G. MARANVILLE.

Calendar Clock.

No. 31,612. Patented March 5, 1861.

Fig. 2

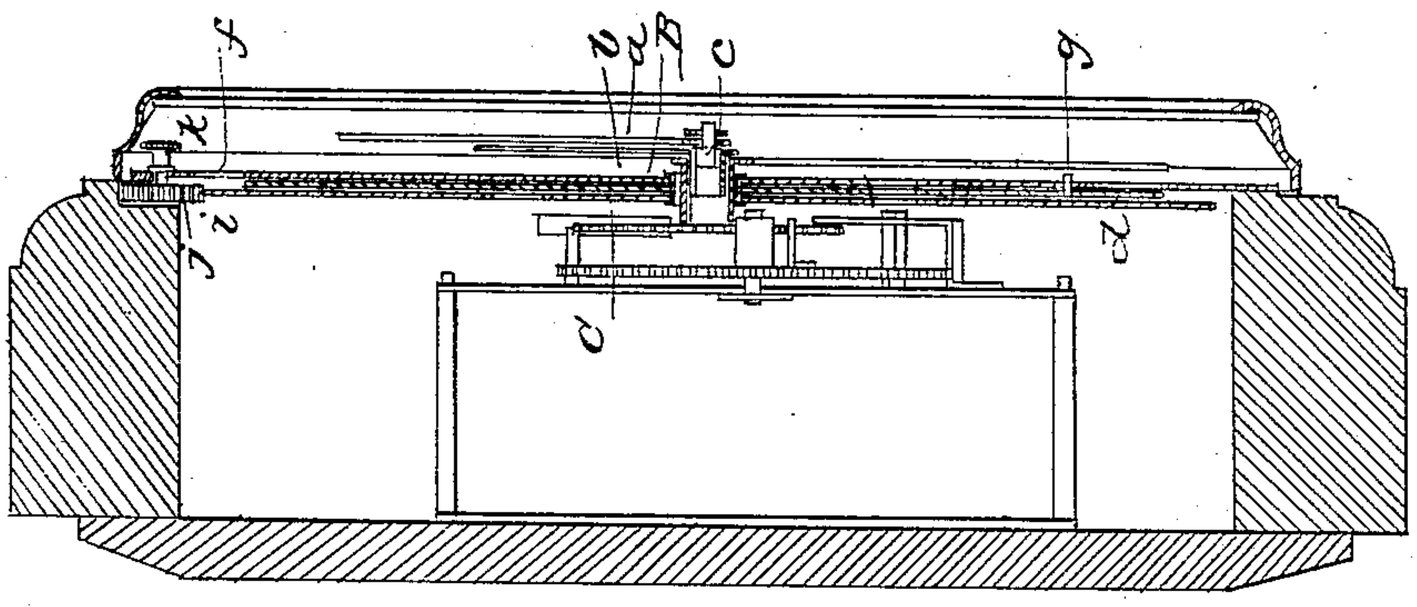
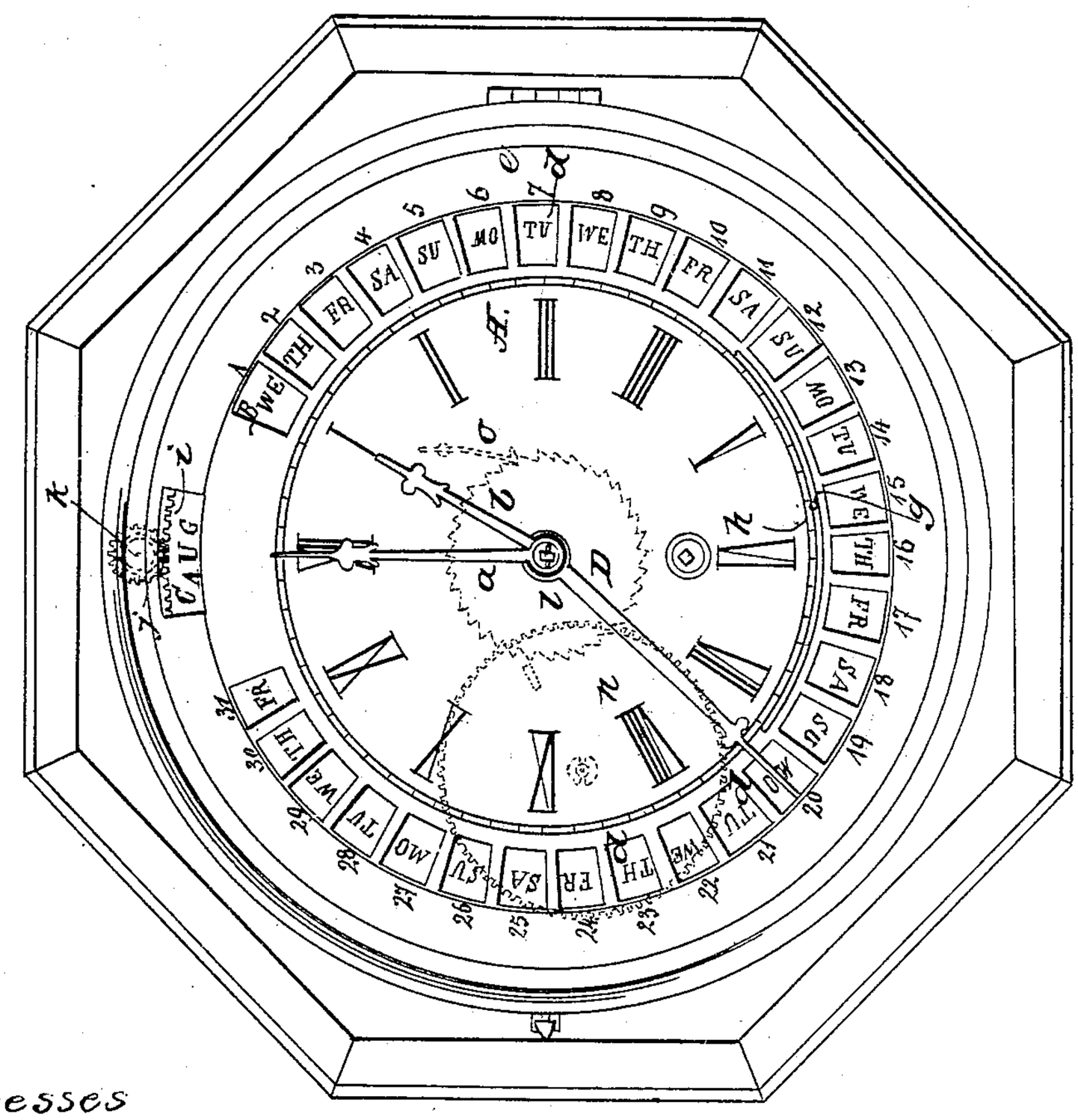


Fig. 1



Witnesses

W. Hauff

James Laird.

Inventor

Galusha Maranville

UNITED STATES PATENT OFFICE.

GALUSHA MARANVILLE, OF HAMPTON CORNERS, NEW YORK.

CALENDAR-CLOCK.

Specification of Letters Patent No. 31,612, dated March 5, 1861.

To all whom it may concern:

Be it known that I, G. MARANVILLE, of Hampton Corners, in the county of Washington and State of New York, have invented a new and useful Improvement in Calendar-Clocks; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 represents a face view of my invention. Fig. 2 is a transverse vertical section of the same.

Similar letters of reference in both views indicate corresponding parts.

With calendar clocks of the ordinary construction the motion of the week day wheel, and of the month wheel and also of the year wheel if such be attached to the clock, is rendered automatic and much ingenuity and labor is spent in producing the variations in the motion required by the varying length of different months and years. Clocks of this kind are therefore rendered very complicated and the slightest accident causes a derangement of the movement, so that the same are not only very expensive, but they also prove a constant source of trouble and expense for their proprietor.

To overcome these difficulties and to produce a calendar clock which is at once simple, cheap, reliable and not easily deranged is the object of my invention.

To enable those skilled in the art to make and use my invention I will proceed to describe its construction and operation with reference to the drawing.

The face plate A of the clock is marked with figures from 1 to 12 to indicate the hours of the day in the ordinary manner and the hour hand *b*, and the minute hand *a*, are both attached to and moved from the central arbor *c*, of the clock movement as usual with clocks of the ordinary construction.

The space around the figures 1 to 12 is perforated with 31 apertures *d*, and an annular space *e*, marked off on the face plate A outside the apertures *d*, has inscribed on it the figures from 1 to 31 one figure being opposite to each of the apertures *d*. These apertures are of such a size, that they do not occupy the entire circle around the figures of the ordinary clock dial, and a space is left on the annular space *e*, between the figures 31 and 1 which is partially occupied by an aperture *f*, in the face plate.

Arranged below the face plate A and so as to turn around the central shaft of the clock movement and independent of the same, are two disks or dials B, C, one above the other. The diameter of the upper one of these dials is equal to the inside diameter of the annular space *e*, and it is marked with the names of the week days near to its periphery, said names being so arranged that they are visible through the apertures *d*, in the face plate A. A pin or button *g*, extending through a segmental slot *h*, in the face plate serves to adjust the week day dial B so that the proper name can be brought opposite the figure 1 in the annular space *e*, and its edge is provided with teeth *i*, which gear into a pinion *j*, that is operated by means of a button *k*, so that said dial can be rotated with perfect ease and independent of the dial B, or of the central shaft *c*. This dial is marked on its face with the names of the months near to its periphery and said names are so arranged that the same can be brought before the aperture *f*, in the face plate one after the other by rotating the dial C.

The days of the week and the day of the month or the date are pointed out by a hand D, to which motion is imparted by means of a ratchet wheel *l*. This wheel is placed loosely on the central shaft *c*, and it is propelled by a tooth *m*, which projects from the face of a cog wheel *n*. This wheel receives its motion from the hour wheel of the clock movement and it is geared up so that it rotates once in 24 hours. The ratchet wheel *l*, is propelled one tooth for each revolution of the 24 hour wheel *n*, and its teeth are so arranged that for each motion of the ratchet wheel the hand D is propelled from one of the apertures *d*, to the next succeeding one, and from one of the figures in the annular space *e*, to the next one. A spring pawl *o*, prevents the ratchet wheel turning in the wrong direction.

The operation is as follows. At the beginning of a month the dial or disk C, is rotated so as to bring the name of said month before the aperture *f*, in the face plate and the dial B, is turned until the name of the proper week day stands opposite to the figure 1 in the annular space *e*, and the hand D is made to point on the

figure 4 in said annular space. The ratchet wheel *l* and the cog wheel *n*, are so adjusted that the carrying tooth *m*, or the cog wheel *n*, comes in contact with the teeth of the ratchet wheel about at midnight and the hand D is propelled from the figure 1 to the figure 2 in the annular space and so forth at the end of every succeeding day so that said hand points out the name of the current day of the week and also the date. This motion of the hand D continues until at the end of each month or at the beginning of the next succeeding month it is necessary to set again the dials B, and C, and the hand D, as above described.

By this exceedingly simple arrangement of the dials B, and C, and of the hand D all the advantages generally derived from very complicated calendar movements are obtained and it is only necessary to set said dials and the hand at the end of each month an operation which can be accomplished in a few seconds and without any trouble or difficulty whatever.

What I claim as new and desire to secure by Letters Patent, is—

The combination of the independently adjustable dials B, C, face plate A, and hand D, the latter being actuated by clock movement and the whole arranged and adapted to operate in connection, in manner substantially as and for the purposes herein shown and described.

GALUSHA MARANVILLE.

Witnesses:
W. HAUFF,
JAMES LAIRD.