

No. 818,577.

PATENTED APR. 24, 1906.

W. B. SUMMERALL.
PERPETUAL CALENDAR.
APPLICATION FILED JUNE 27, 1905.

3 SHEETS—SHEET 1.

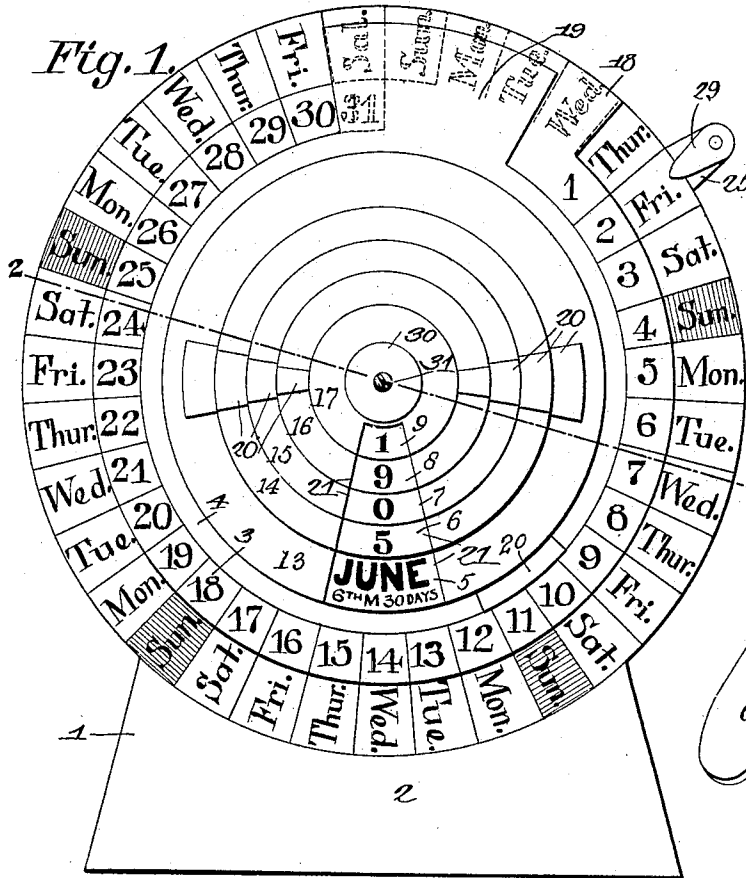


Fig. 5.

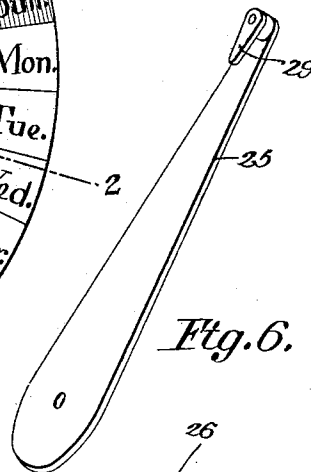


Fig. 6.

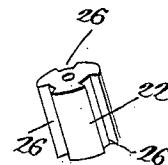


Fig. 7.

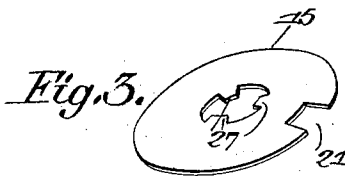


Fig. 3.

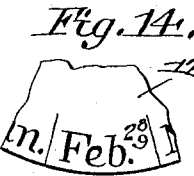


Fig. 14.

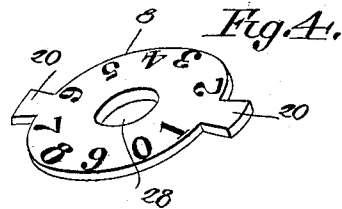


Fig. 4.

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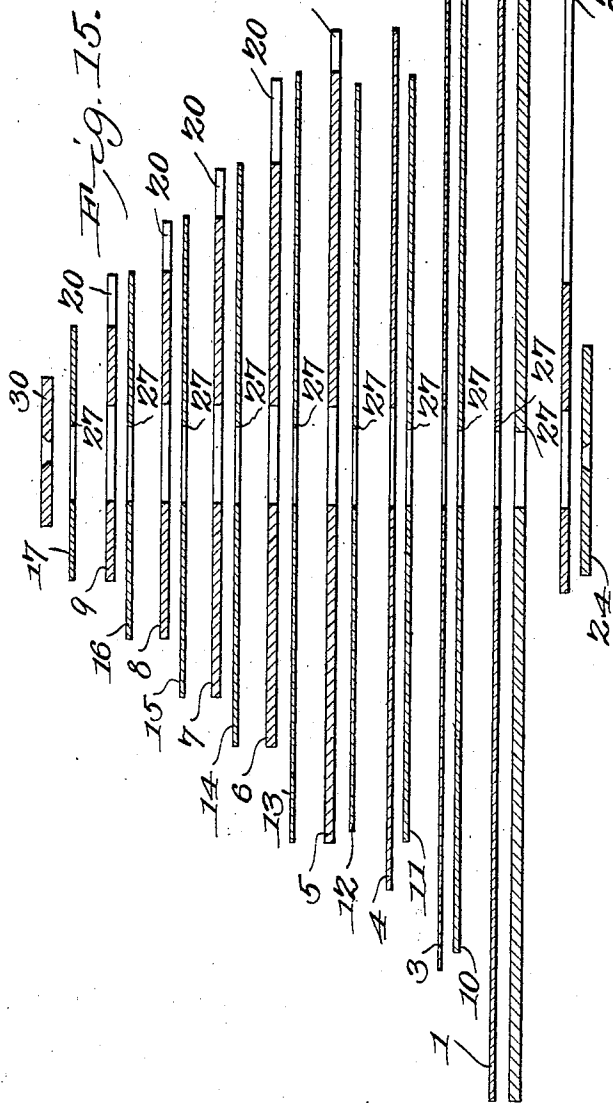
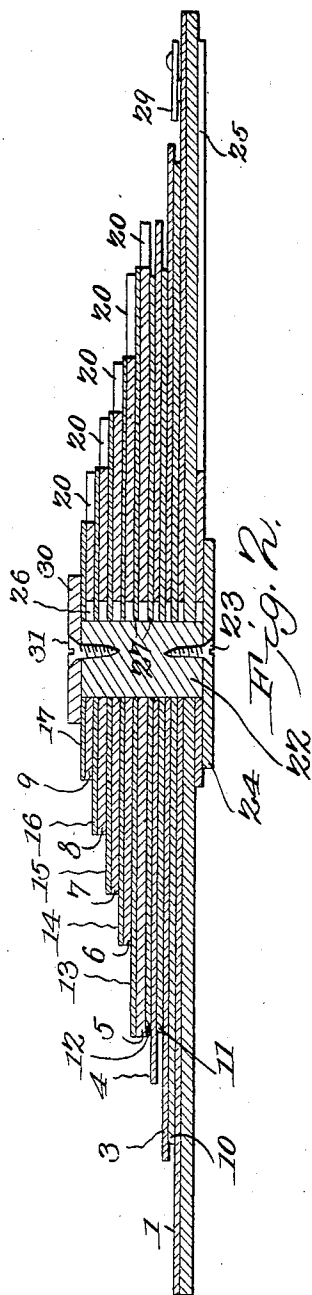
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3 SHEETS—SHEET 2.



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3 SHEETS—SHEET 3.

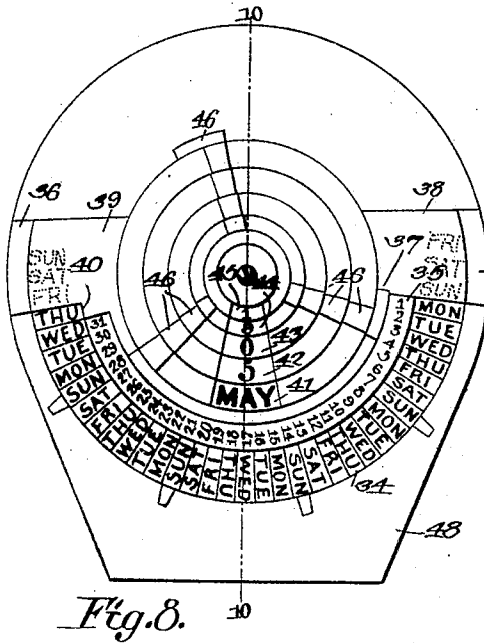


Fig. 9.

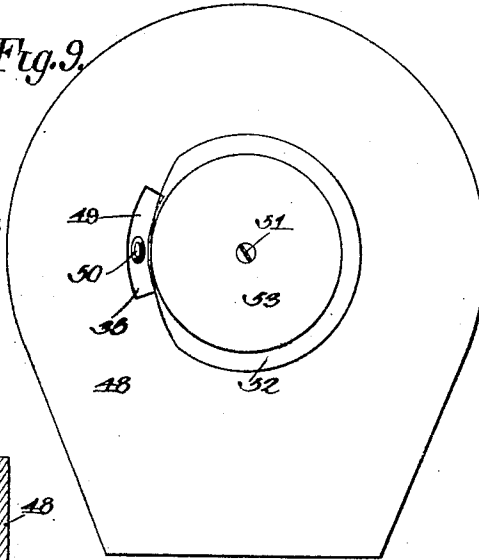


Fig. 8.

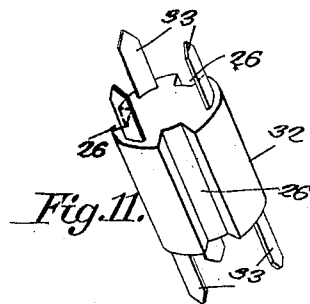


Fig. 11.

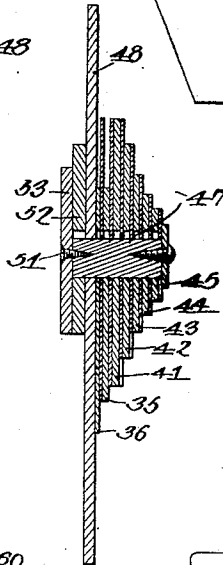


Fig. 10.

Fig. 12.

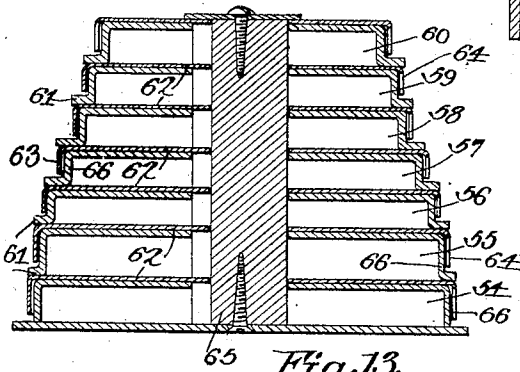
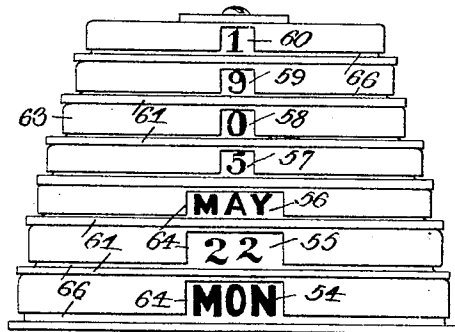


Fig. 13.

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UNITED STATES PATENT OFFICE.

WILLIAM B. SUMMERALL, OF ATLANTA, GEORGIA.

PERPETUAL CALENDAR.

No. 818,577.

Specification of Letters Patent.

Patented April 24, 1906.

Application filed June 27, 1905. Serial No. 267,281.

To all whom it may concern:

Be it known that I, WILLIAM B. SUMMERALL, a citizen of the United States, residing at Atlanta, in the county of Fulton and State of Georgia, have invented a new and useful Perpetual Calendar, of which the following is a specification.

This invention relates generally to perpetual calendars, and more particularly to one of that class embodying a plurality of superimposed disks bearing the names of the days of the week, days of the month, the months of the year, and the years of a century, and has for its object to improve the manner in connecting such disks whereby their manipulation in setting the calendar will be materially facilitated.

With the above and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the novel construction and combination of parts of a perpetual calendar, as will be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like characters of reference indicate corresponding parts, Figure 1 is a view in elevation of one form of perpetual calendar constructed in accordance with the present invention. Fig. 2 is a view in transverse section, taken on the line 2-2, Fig. 1. Fig. 3 is a perspective detail view of one of the spacer-disks. Fig. 4 is a similar view of one of the number-disks. Figs. 5, 6, and 7 are perspective detail views of certain parts of the calendar shown in Fig. 1. Fig. 8 is a view in plan of a modified form of calendar. Fig. 9 is a reverse plan view of the calendar shown in Fig. 8. Fig. 10 is a vertical longitudinal sectional view taken on the line 10-10, Fig. 8. Fig. 11 is a perspective detail view of a modified form of post upon which the various disks of the calendar are adapted to revolve. Fig. 12 is a view in elevation of a slightly-modified form of calendar. Fig. 13 is a vertical transverse sectional view through the form of calendar shown in Fig. 12. Fig. 14 is a fragmentary detail view of a part of the months-disk. Fig. 15 is a sectional detail view exhibiting the different parts of the calendar shown in Fig. 1 separated.

Referring to the drawings, and more particularly to Figs. 1 and 2 thereof, 1 designates the base of the calendar, which preferably is a two-ply structure and may be constructed of any suitable material that will combine

cheapness, durability, and lightness. As here-in shown, the base is provided with an approximately triangular field 2, upon which may be exhibited advertising matter, and the base may have combined with it a suitable brace to make it constitute a stander. The upper portion of the base has displayed upon it, in a true circle, the names of the days of the week in thirty-five equal divisions, thereby exhibiting Sunday five times. Superposed upon the base and in alternate arrangement are seven disks 3, 4, 5, 6, 7, 8, and 9 and eight spacers 10, 11, 12, 13, 14, 15, 16, and 17. The object for providing the spacers is to permit of one disk being turned without imparting motion to an adjacent one, whereby the successive disks may be adjusted with readiness and ease. The disk 3 has arranged upon it the days of the month, running from "1" to "31," arranged in a circle and spaced apart a distance equal to the days of the week, and bridging the four spaces between "31" and "1" is a shutter 18, that projects outward to the periphery of the day-disk and is of a width to cover the names of four days, so that days intervening between "31" and "1" upon the day-disk will always be hidden from view. Superposed upon the spacer 11 is the disk 4, which is provided with a shutter 19 of a width to cover four of the days of the month and a like number of the days of the week. This shutter by coacting with the shutter 18 of the disk 3 permits the calendar to be set for the month of February, having either twenty-eight or twenty-nine days, or for a month having thirty days. Superposed upon the spacer 12 is a month-disk 5, upon which are printed the names of the months of the year in a circle, together with any additional matter, such as shown in Fig. 1, wherein in conjunction with the month of June appears the information that it is the sixth month and contains thirty days. As shown in Fig. 14, the space bearing the name of February will have also printed therein "28" and "29," thus to adapt the calendar for use in leap-years. In addition particular months may have designating colors or other matter combined with them to attract attention, such as those in which there are national or local holidays, as January, July, November, and December, wherein occur New-Year's Day, Independence Day, Thanksgiving Day, and Christmas. If preferred also, the Sundays may be designated by a color or by a suitable marking, as shown in Fig. 1, wherein the Sundays are designated

as having a red background. Superposed upon the month-disk 5 and interposed by the spacers 13, 14, 15, and 16 are the year-disks 6, 7, 8, and 9, each of which progressively decreases in size toward the disk 9, as clearly shown in Fig. 2. Upon each of these disks are arranged the numerals from "1" to "0," thereby rendering the calendar adaptable for use to an almost indefinite period or up to ten thousand years. Each of the disks 5, 6, 7, 8, and 9 is provided with oppositely-alined arms or projections 20, by which to facilitate their turning. While it will generally be preferred to employ two of these arms, it is to be understood that one or more than two may be utilized without departing from the scope of the invention. Each of the spacers 13, 14, 15, 16, and 17 is provided with a notch or sight-opening 21, as clearly shown in Fig. 3, by which the matter on the disk immediately beneath it will be rendered plainly visible to view. As shown in Fig. 1, all of the sight-openings of the disks named are disposed in alinement, thereby clearly displaying the year and the month to the exclusion of other matter.

The disks and spacers may be held combined with the base in any preferred manner; but in this instance a post 22 will be employed, which is held combined with the day-disk or base by a screw 23, that passes through a washer 24 and a pointer 25, the function of which will presently be described. The post 22 may be made of any suitable material, preferably of wood, and is provided with a plurality of longitudinal grooves 26—in this instance three—to be engaged by tongues 27, projecting inward from the post-opening of the spacers 13, 14, 15, 16, and 17, whereby these latter are positively held from turning, while the disks 3 to 9 will be free to turn, owing to the fact that the post-openings 28 therein are circular. By reason of the interlocked relation between the tongues of the spacers and the grooves of the post the sight-openings of all the spacers will be held in direct alinement and against possibility of shifting. The pointer 25, to which reference has been made, is employed for the purpose of indicating some special day or day of a current month and is provided with a finger 29, which is adapted to overhang the names of the days of the week, as shown in Fig. 1.

In the use of the device thus far described suppose it be desired to set the calendar for the month of June, 1905. To effect this, the disk 3 will be turned until "1" is brought opposite "Thursday," that being the first day of the month. As June has but thirty days in it, the disk 4 will be turned to cause its shutter to cover the thirty-first day, so that the calendar will only show thirty days, running in sequence from "1" to "30." To bring the desired month opposite the appropriate sight-opening, the arms on the disk 3 will be manip-

ulated in a manner that will readily be understood.

As a means for holding the disks and spacers against disconnection from the post there is a washer or button 30 employed, through which passes a screw 31, that enters the top of the post, as clearly shown in Figs. 1 and 2. Generally the post will be made of some cheap light material, such as wood; but, if preferred, it may be made of metal and in the form shown in Fig. 7. Should it be desired to dispense with the use of screws for securing the post in position, the post 32 (shown in Fig. 11) may be employed, in which flexible arms 33 are provided that are adapted to be inserted through the base and through the button or washer 30 and be bent down, thus to hold all the parts of the calendar properly assembled.

In the form of the invention shown in Figs. 8, 9, and 10 the days of the week are arranged in a semicircle 34, there being thirty-five day-names employed, as in the circle shown in Fig. 1. The days of the month are carried by a segmental-circular disk 35, having two alined shutters 36, that project beyond the outer line of the day-names, and thus shield four of them from view. The disk 37, corresponding to the disk 4 in Fig. 1, carries two shutters 38 and 39, the shutter 39 being provided with a recess 40, the outer wall of which terminates with the periphery of the day-disk 35. It will thus be seen that there will always be one more day exposed than there are days in the month, and the object of this is to show that the day following the last day of the month indicated is the name of the first day of the following month.

The disks are superposed and interposed by spacers, such as described in connection with Fig. 1, a months-disk 41 and four year-disks 42, 43, 44, and 45, each of which is provided with a plurality of arms 46—in this instance three, although it is to be understood that the invention is not to be limited to this number—which operate in the same manner as that already described in effecting adjustment of the different disks. The post 47, upon which the various disks and spacers are mounted, may be of the same construction as that shown in Fig. 1 or of the form shown in Fig. 11.

The back of the base 48 is provided with an arcuate slot 49, which is engaged by a stud 50, carried by the day-of-the-month disk 35. The slot is only of sufficient length to permit the disk 35 to be revolved a distance equal to six spaces containing days of the month, this limited motion covering as much space as is necessary to designate the day of the week on which any month makes its advent. For instance, if the disk 35 be revolved to the upper limit of the slot Friday will be the day designated, and if moved to the lower limit

Thursday will be the day designated, which is sufficient to show the advent of any month.

As shown in Figs. 9 and 10, the screw 51, that enters the lower end of the post 47, passes through two washers 52 and 53; but this is not essential, as only one washer may be employed, if found necessary or desirable.

In the form of the invention shown in Figs. 12 and 13 the day-disk 54, day-of-the-month disk 55, month-disk 56, and year-disks 57, 58, 59, and 60 are inverted-dish-shaped structures, each of which except the day-disk has its lower end outturned to present arms 61, by which the different disks may be turned in the manner described. These disks are interposed by spacers 62, which are also dish-shaped, the flanges 63 of which have sight-openings 64, through which show the matter back of them. The disks and spacers are secured to a post 65, which is constructed in the same manner as that shown in Fig. 2 or as shown in Fig. 11 and which operates in the same manner to prevent the spacers from turning, while the different disks are free to turn. The printed matter indicating the day of the week, the day of the month, month, and year are printed or otherwise displayed upon the downturned flanges 66 of the different disks, as shown in Fig. 12. This latter form of calendar is approximately cone-shaped and is adapted to set in upright position on a desk or other suitable support.

In setting the calendar shown in Figs. 8 and 9 the year and month disks being adjusted, the disk 36 is moved to bring "1" opposite the first day of the month—in this instance Monday—the month being designated as May, and as May has thirty-one days in it the disk 38 will be turned to bring the shutter 39 at "31," thereby exposing the next succeeding day, which will be Thursday and which will show that the month of June will enter on that day.

It will be seen from the foregoing description that while the improvements herein defined are simple in character they will be thoroughly effective for the purpose designed

and will result in the production of a perpetual calendar that may be readily manipulated and will be positive in securing the functions designed.

Having thus described the invention, what is claimed is—

1. A calendar embodying a plurality of independently-rotatable disks having printed thereon the names of the days of the week, the days of the month, the months of the year, and the years of a century, certain of the disks being provided with shutters for concealing from view days of the week and of the month not appearing in the month designated, and also exhibiting to view the first day of a succeeding month.

2. A calendar comprising a base having displayed thereon, the names of the days of the week five times repeated, a disk superposed thereon and bearing the number of the days of the month, a months-disk superposed upon the day-disk, a plurality of year-disks superposed upon the months-disk, and means combined with certain of the disks for shielding from view days of the week and of the month not present in the month designated.

3. A calendar comprising a base having arranged thereon, the names of the days of the week, five times repeated, a post secured to the base and provided with longitudinal channels or grooves, a day-of-the-month disk, a month-disk, and a plurality of year-disks loosely mounted upon the post, and spacers interposed between the respective disks and having means to engage the grooves of the channels to hold them against rotation, each of the said spacers beginning with the month-disk being provided with a sight-opening.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM B. SUMMERALL.

Witnesses:

A. B. HARRISON,
JAS. P. McDONALD.