its under side with a series of radial grooves 19, one of which is indicated in section in Fig. 5, said grooves forming weakened lines of di- 7° vision, so that when the plate is dished or concaved by depressing its center it forms itself into a series of substantially flat sectoral panels 19 19, these brilliant-surfaced panels increasing the scintillating effect.

I claim--

1. An ornamental construction for an exposed part of a watch-movement or the like, comprising a continuous dished bed, a flexible plate separable or distinct from the said bed so and having an unbroken surface, and means for conforming the plate to the bed.

winding-wheel 11 is dished or concaved at 12 on its upper surface to form a dished bed, this being effected by an ordinary reaming operation. To this bed is fitted or conformed a flexible sheet-metal plate or disk of suitable 2. An ornamental construction for the center of an exposed winding-wheel, comprising a wheel having a vertical dished bed, a flexible 85 plate covering said bed, and a screw securing and conforming the plate to the bed.

3. An ornamentation comprising a continuous or unbroken, normally flat, flexible plate having a brilliant surface, and means for 9° springing said plate to impart a dished form thereto.

4. An ornamentation comprising a brilliant-surfaced, sheet-metal plate, and means for springing said plate to impart a dished form thereto, the plate having radial grooves in its under side, producing weakened lines of division, whereby substantially flat-surfaced sectoral panels are formed on the dished plate.

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

OLOF OHLSON.

-Witnesses:

BEATRICE E. MESHER, E. A. MARSH.