

No. 641,456.

Patented Jan. 16. 1900.

C. L. LEONARD.

CALENDAR.

(Application filed July 18, 1898.)

(No Model.)

2 Sheets—Sheet 1.

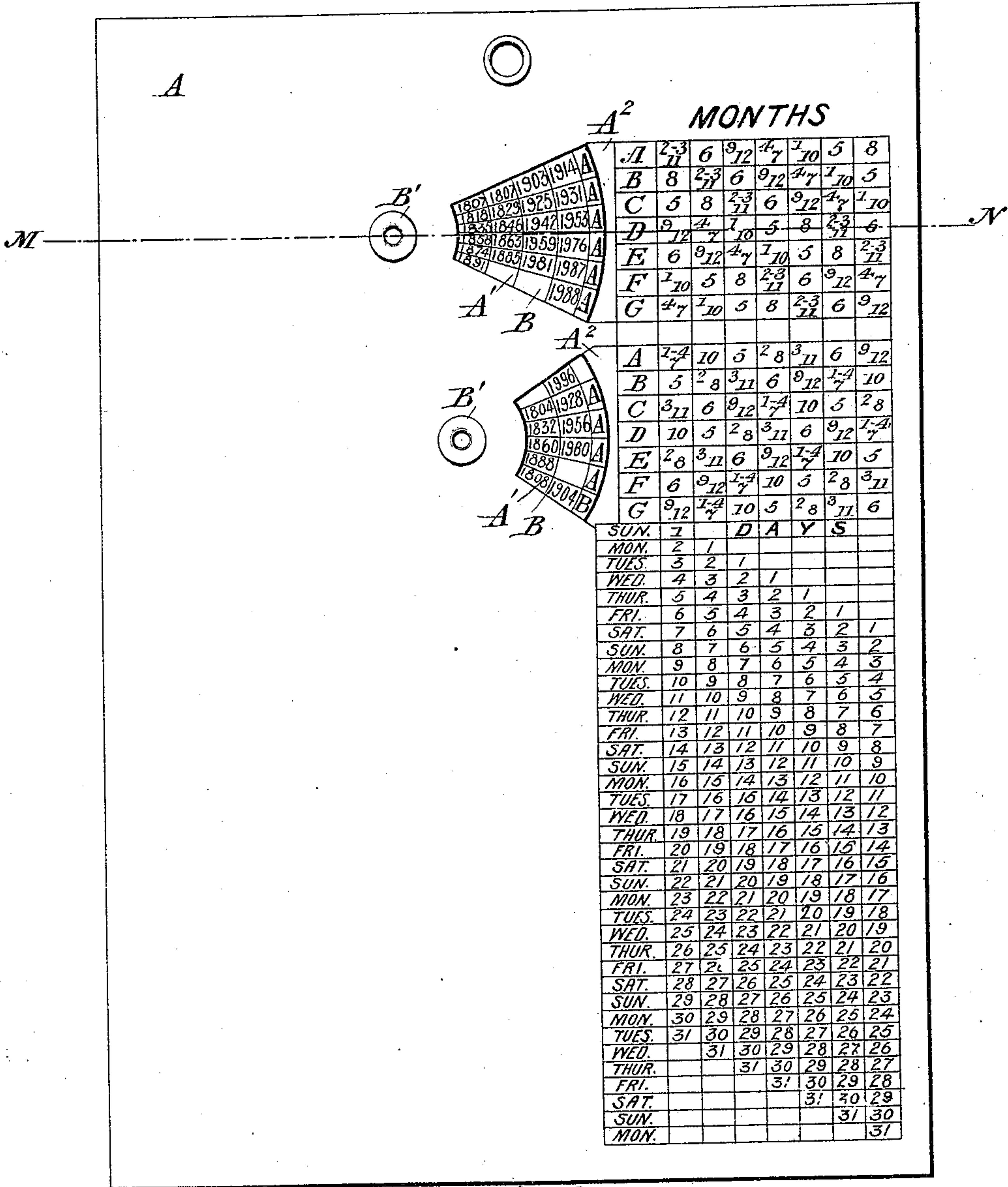


Fig. 1.

Witnesses. *B' A' B A* Inventor.

O. U. Perrin -
J. M. Willis.

Charles Lee Leonard.

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2 Sheets—Sheet 2.

Fig. 3.

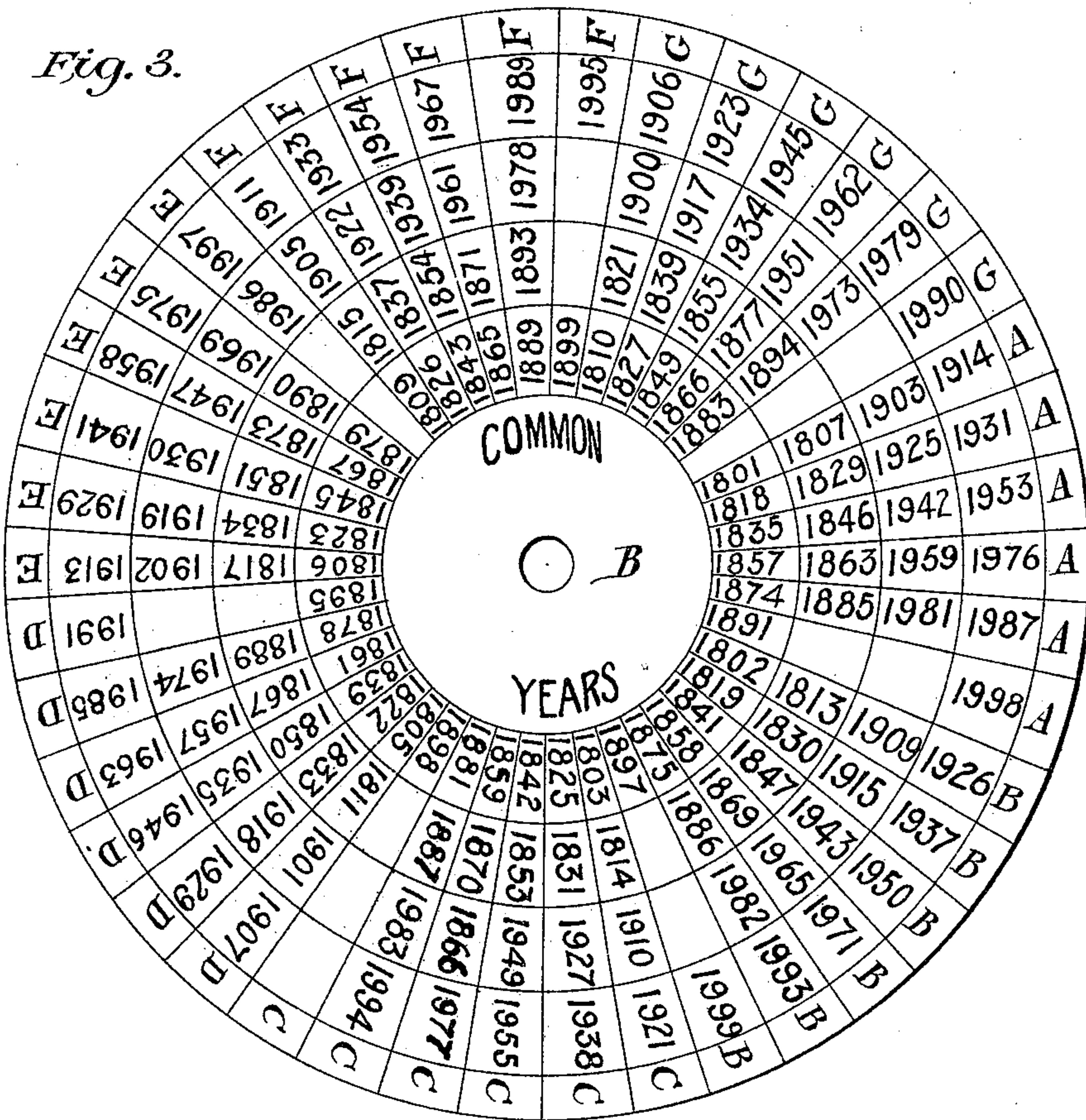
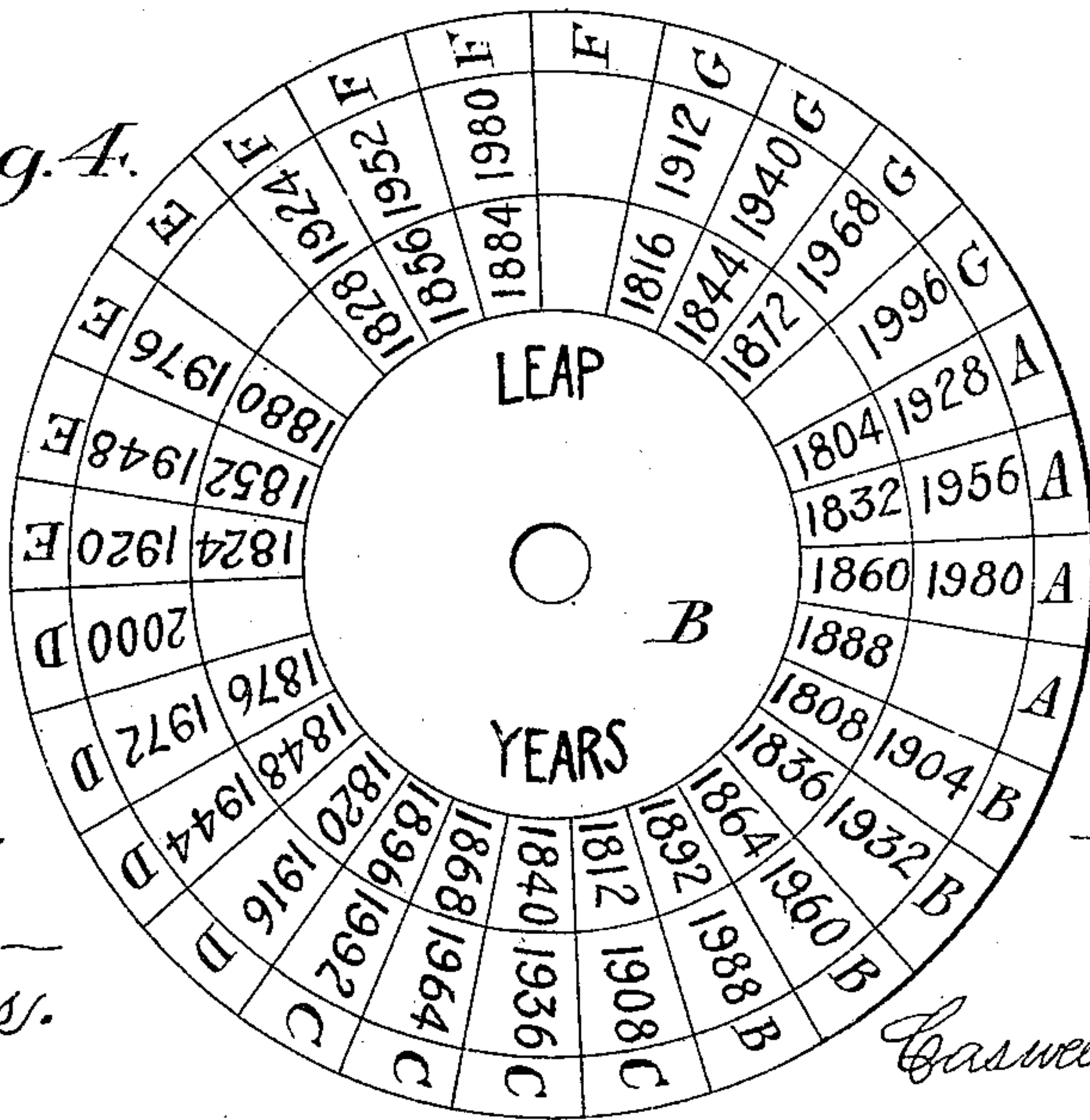


Fig. 4.



Witnesses.

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UNITED STATES PATENT OFFICE.

CASWELL LEE LEONARD, OF VEEDERSBURG, INDIANA.

CALENDAR.

SPECIFICATION forming part of Letters Patent No. 641,456, dated January 16, 1900.

Application filed July 18, 1898. Serial No. 686,318. (No model.)

To all whom it may concern:

Be it known that I, CASWELL LEE LEONARD, a citizen of the United States, residing at Veedersburg, in the county of Fountain and State of Indiana, have invented certain new and useful Improvements in Time-Calendars, of which the following is a specification.

My invention relates particularly to certain novel features in the construction and method of computation in time-calendars, and has for its object the production of a time-calendar wherein the calendar name of the day of the week or the number of the day of the calendar month may be found from the year A. D. 1800 to the year A. D. 2000 when the year, month, and day of the month are known and which may be used as a correct year-calendar for every year and month of the year until A. D. 2000; and it consists in the peculiar construction, combination, and arrangement of the parts and in the peculiar method of combination, arrangement, and tabulation of figures, letters, and words as will be fully pointed out in the following description and claim.

Referring to the accompanying drawings, forming a part of this application, in which like letters of reference indicate corresponding parts throughout the several views, Figure 1 is a plan view of my invention entire. Fig. 2 is a transverse section of the same on the line M N, Fig. 1. Fig. 3 is a detail of the circular disk, showing all the common years from A. D. 1800 to the year A. D. 2000. Fig. 4 is a detail of the revoluble disk, showing all leap-years from A. D. 1800 to the year A. D. 2000.

In the construction of my invention I use a base part A and a pair of disks B of suitable material, such as cardboard, celluloid, or sheet metal. The disks B are mounted on the base part by the pins B', which pass through the center of the disks and allow them to revolve thereon. The base part has a segment-shaped opening A', which allows a similar portion of the disks B to show with its surface near which they are held by the segment-shaped portion A² of the base part A back of them. The disks B may be manipulated with the fingers for revolving any portion of their surface under the segment-shaped opening.

My method of computation in time-calendars embraces all the common years from the

year A. D. 1800 to the year A. D. 2000, which are designated by figures on the upper disk B, and all the leap-years from the year A. D. 1800 to the year A. D. 2000, which are tabulated in figures on the lower disk B. A table of months and days positioned at the right of the revoluble disks B on the base part are peculiarly arranged for perfecting my method of computation. Two series of letters "A," "B," "C," "D," "E," "F," and "G" are positioned in the upper portion of the first column to the right of the disks, one series at the right of the common-year disk and another at the right of the leap-year disk. In the lower portion of said column, beginning with Sunday, the calendar days of the week are tabulated in their consecutive order until thirty-seven days have been tabulated in their regular calendar order. At the right of the first column of letters and calendar days are seven vertical columns, which are crossed at their upper portion by a horizontal column for each letter of both series of letters "A," "B," "C," "D," "E," "F," and "G" and at their lower portion by a horizontal column for each of the thirty-seven consecutive calendar days. At the right of each letter of both series of letters numbers from "1" to "12" are used to designate the consecutive number of the calendar month instead of its name; but the name of the calendar month may be used instead of its representative number, if desired, without deviating from my invention. At the right of the column of thirty-seven calendar days consecutively named are vertically tabulated the numbers from "1" to "31" consecutively in seven series, respectively, each series beginning one horizontal column lower than its left-hand series, which positions the beginning of the seventh series to the right seven horizontal columns lower than the beginning of the first vertical series at the left, the purpose of which will appear hereinafter.

Referring again to the revoluble disks B, which contain the common-year and leap-year tables, it will be seen that the tables are positioned in both circular and radiating columns and have at the periphery of the radiating columns seven alphabetically-arranged series of reference-letters—namely, "A," "B," "C," "D," "E," "F," and "G," which design-

nate, respectively, seven groups of years, each year of each group of years beginning on the same calendar day of the week.

The operation of my invention and method of computation therewith are as follows: The name of the calendar day of the week is found when the year and the number of the day of the month are known—as, for illustration, designate July 4, 1807, which is found on the upper or common-year disk by revolving said disk until the letter “A” at the periphery of the radial column in which 1807 occurs tallies with the letter “A” at the beginning of the first vertical column which points to the uppermost horizontal column, following which to the right (July being the seventh month of the year) “7” is found in the fourth vertical column at the right of the reference-letter column, and passing down said column to the series of numbers from “1” to “31” until “4” is found, and following to the left in the horizontal column in which “4” occurs and Saturday is tabulated, which indicates that July 4, 1807, occurred on Saturday of the calendar week. Returning to “4” in the horizontal column and upward to “1” in its vertical column, in which “1” occurs and Wednesday is tabulated, which indicates that the month of July, 1807, began on Wednesday of the calendar week. By a similar method of procedure the name of the day of the calendar week of any certain future date may be found. For instance, July 4, 1914, will be found to occur on Saturday of the calendar week and that the month of July in the year 1914 begins on Wednesday. Pursuing the method above pointed out it will be found that the correct calendar month for July, 1914, is tabulated in the fourth vertical column to the right, which begins on Wednesday of the calendar week. A complete calendar for each month of the year 1914 may be found without changing the position of the disk.

The number of days in a particular month may be known by simply finding the first day of its succeeding month, and the name of the last day of a particular month may be known by simply finding the first day of its succeeding calendar month.

In the above construction and method of

computation I produce a convenient and complete time-calendar embracing two centuries.

Having thus fully described my invention and set forth its operation and method of computation, what I claim as new, and desire to secure by Letters Patent, is—

In a time-calendar having a base part, an upper revoluble disk pivoted on the base part and having a table of common years in both circular and radiating columns grouped into seven series, designated by seven, alphabetically-arranged series of letters at the periphery of the radial columns, a lower revoluble disk pivoted to the base part having a table of leap-years in both circular and radiating columns grouped in seven series designated by seven, alphabetically-arranged series of letters at the periphery of the radial columns and a table of months and days on the base part of eight vertical columns having two alphabetically-arranged series of letters in the upper portion of the first column at the right of the disks which tally with the seven, alphabetically-arranged series of letters of the revoluble disks for the purpose specified, a table beginning with Sunday containing the names of thirty-seven days in their regular consecutive order tabulated in the lower portion of the first column for the purpose set forth, a series of horizontal columns having a horizontal column for each letter of the two alphabetically-arranged series of letters and for each name of the table of names of thirty-seven consecutive calendar days for the purpose named, a series of figures in the upper horizontal columns which designate certain months of the calendar year and seven series of numbers from “1” to “31” respectively in the seven vertical columns at the right of the names of the calendar days, each series beginning one horizontal column lower than its left-hand series which positions the seventh series of numbers at the right seven horizontal columns lower than the beginning of the first vertical series of numbers at the left, all in the manner and for the purposes set forth.

CASWELL LEE LEONARD.

Witnesses:

L. W. CRANE,
W. M. LEATHERMAN.