

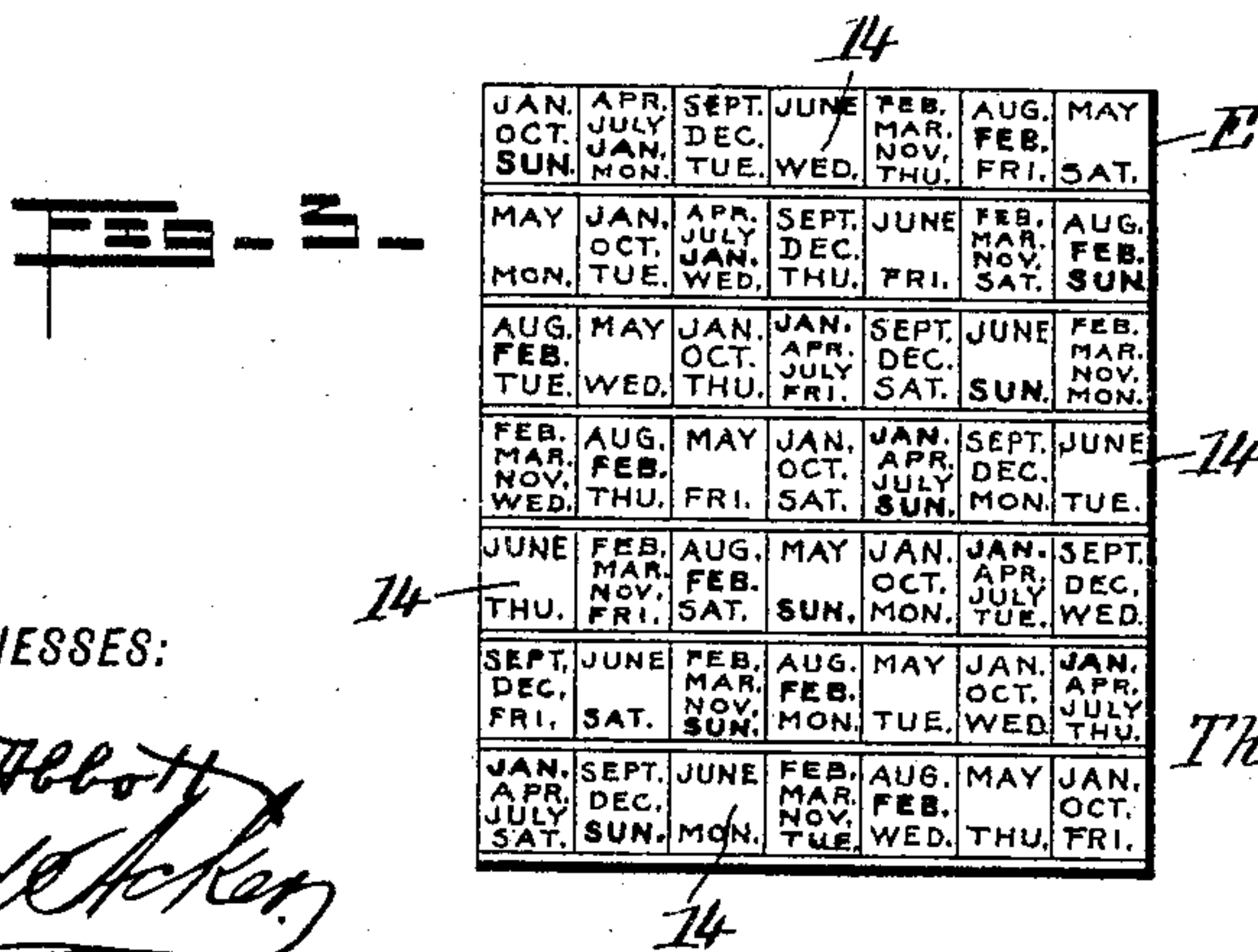
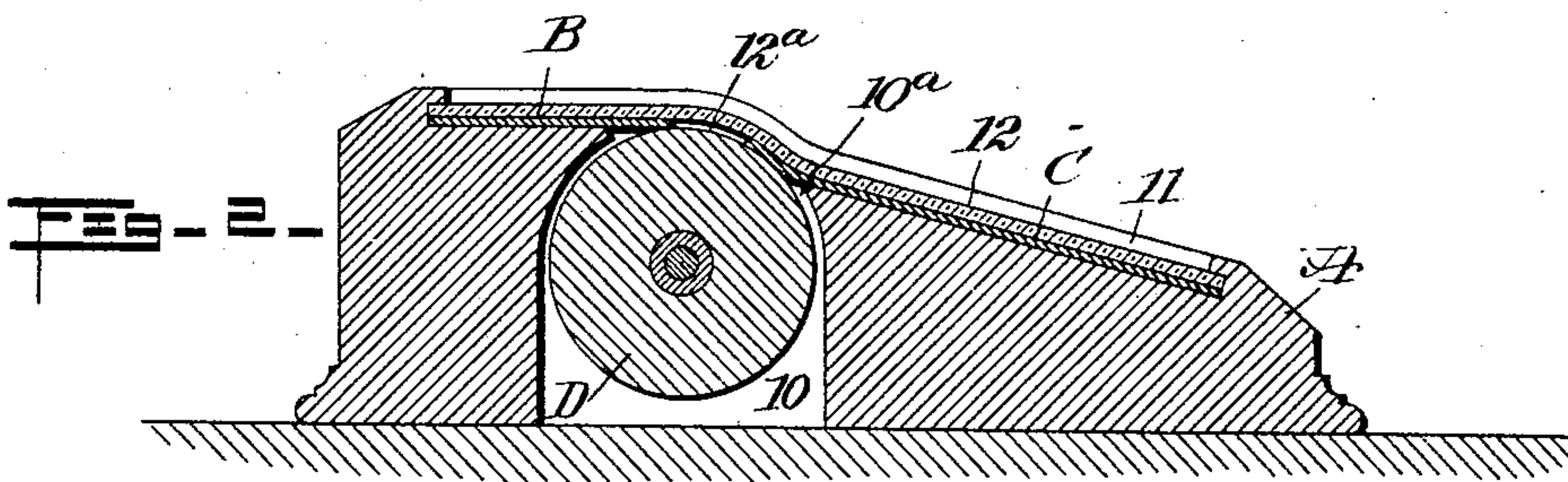
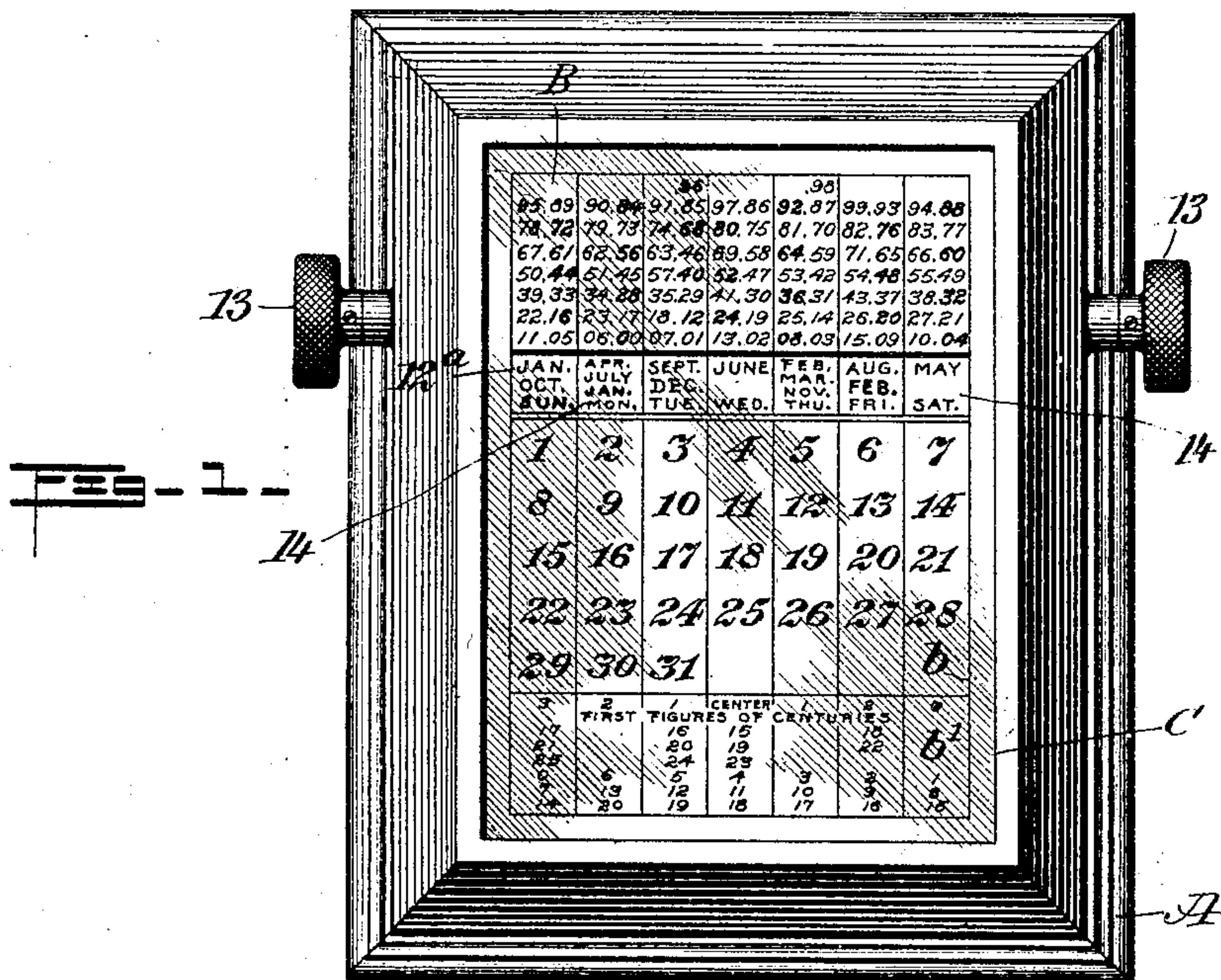
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PATENTED OCT. 4, 1904.

T. O'SHAUGHNESSY.
PERPETUAL CALENDAR.

APPLICATION FILED JAN. 11, 1904.

NO MODEL.



WITNESSES:

M. C. Abbott
Frederick A. Ken

INVENTOR

Thomas O'Shaughnessy

BY

Mumford
ATTORNEYS

UNITED STATES PATENT OFFICE.

THOMAS O'SHAUGHNESSY, OF SAN JOSE, CALIFORNIA.

PERPETUAL CALENDAR.

SPECIFICATION forming part of Letters Patent No. 771,742, dated October 4, 1904.

Application filed January 11, 1904. Serial No. 188,563. (No model.)

To all whom it may concern:

Be it known that I, THOMAS O'SHAUGHNESSY, a citizen of the United States, and a resident of San Jose, in the county of Santa Clara 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 and accurate form of perpetual calendar that may be set for any month in any year, leap-year included, and in any century within the scope of the calendar and the day of week of any date may be quickly and readily ascertained without calculation on the part of the operator.

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 plan view of one form of the improved calendar. Fig. 2 is a vertical central section through the same, and Fig. 3 is a plan view of the covering for the cylinder employed laid flat.

A represents a frame in the form of a base having a chamber 10 therein between its ends, which chamber is open at the back or bottom and has preferably a segmental portion 10^a, connecting with a recess or depression 11, produced in the outer or upper face of the frame or base, as is shown in Fig. 2. A transparent pane 12 is fitted in this recess, extending over two sheets B and C, separated by a space 12^a, whereby to expose a part of the periphery of a drum or roller D, journaled in the said chamber 10 and turned by connected knobs 13 at the outer side portions of the frame or by equivalent means.

The periphery of the drum or roller D is covered by a sheet E, read in connection with the sheets B and C. The sheet C has an upper panel *b*, ruled off and provided with figures between the rulings reading from "1" to "31," inclusive, and having an arrangement corresponding to the arrangement of the

figures on a monthly panel of the ordinary calendar, as is shown in Fig. 1—that is to say, the panel *b* is ruled in seven columns, corresponding to the seven days of a week. A second panel *b'* may be and preferably is produced below the notation-panel *b* for the month, being correspondingly ruled in seven columns. This lower panel *b'* is adapted to contain the first figures of centuries, and the columns are numbered in opposite directions from the center one, as "1," "2," "3." Each century-column contains longitudinally-arranged figures properly calculated—as, for example, the center column contains the figures "15," "19," "23," "4," "11," and "18," the first column to the right "3," "10," and "17," the second column to the right "18," "22," "2," "9," "16," and the third column to the right "1," "8," and "15." The figures in the first column to the left read "16," "20," "24," "5," "12," and "19," the second column to the left "6," "13," and "20," and the third column to the left "17," "21," "25," "0," "7," and "14." The upper sheet is likewise ruled in seven columns, corresponding to the columns in the notation-panel *b* and century-panel *b'*, and each column on the sheet B contains the terminals of the figures denoting all the years expressed in the centuries set forth in the corresponding century-column, the arrangement of the terminals of the years being in predetermined and previously-calculated order, as is shown by Fig. 1.

The years which are leap-years are distinguished from the other years by a difference in the character of the figures or by the figures being produced in a different color; but the same color or character of figures is employed for all leap-years, as is likewise the same predetermined color or character of type for all of the complete years.

The sheet E (shown in detail in Fig. 3 and which is secured in any suitable manner to the periphery of the roller D) is ruled in seven columns adapted when the roller is in position to register with corresponding columns on the sheet containing the terminals of the years, the notation-panel, and the century-panel. This sheet E is furthermore ruled so that it is divided into a series of squares 14, 100

reading seven each way, the sheet E being of rectangular formation. Thus the squares on the sheet E represent the square of seven. Each panel contains the names, preferably abbreviated, of one or more months of the year, or the figures "1" to "12" representing the months, and January and February in a leap-year are made in the same color or are of the same type as that color or type used to designate the leap-years on the sheet B. Each series of squares 14, reading longitudinally of the roller D and which as the roller is turned appear in their longitudinal order at the opening 12^a between the sheets B and C, are provided with the abbreviations or the full names of a week, produced one name on each square. When the calendar is operated for a leap-year, use the designated January and February, and the month and week are read the same as for any other year.

The opening 12^a is only sufficiently large to permit one longitudinal row of squares containing the names of a complete week to be visible at one time from the front of the machine, as is shown in Fig. 1, and the sheet E is so arranged on the roller or drum D that as a longitudinal series of squares 14 on the sheet E is made visible at the upper portion of the machine the said squares in such alinement will also aline the various columns on the sheet for years, the notation-panel, and the century-panel.

Centuries are ordinarily counted under the old style and new style of reckoning, and in order that the distinction may be made very plain the figures representing the old style are made heavier or in one color and the figures representing the new style are in a different color or are lighter in print; but it will be understood that any means most suitable may be employed to distinguish between the two styles, so that one cannot readily be mistaken for the other.

I desire it to be understood that the panel b', containing the first figures of the centuries, may be omitted and that the index-sheet E instead of being placed around a roller or drum may be used flat, being simply mounted to slide beneath the opening 12^a between the notation-panel b and the sheet B, bearing the terminals of the years.

In operation if it is desired to ascertain what particular day of the week is designated by a certain date in a given month of a given year in the past or what day will correspond to a given month in a given year in the past or future it is simply necessary to move the index-sheet E by means of the roller D or otherwise until the month in question in a square 14 on the index-sheet registers with a corresponding vertical or longitudinal column on the sheet B for years containing the terminal figure of the year in which the month in question occurs, whereupon the transverse reading of the line of squares 14 at the open-

ing 12^a, which gives the reading of all the days of the week, is read in the usual way with reference to the figures on the notation-panel b; but if the year is a leap-year the January and February in the same color or style should be used in obtaining the desired data in a leap-year.

The rule for reading in the centuries for the present and all centuries whose first figures appear in the center column of the panel b' is to place the desired month at the opening 12^a under the desired year. With reference to the reading of the figures in the century-columns 1 2 3 to the left of the center column place the month desired respectively one, two, or three columns to the left of the column containing the suitable terminal for the year desired. The figures in the century-columns 1 2 3 to the right of the center column are read in the same manner as the figures in the corresponding column to the left, except that the desired month is placed one, two, or three columns to the right of that containing the terminal for the desired year. When the year is a leap-year, place the red January and February at the opening 12^a under the desired year.

I desire it to be understood that the names of the months and the days of the week may be produced each in a different color or each printed in a different style of type and that the calendar may be made perfectly flat, in which event a flat slide will be substituted for the cylinder at the opening 12^a.

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

1. In a perpetual calendar, a sheet having the terminals of years produced thereon in predetermined order and in columns corresponding in number to the number of the days in a week, a notation-panel separated from the sheet expressing years and having corresponding columns and consecutive figures expressing the number of days in a calendar month, and an index-sheet movable at the space between the sheet expressing years and the notation-panel, being read in connection with both, which index-sheet is divided into columns corresponding in number to the number of days in a week, the said columns being subdivided into squares reading in equal number transversely and longitudinally of the sheet, each of which spaces contains the name of the day of a week and the names of the months in predetermined arrangement, the months of January and February for leap-years and the terminals of the years which represent leap-years being similarly designated and distinguished from the other months and other years, as described.

2. In a perpetual calendar, a sheet having the terminal of years produced thereon in predetermined order and in columns corresponding in number to the number of days in a week, a notation-panel separated from the sheet expressing years, and having corre-

5 sponding columns and consecutive figures expressing the number of days in a calendar month, a panel for centuries ruled correspondingly to the notation-panel and reading in connection therewith, which century-panel has predetermined arranged figures in its columns, an index-sheet mounted for movement at the back of the space between the sheet expressing years and the notation-panel, being read in connection with both of the latter, which index-sheet is divided into columns corresponding in number to the number of days in a week, the said columns being divided into transverse series of squares, the series being adapted to be read one after the other at the said opening between the sheet expressing years and the notation-panel, each square on

the index-sheet having produced thereon a day of the week, which days in a given series represent all the days of a week, each square on the said index-sheet being further provided with the names of months predetermined arranged, sundry of the terminals of the years and January and February being correspondingly designated to represent leap-years and distinguished from the ordinary calendar years and months, as described. 20 25

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

THOMAS O'SHAUGHNESSY.

Witnesses:

L. H. CASE,

WESLEY W. HASTINGS.