

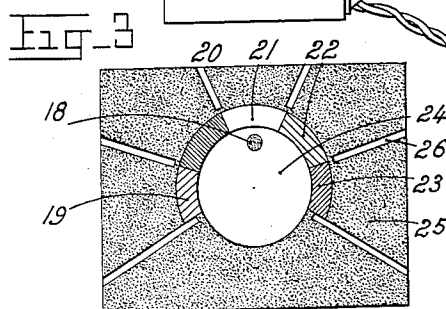
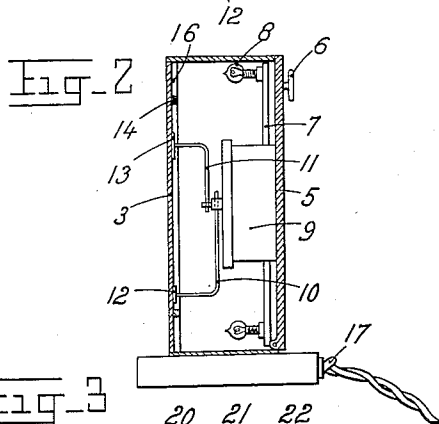
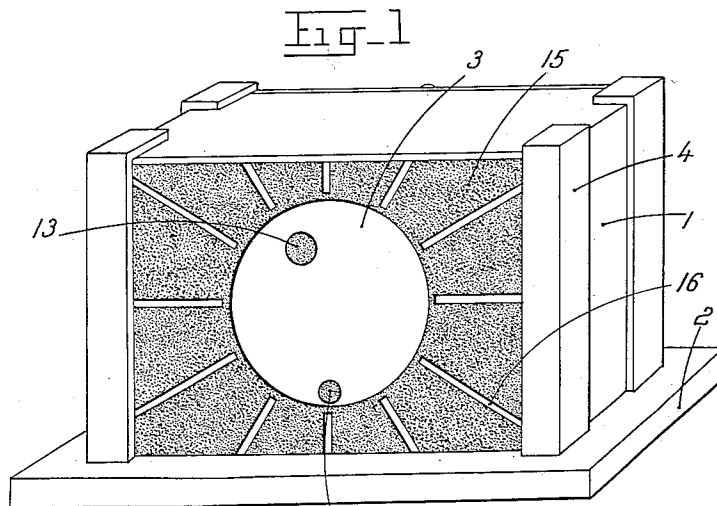
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INDICATING APPARATUS SUCH AS CLOCKS, BAROMETERS, METERS, AND THE LIKE

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INDICATING APPARATUS SUCH AS CLOCKS,
BAROMETERS, METERS, AND THE LIKE

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Application June 12, 1933, Serial No. 675,511
In France June 25, 1932

3 Claims. (Cl. 116—133)

The object of the present invention relates to a new device adapted to movable indexes and to dials, for indicating apparatus, such as clocks, barometers, meters and the like, and it is especially characterised by the fact, that the usual ordinary indexing device such as for instance the hands, are replaced by means of shadow spots which appear on a dull or frosted glass, which is illuminated from the rear, and are due to small screens carried by the hands of the indicating apparatus which are however invisible from the outside. So as to facilitate the reading of the said indications such as for instance the hours, the clear part of the dial, in which the shadow spots move, is surrounded by a part, of any suitable form or shape, which is darker than the said clear part but which is adapted to show fixed indications in a clear manner, such as for instance numerals or stripes which serve as reference data for the reading of the apparatus, this darkened portion of the dial may be obtained by fixing, a plate of metal which is provided with slits or the like which are intended to form or act as the stationary indications such as numerals or stripes used for purposes of reference, against the dulled or frosted glass dial.

Two embodiments of the present invention are shown on the appended drawing by way of example.

Figure 1 is a perspective view of a clock according to the present invention.

Figure 2 is a vertical section thereof, from the front to the rear, and the

Figure 3 shows a dial adapted to a barometer.

The clock shown in the Figures 1 and 2 comprises a body or housing 1 resting on a base 2, and containing the clock mechanism. The front face of the body or housing 1 consists of a piece of dulled or frosted glass 3, in the central part of which the shadow spots of the movable indexes move, said shadow spots being produced as will be explained here below; the lateral faces of the body or housing 1 and the top face may also be made of dulled or frosted glass the assembly of all these faces or walls being effected by means of vertical pillars or uprights which may consist of the corner pieces 4 made of polished metal, which impart an artistic look to the whole unit. The rear face or wall of the body or housing 1 is constituted of a bottom 5 which is adapted to be opened by means of a manipulating button or knob 6. A frame 7 is mounted within the interior of the body or housing 1 said frame having mounted on it a certain number of lamps 8 which illuminate the whole of the interior.

The clock mechanism may be of any suitable type and is mounted at 9; it may be electrically or mechanically actuated, and if electrically actuated it may be operated either by a battery or by the supply means current; it is preferably provided with a reversing device enabling the minute hand 10 to be placed beneath the hour hand 11. The hands 10 and 11 are of the form or shape shown in Figure 2, that is to say they are bent back or recurved towards the dial at their extremity and each of them is provided with a small plate or disc which is adapted to be displaced towards the dial 3 in the interior of the clock. The plate or disc 12 of the minute hand is preferably of a smaller size than the plate or disc 13 of the hour-hand, and moves along an outer circle, which is evidently only then possible if the minute hand 10 is placed below the hour hand 11, as above mentioned. Moreover, a metal plate 14 is mounted in the interior of the clock and against the dial, which causes a dark zone 15 to appear on the dial, which is arranged around the light or clear central part 3, in which the shadow spots 12 and 13 caused by the said minute and hour discs or plates move. The plate 14 is provided with suitable excisions, so as to show the stationary indications in a clear light; in the embodiment shown the said plate is provided with slits 16 which will appear as luminous pencils or stripes on the dial, passing across the dark region or zone 15 and allowing one to observe the different hours on the dial easily.

A switch handle 17 enables the lamps 8 to be switched off without stopping the works of the clock.

On Figure 3 a dial is shown which is especially adapted for a barometer; and in this particular form of embodiment, the shadow spot 18, which indicates the barometric pressure, moves in the interior of a circle or crown the consecutive regions 19, 20, 21, 22 and 23 of which may for instance be tinted in different colours, whilst the central part of the dial 24 may also be light and the peripheral part 25 of the dial dark and provided with clear or light lines 26 or stripes.

I claim

1. In an indicating apparatus, illuminating means, a translucent member arranged in front of said illuminating means, rotatable hands arranged in a plane between the illuminating means and the translucent member, and having the outer ends thereof directed toward said translucent member, screens carried by the end of said hands and movable over the translucent member in close proximity thereto to produce moving shadow

ows on said member, the screens being arranged at different distances from the axis of rotation of said hands whereby said screens move through separate circular paths during rotation of said hands.

2. In an indicating apparatus, illuminating means, a translucent member arranged in front of said illuminating means, rotatable indicating hands arranged in a plane between the illuminating means and the screen and spaced a distance from the latter sufficient to prevent casting of

a direct shadow, the outer extremity of the hands being directed towards said translucent member and terminating in proximity thereto, and screens carried by the outer ends of the hands and movable over the translucent member in close proximity thereto to produce shadows.

3. An indicating apparatus as claimed in claim 1 characterized in that said screens are of different size.

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15	90
20	95
25	100
30	105
35	110
40	115
45	120
50	125
55	130
60	135
65	140
70	145
75	150