

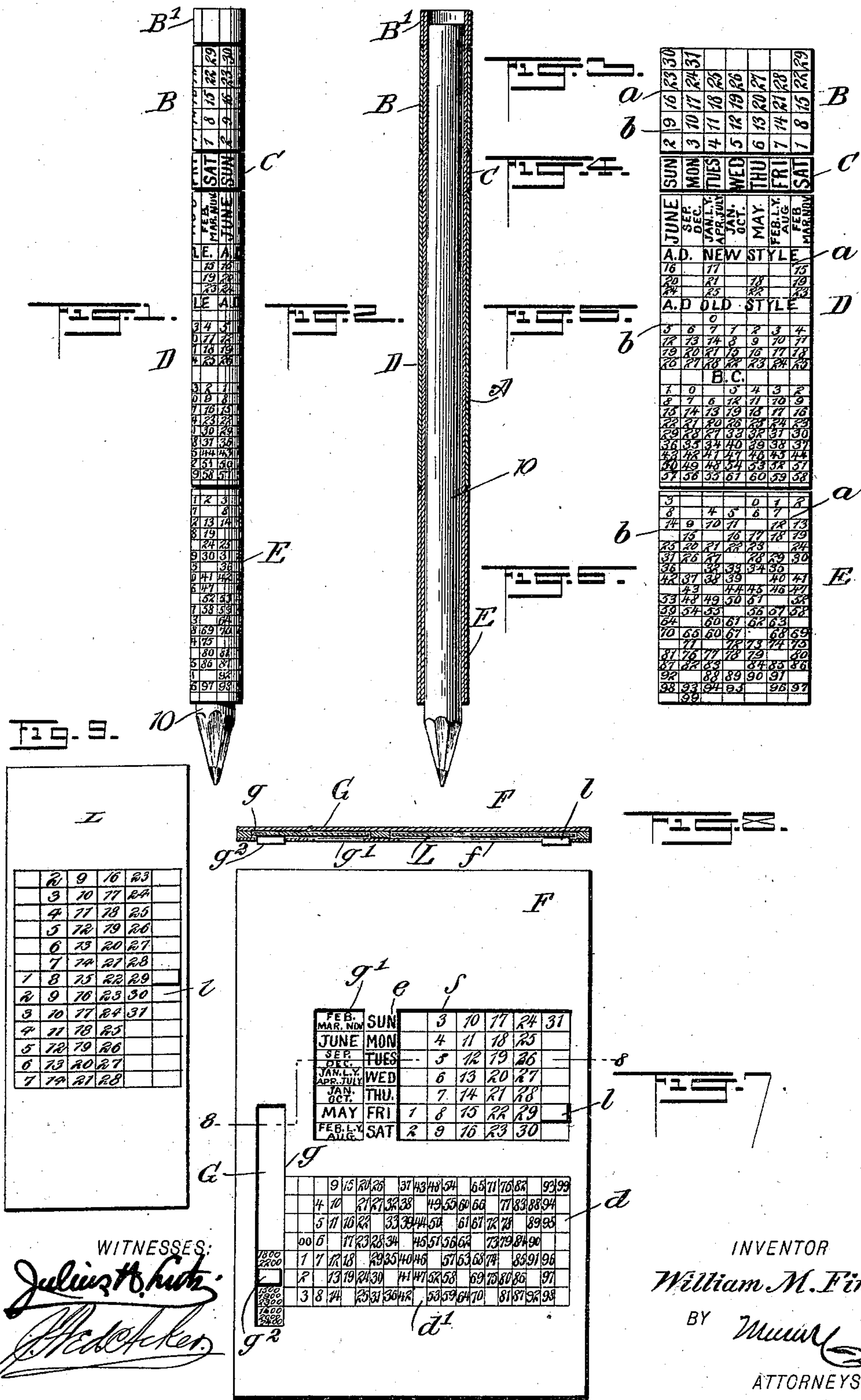
No. 725,431.

PATENTED APR. 14, 1903.

W. M. FINCH.  
PERPETUAL CALENDAR.

APPLICATION FILED SEPT. 22, 1902.

NO MODEL.





# UNITED STATES PATENT OFFICE.

WILLIAM M. FINCH, OF WILLOW, CALIFORNIA.

## PERPETUAL CALENDAR.

SPECIFICATION forming part of Letters Patent No. 725,431, dated April 14, 1903.

Application filed September 22, 1902. Serial No. 124,402. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM M. FINCH, a citizen of the United States, and a resident of Willow, in the county of Glenn and State of California, have invented a new and Improved Perpetual Calendar, of which the following is a full, clear, and exact description.

The purpose of my invention is to provide a simple construction of a perpetual calendar which can be easily read and operated and which can be adapted to a penholder, a pencil, or other cylindrical support or which can be used flat, as desired.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

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

Figure 1 is a side elevation of a pencil and the improved calendar applied thereto. Fig. 2 is a vertical section through the calendar, showing the pencil in side elevation; and Figs. 3, 4, 5, and 6 are plan views of the several cylinders constituting the working portions of the body, which cylinders are shown flat. Fig. 7 is a front elevation of the calendar in card form, and Fig. 8 is a transverse section on the line 8 8 of Fig. 7. Fig. 9 is a plan view of the slide for the numerals of the days of the week used in connection with the card form of calendar shown in Fig. 7.

When the calendar is of cylindrical form and is adapted to be mounted upon a pencil 10 or like support, it consists of an inner cylinder A of the full length of the calendar adapted to be stationarily placed upon its support 10 and four outer cylinders B, C, D, and E, together with an upper collar B'. The upper cylinder B is mounted to turn loosely upon the inner or fixed cylinder A below the collar B', and upon said cylinder B numerals are produced representing the dates of the days of a month, the said numerals reading from "1" to "31," inclusive. The second cylinder C has the names of the days of the week produced thereon and is fast to the inner cylinder A. The third cylinder D represents the centuries and is mounted to turn loosely around the inner cylinder A,

while the fourth cylinder E, which represents the years, is secured to the said inner cylinder A.

Each outer cylinder is divided into seven longitudinal columns *a* and as many transverse or circumferential columns *b* as may be found necessary, and a numeral is placed in each square formed by the two columns, except when a letter or word is required.

The cylinder B, representing the days of the month, has a single numeral in each of thirty-one squares; but a few surplus plain squares are included. Each of the squares on the cylinder C contains the name of a day of the week. In the upper squares of the century-cylinder D the names of the months are produced, some of the squares containing one name and the others two or more, according to the requirements of the system of calculation.

Below the names of the months upon the cylinder D, I print "A. D. New Style" and numerals reading transversely to indicate the new centuries, which numerals are shown reading from "15" to "25." Below these numerals I print "A. D. Old Style" and numerals reading from "0" to "28" or more, and below these latter numerals I print "B. C." and numerals reading transversely from "0" to "61," indicating the centuries of the old era. On the squares on the cylinder E numerals representing the years read circumferentially in the squares from "0" to "99," but every fourth square, representing a leap-year, is left blank.

In operation to ascertain from the calendar the date and day of a month for any year turn the century-cylinder D until the figure representing the desired century is in the same longitudinal column *a* with the desired year found on the cylinder E, then turn the cylinder B, containing the numerals of the days of the month, until the figure "1" is brought into the same column on the century-cylinder D in which the name of the desired month appears, whereupon the date-numerals on the cylinder B may be read in connection with the names of the days of the week on the cylinder C in the usual manner and will be found to be a correct calendar of the month.

With reference to the flat form of calendar shown in Figs. 7 and 8 a board F, of suitable



size, is provided, forming a support and having a panel *d* produced upon its outer surface, divided into the desired number of squares *d'*, sundry of which contain figures designating years, and sundry of the squares are plain, designating the leap-years. This panel of years corresponds to the cylinder E, heretofore described.

Between the inner and outer surfaces of the board a slide G is located, which is read at two open spaces *g* and *g'*, produced in the front of the board. That portion of the board appearing at the open space *g* has figures designating centuries produced thereon and is provided with a lug *g*<sup>2</sup> to facilitate the movement of the slide. That portion of the slide G which appears at the open space *g'* has the names of the months produced thereon. The figures on the slide are in transverse squares and are adapted to be read transversely with regard to the squares *d'* on the panel *d*. This slide G corresponds to the cylinder D, heretofore described.

The names of the months on the slide G read in connection with the names of the days of the week *e* produced adjacent to the open space *g'*, and said names of the days of the week are between the open space *g'* and a larger space *f*, at which latter space a second slide L is read, having squares produced thereon in which the figures for the days of the month are produced, the said figures being read in connection with the aforesaid names of the days of the week. This slide L corresponds to the cylinder B and is moved by an attached lug.

I desire it to be understood that the figures of the days of the months are repeated in proper sequence above and below those shown in Fig. 7 and that the sliding member on which said figures appear extends above and below the open panels *g* and *f*, as is indicated by dotted lines in Fig. 7.

The operation of the flat style of calendar is substantially the same as in the cylindrical type. The slide G is moved until the figure denoting the century is opposite the particular year desired on the panel *d*. The slide L is then moved until the figure "1" thereon is opposite the desired month at the open space *g'*, and the date of the days of the month is read from the figures on the slide L in the same manner as are the equivalent figures on an ordinary calendar and as accurately.

I do not confine myself to the exact arrangement of the table of centuries shown, as the arrangement can be varied without departing from the spirit of the invention.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a perpetual calendar, a support, a combined table of centuries and the names of the months of the year, which table is movable

upon said support, a fixed table of years, a fixed table of the names of the days of the week, and a movable table having figures indicating the dates of the different days of the week in a month, the combined century and month carrying table moving relatively to the fixed table of the days of the week and the fixed table of the years, and the table carrying the figures expressing the dates of the days in a month moving relatively to the fixed table carrying the names of the days of the week, as set forth.

2. In a perpetual calendar, a support, a combined table of centuries and the names of the months of the year, which table is movable upon said support, a fixed table of years, a fixed table of the names of the days of the week, and a movable table having figures indicating the dates of the different days of the week in a month, the combined century and month carrying table moving relatively to the fixed table of the days of the week and the fixed table of the years, and the table carrying the figures expressing the dates of the days of the month moving relatively to the fixed table carrying the names of the days of the week, all of the said tables being provided with the same number and arrangement of horizontal columns, in which columns the data are produced, substantially as described.

3. In a perpetual calendar, the combination with an inside cylindrical support, an upper cylinder mounted to revolve upon the said support, a lower cylinder fixed on the support, a long and a short intermediate cylinder located on the support, the short cylinder being adjacent to the upper cylinder and fixed upon the inner or body cylinder, the longer, intermediate cylinder being mounted to turn on the body-cylinder, all of the cylinders being provided with the same number and arrangement of longitudinal columns, the upper cylinder being a cylinder of the days of the month and having corresponding figures produced in its columns, the shorter, intermediate cylinder having the names of the days of the week produced in its columns, the longer intermediate cylinder having the names of the months of the year produced in the upper portions of its columns, and figures below said names of the months designating centuries, and the lowest cylinder having figures produced thereon expressing years, all of the said cylinders being combined for operation in the manner described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM M. FINCH.

Witnesses:

P. O. EIBE,  
E. B. HARBOUR.