

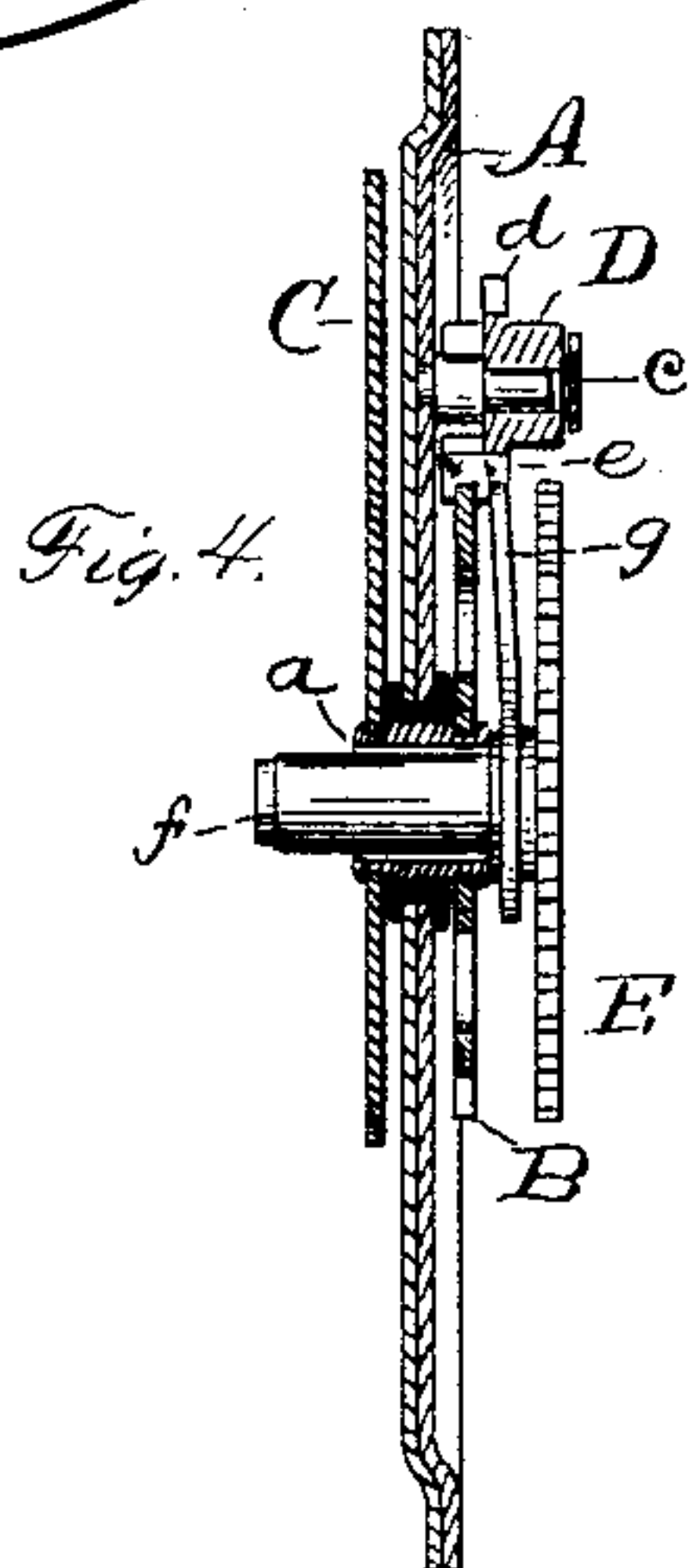
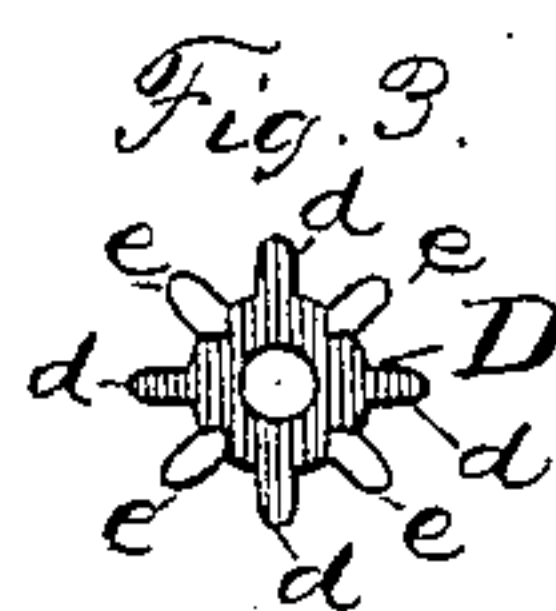
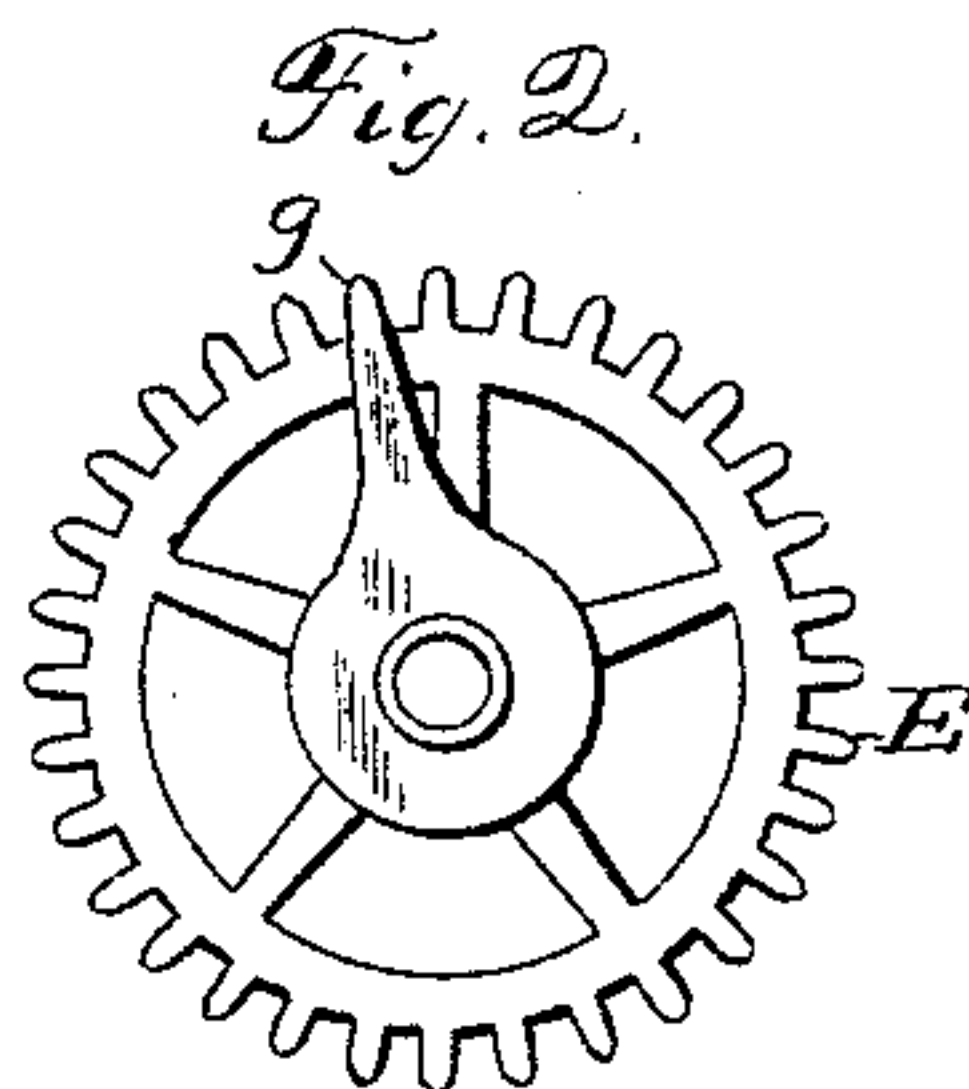
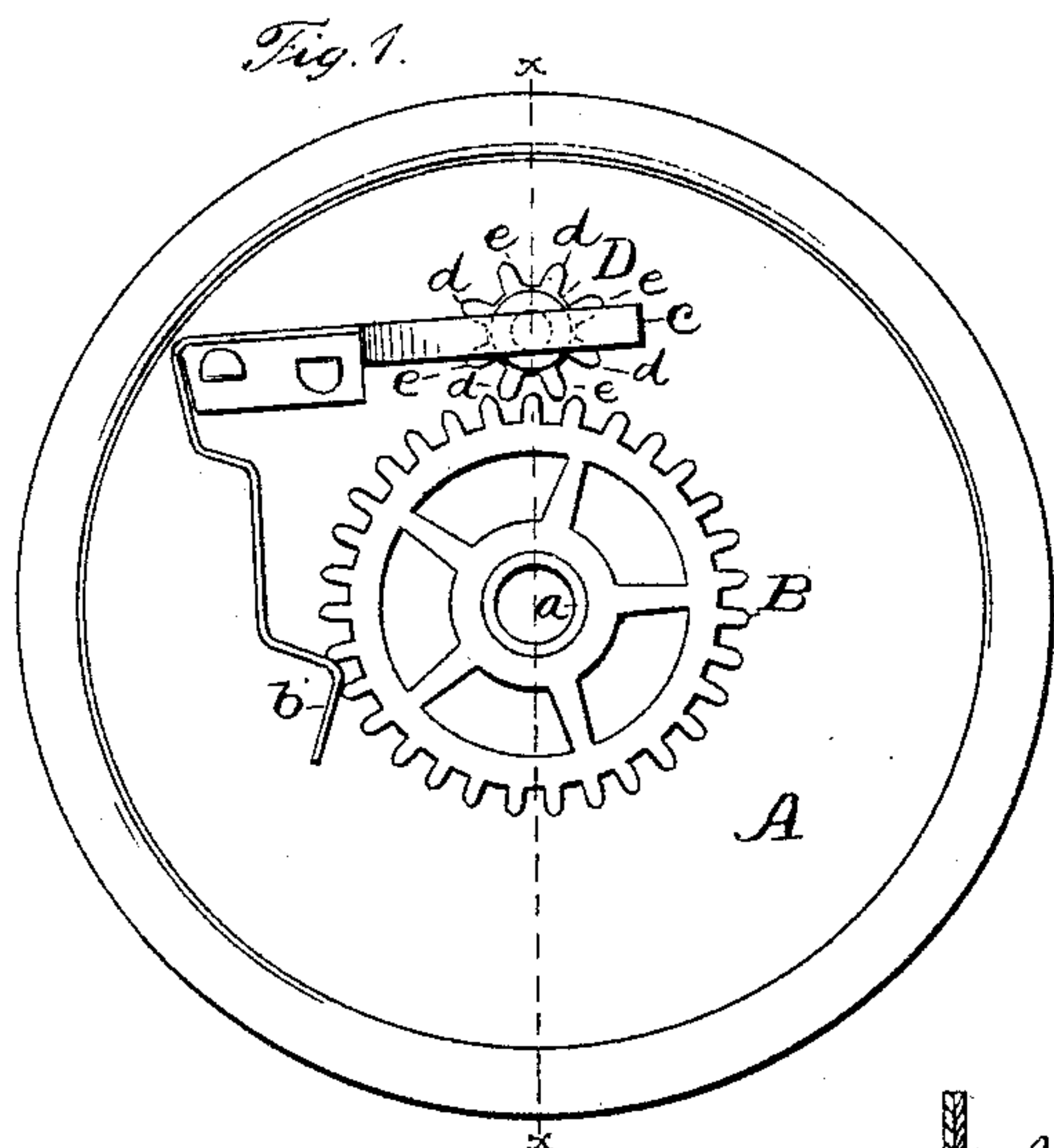
(No Model.)

F. M. WRIGHT & W. M. WOOD.

CALENDAR CLOCK.

No. 349,025.

Patented Sept. 14, 1886.



Witnesses.
John Edwards Jr.
W. Howard Whitney.

Inventors.
Frank M. Wright.
Warren M. Wood.
By James Shepard. Atty.

UNITED STATES PATENT OFFICE.

FRANK M. WRIGHT, OF BRISTOL, AND WARREN M. WOOD, OF CHESHIRE,
ASSIGNORS TO THE PARKER & WHIPPLE COMPANY, OF MERIDEN, CON-
NECTICUT.

CALENDAR-CLOCK.

SPECIFICATION forming part of Letters Patent No. 349,025, dated September 14, 1886.

Application filed February 19, 1886. Serial No. 192,595. (No model.)

To all whom it may concern:

Be it known that we, FRANK M. WRIGHT, of Bristol, in the county of Hartford and State of Connecticut, and WARREN M. WOOD, of
5 Cheshire, in the county of New Haven and State of Connecticut, both citizens of the United States, have invented certain new and useful Improvements in Clock-Calendar, of which the following is a specification.

10 Our invention relates to improvements in clock-calendars; and the main objects of our improvements are to lessen the cost of production, to simplify the construction, and to bring the day-of-the-month operating mechanism
15 into a very compact form, so the calendar may be applied to very small clocks.

In the accompanying drawings, Figure 1 is a rear elevation of our calendar mechanism as mounted upon the back of a clock-dial. Fig.
20 2 is a front elevation of the ordinary twelve-hour dial-wheel with a point attached for driving our calendar mechanism. Fig. 3 is a front elevation of the pinion with which the point on the twelve-hour wheel engages; and Fig. 4 is
25 a vertical section, partly in elevation, of our calendar as applied to the back of a clock-dial, in connection with the twelve-hour wheel.

All of the figures are on an enlarged scale.

A designates the dial-back, in the center of
30 which is a tubular shaft, *a*, having upon the rear side of the dial the day-of-the-month wheel B, provided with thirty-one teeth, and having upon the front of the dial the index finger or pointer C, said pointer and wheel both being
35 secured to the tubular shaft *a*, so as to necessarily rotate together. This wheel is held against accidental rotation by means of the spring *b*.

D designates a pinion, which is mounted
40 upon a fixed stud on the dial-back, as shown, and is held against accidental rotation by means of the spring *c*. This pinion D is of peculiar construction. It is first made with eight leaves or teeth, like any ordinary pinion,
45 after which four of the leaves are cut away or

removed on one side, as shown in Fig. 3, thereby producing four leaves, *d*, which, measuring in the direction of the axis of said pinion, are of less thickness than the other teeth, while the other four teeth, *e*, are of the full thick-
50 ness of the pinion. For convenience, we will term these the "full teeth" *e*, and "half-teeth" *d*. This pinion is placed upon the stud on the dial-back in proper position to have the full teeth engage with the day-of-the-month wheel B, 55 while the half-teeth *d* stand back of the plane of the day-of-the-month wheel B, so that they do not engage therewith.

E designates the ordinary twelve-hour wheel of a common clock, which is attached to the
60 hour-hand socket *f* and connected with the clock-movement in any ordinary manner, so as to revolve once in twelve hours. We secure to this wheel or to the socket thereof a point or spur, *g*, to serve as a trip-pin for en-
65 gagement with the pinion D. Thus it will be seen that the pinion D is moved a fraction of a revolution once in twelve hours. The full teeth *e* mesh or engage with the point *g* and the day-of-the-month wheel B, so that upon
70 such engagement of the spur *g* and pinion D the day-of-the-month wheel B is moved one thirty-first of a revolution, or the space of one tooth. In twelve hours more the spur again
engages the pinion D; but this time it engages
75 one of the half-teeth *d*, and consequently the pinion D is moved without imparting any movement to the day-of-the-month wheel. The operation will thus continue, moving the pin-
80 ion D once in twelve hours and the day-of-the-month wheel B and its pointer once in twenty-four hours.

The arrangement of the parts is very compact and simple, while the changes are made in a much shorter space of time than would be
85 the case if the day-of-the-month wheel were moved by a twenty-four-hour wheel, as heretofore.

We have shown our mechanism as applied directly to the back of an ordinary time-dial; 90

but it is evident that the same mechanism may be applied in other positions without changing the nature of our invention.

We claim as our invention—

- 5 The combination of the twelve-hour wheel having an operating-spur, the day-of-the-month wheel, and the pinion D, the latter provided with full teeth and half-teeth, all of which engage the spur or point of the twelve-
10 hour wheel, and only half of which engage the teeth of the day-of-the-month wheel, substan-

tially as described, and for the purpose specified.

FRANK M. WRIGHT.
WARREN M. WOOD.

Witnesses to the signature of Wright:

J. L. RUTHERFORD,
F. S. WRIGHT.

Witnesses to the signature of Wood:

J. L. RUTHERFORD,
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