

(No Model.)

2 Sheets—Sheet 1.

A. E. McCOLLUM.
CALENDAR CLOCK.

No. 551,556.

Patented Dec. 17, 1895.

Fig 1

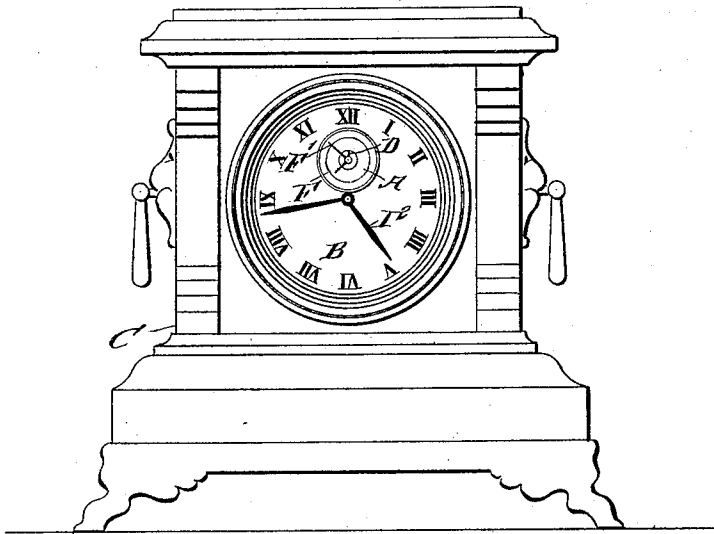
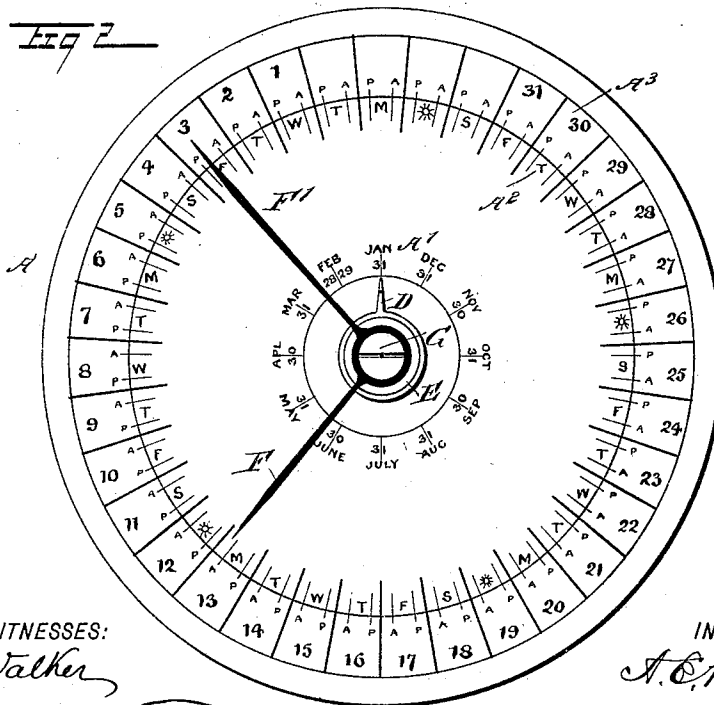


Fig 2



WITNESSES:

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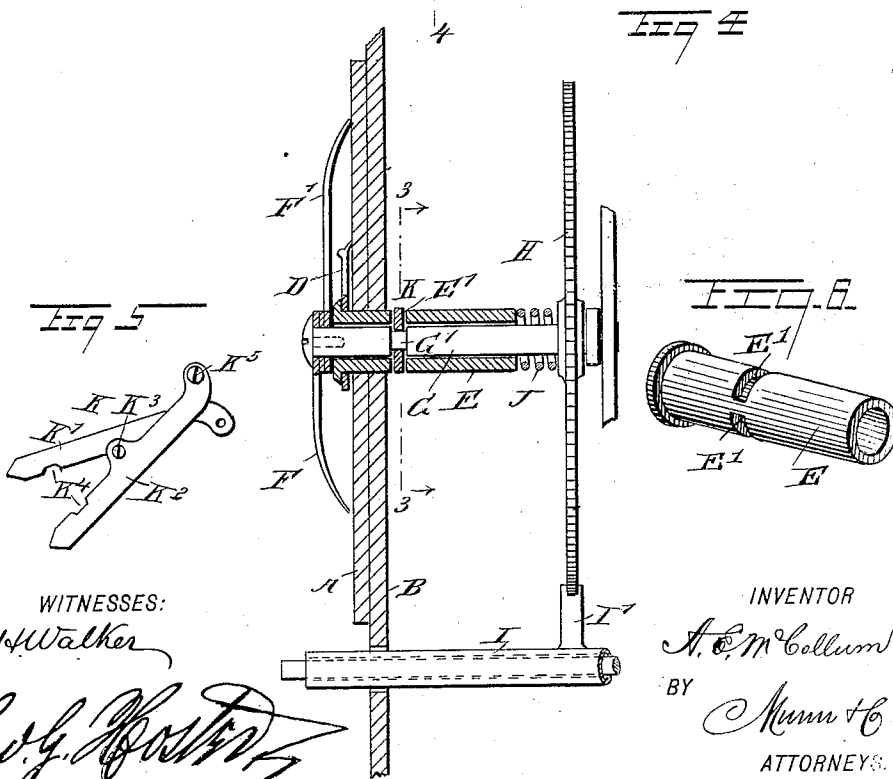
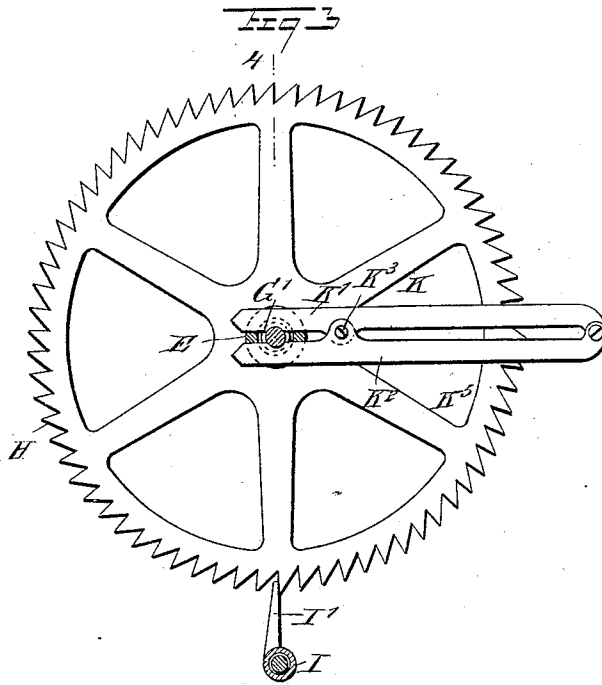
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2 Sheets—Sheet 2.

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WITNESSES:

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UNITED STATES PATENT OFFICE.

ALFRED ELMORE MCCOLLUM, OF WEST LEISENRING, PENNSYLVANIA.

CALENDAR-CLOCK.

SPECIFICATION forming part of Letters Patent No. 551,556, dated December 17, 1895.

Application filed February 14, 1895. Serial No. 538,388. (No model.)

To all whom it may concern:

Be it known that I, ALFRED ELMORE MCCOLLUM, of West Leisenring, in the county of Fayette and State of Pennsylvania, have invented a new and Improved Dial-Calendar for Clocks or Watches, of which the following is a full, clear, and exact description.

The invention relates to calendars attached to and driven from watches, clocks or like devices.

The object of the invention is to provide a new and improved calendar which is comparatively simple and durable in construction, readily applied to a watch or clock, and arranged to properly indicate the month, the day of the month, and the day of the week.

The invention consists principally of a rotatable sleeve carrying the month-hand, a shaft fitted to rotate in the said sleeve and adapted to be driven from the clockwork, and a double hand secured on the said shaft, the hands standing at angles one to the other, one indicating the day of the month and the other the day of the week.

The invention also consists in certain parts and details and combinations of the same, as will be hereinafter fully described, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the views.

Figure 1 is a face view of the improvement as applied on a clock. Fig. 2 is an enlarged face view of the improvement. Fig. 3 is a sectional front view of the same on the line 3 3 of Fig. 4. Fig. 4 is a cross-section of the same as applied, and Fig. 5 is a perspective view of a key for holding the sleeve and shaft in position. Fig. 6 is a perspective view showing the construction of the stationary sleeve whereon the month-indicating hand or pointer is mounted.

The improved dial-calendar is provided with a dial A, formed either on the face of the dial B of a clock C or a watch, or the said dial A may be made of a suitable material and attached to the face of the dial B in any desired manner. On the face of the dial A, and near the center thereof, is arranged a graduation A', indicating the months of the

year and the days in each month. Concentric to this graduation A' is a second circular graduation A² divided into thirty-five parts, indicating the days of the week for five weeks, and next to this graduation A² is a third circular graduation A³, likewise divided into thirty-five parts corresponding with the parts in the graduation A², and containing the consecutive numerals from "1" to "31" and four blank spaces. Each of the parts in the graduations "A²" and "A³" is provided with the letters "A" and "P," indicating the corresponding parts of the day, A. M. and P. M.

On the graduation A' indicates a pointer D, secured on the outer end of a sleeve E, (seen in detail in Fig. 4,) extending transversely and mounted to turn in bearings formed in the dials A and B, as indicated in Fig. 4. This sleeve E is normally held in a fixed position, and the pointer D is shifted by hand at the end of each month. On the graduations A² and A³ indicate the hands F and F', standing at angles one to the other, and both secured on the front end of a shaft mounted to turn loosely in the sleeve E. On the rear end of this shaft G is secured a toothed wheel H, having seventy teeth—that is, double the number of the parts in the graduations A² and A³—and this toothed wheel H is in mesh with a tooth I' secured on the sleeve I carrying the hour-hand I² of the clock C. Now it will be seen that on every full revolution of the hour-hand I² the tooth I' will turn the wheel H the distance between two teeth, so as to change the position of the hands F and F' correspondingly, and for every two revolutions of the said sleeve I, carrying the hour-hand I², the hands F and F' are shifted from one part of the graduations A² and A³ to the next following one. Thus the hand F indicates the day of the week as well as the corresponding half of the day, A. M. or P. M., and the hand F' indicates the day of the month and corresponding half of the day.

A spring J coiled on the rear end of shaft G extends between the hub of the wheel H and the inner end of the sleeve E, (see Fig. 4,) and a key K is employed to hold the sleeve E stationary against rotation and also against longitudinal movement on the shaft G. This

key K is preferably made in two parts K' and K², pivotally connected with each other at K³, and each formed at one end with a notch K⁴ adapted to engage an annular groove G' in the shaft G, which turns between said notched ends of the parts K' and K². The said notched ends of the two parts K' and K² of the key K extend through slots E' in the sleeve E, and the outer ends of the said parts are adapted to be fastened together by means of a set-screw K⁵ secured to the casing or frame of the clock, said set-screw being adapted to be placed in position after the notched ends of the parts of the key have been inserted through slots E' in sleeve E and their notches K⁴ engaged with the groove G' in shaft G. The key K is thus held in position on the clock-frame and the screw K⁵ is screwed up, as indicated in Fig. 3, and serves to hold the sleeve E stationary in its proper position.

At the end of the month the operator has to change the position of the hands F and F' relative to each other and move the hand F' from the last day of the month to the first one, with the hand F indicating the corresponding day in the week. At the same time the operator changes the position of the pointer D to indicate on the proper month. Thus by the arrangement described the hands F and F' move in unison and are driven from the mechanism of the clock or watch to indicate the day of the week and the day of the month.

Having thus described my invention, I

claim as new and desire to secure by Letters Patent—

1. In a device of the character described, the combination of a rotative shaft, having a groove, a sleeve inclosing the shaft and having slots opposite the groove therein and a key adapted to be secured to the casing projecting through the slots in the sleeve and engaging the groove in the shaft, substantially as set forth.

2. A dial calendar, comprising a sleeve mounted to turn and carrying a month hand, a shaft mounted to turn in the sleeve and carrying two hands indicating the day of the month and the day of the week, means for rotating the said shaft, and a key held on the said sleeve and engaging an annular groove in the said shaft, substantially as shown and described.

3. A dial calendar, provided with a key made in two parts having oppositely arranged notches, and a set screw for fastening the two parts together, substantially as described.

4. A dial calendar, having a key consisting of two parts pivoted together at their central portions and each having near one end oppositely arranged notches, and a set screw secured to the opposite end of one part and adapted to engage the other part to lock said parts in position, substantially as set forth.

ALFRED ELMORE MCCOLLUM.

Witnesses:

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J. H. STINER.