J. GREENWOOD ET AL

CALENDAR

Filed Sept. 22, 1925 3 Sheets-Sheet 1

Fig. 1,

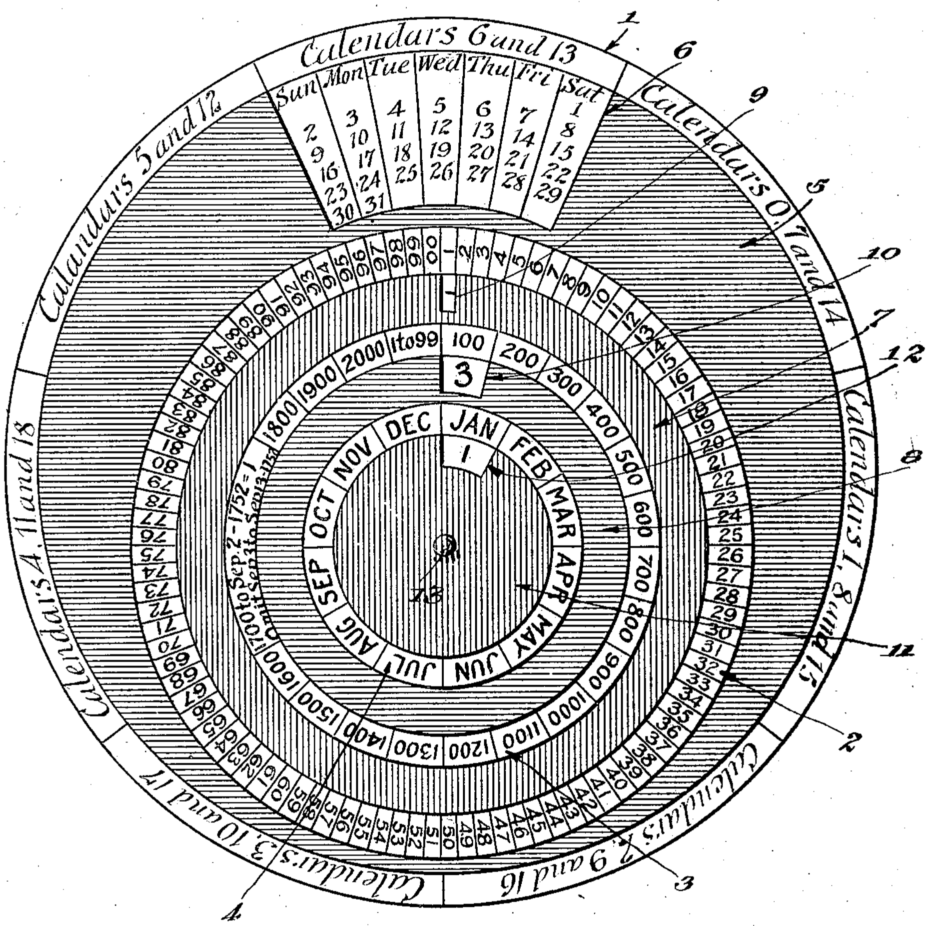
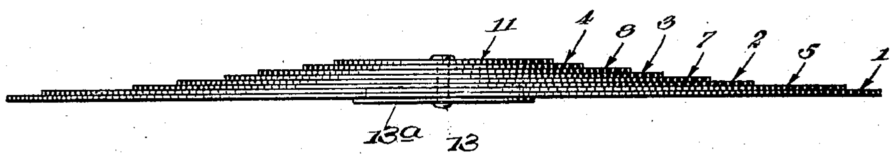


Fig. 2,



WITNESSES

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CALENDAR

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Fig. 5.

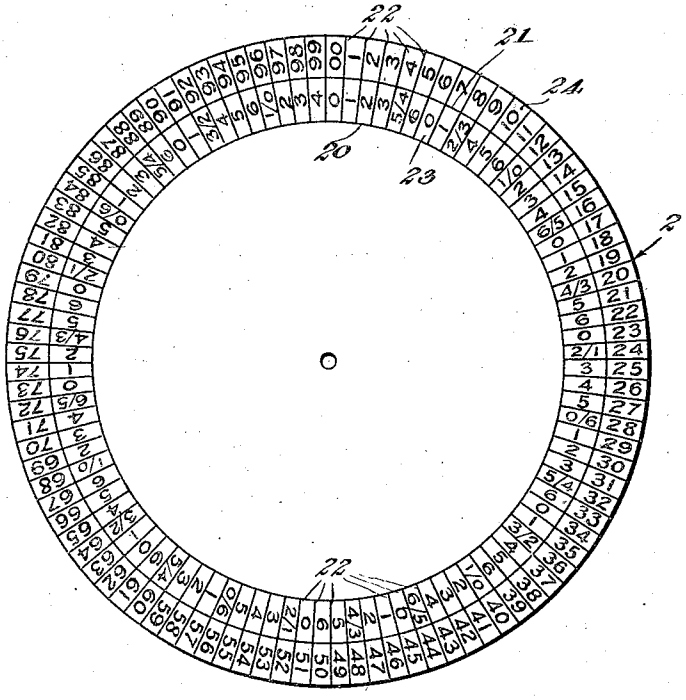
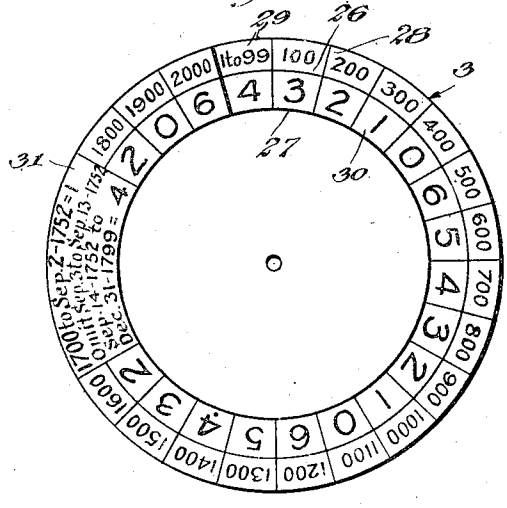


Fig. 6.



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Fig. 3,

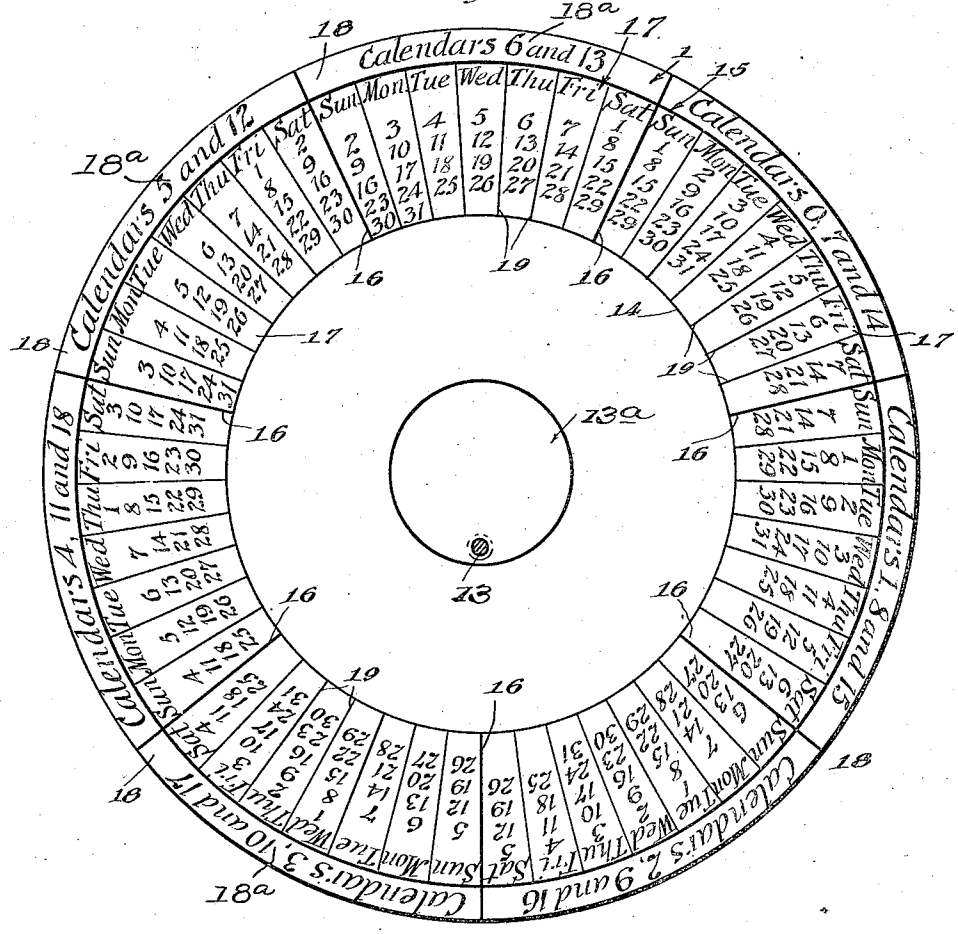
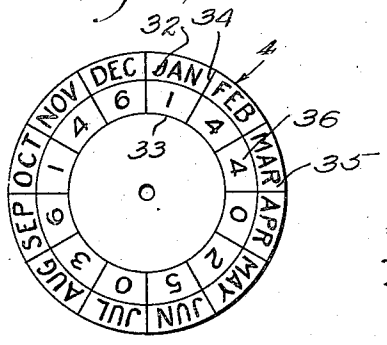


Fig. 4,



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UNITED STATES PATENT OFFICE.

JAMES GREENWOOD AND JOSEPH E. SPARKS, OF HOUSTON, TEXAS.

CALENDAR.

Application filed September 22, 1925. Serial No. 57,893.

This invention relates in general to an improvement in calendars and more particularly to an improvement in perpetual calendars.

The object of the invention is to provide a calendar of this character which has a wide range over the centuries and which may be readily and easily adjusted to provide a calendar for any particular period. With the present embodiment of the invention a calendar is provided for any date from the year one to the year twenty one hundred A. D.

A further object is to provide a device of this character which is of simple and durable construction, reliable in operation, easy to manipulate and comparatively inexpensive to manufacture.

Other objects and advantages reside in certain novel features of the construction, arrangement and combination of parts which will be hereinafter more fully described and particularly pointed out in the appended claims, reference being had to the accompanying drawings forming a part of this specification and in which:

Figure 1 is a plan view showing a calendar constructed in accordance with the present invention,

Figure 2 is a view thereof in edge elevation,

Figure 3 is a plan view of the calendar or day disc,

Figure 4 is a similar view of the month disc,

Figure 5 is a plan view of the year disc, and

Figure 6 is a similar view of the century disc.

Referring to the drawings it will be seen that the present invention proposes a calendar comprising generally a large calendar or day disc 1, and a year disc 2, a century disc 3, and a month disc 4 of successively decreasing size. Between the discs 1 and 2, a blank or cover disc 5 having a viewing opening 6 is interposed. Similar though smaller blank or cover discs 7 and 8 having viewing openings 9 and 10 respectively are interposed between the discs 2 and 3, and 3 and 4 respectively. Still another and small disc 11 having a view opening 12 is placed on top of the disc 4.

The discs 1 and 5 are mounted at their centers for independent rotation on a pivot element or hub 13^a.

The discs 2, 3, 4, 6, 7, 8 and 11 are mounted for concentric independent rotation on a pivot pin 13 fixed eccentrically to the hub 13^a. In this way while the discs 2, 3, 4, 6, 7, 8 and 11 are rotatable about the same axis they are eccentric with respect to discs 1 and 5 and this has the advantage of permitting the discs 1 and 5 to be smaller than they could be if all of the discs were pivoted on the same axis.

The disc 1 as shown in Figure 3 has concentric circles 14 and 15 applied thereto, the circles being spaced inwardly from the periphery of the disc and coacting with heavy intersecting radial lines 16 to provide a circular series of calendar receiving spaces 17 and heading receiving spaces 18. The heading spaces 18 bear the word "calendars" and the key numbers 18^a identifying the calendar in each particular space as will hereinafter more fully appear. Each calendar receiving space has light radial lines 19 applied thereto to define spaces or divisions adapted to receive columns of figures, each column of figures being headed by an abbreviation of the day of the week of which the figures in the columns are the dates.

As shown in Figure 5 the year disc 2 has concentric circles or circular lines 20 and 21, and intersecting radial lines 22, the circles and the periphery of the disc defining inner and outer annular panels 23 and 24 respectively which are divided up into one hundred spaces by the lines 22. In the spaces of the outer annular panel numbers from one to one hundred are placed and signify years. In the spaces of the inner annular panel key numbers, accompanied by suitable explanatory indicia, are placed, each year thus having a key number or a factor of a key number radially alined therewith.

The century disc 3 is shown to advantage in Figure 6 and has an arcuate line 26, a circular line 27 and radial lines 28 which coact with each other and with the periphery of the disc to define an outer arcuate series of spaces 29, an inner arcuate series of spaces 30, and a panel 31. Numbers representative of centuries are placed in the spaces 29, key numbers or factors of key numbers are placed in the spaces 30. The numbers representative of the centuries and contained in the spaces 29 progress from the year one to the year 2000 with the exception of the number "1700" representative of the eighteenth century which is placed in the panel

31 along with certain explanatory indicia.

The month disc 4 is shown in detail in Figure 4 and has concentric circular lines 32 and 33 and radial lines 34 applied thereto to define inner and outer circular series of spaces 35 and 36 respectively. In the space 35 abbreviations of the names of the months are placed and in the radially alined spaces 36 key numbers or factors of key numbers are applied.

In assembling the discs, the calendar disc 1 is placed on its hub 13[a] and the cover disc 5 is also placed thereon. On top of the cover disc 5, the year disc 2 is placed and is in turn covered by the blank or cover disc 7. The century disc 3 is applied to the cover disc 7 and on the disc 3 the blank or cover disc 8 is placed. On the cover disc 8, the month disc 4 is arranged and the outer cover or blank disc 11 is applied on the month disc 4, the discs 2, 7, 3, 8, 4 and 11 being mounted on the pivot pin 13.

The calendar for any month of any year may be had by adjusting the month disc 4 to bring the abbreviation of the desired month and the key number factor into the view opening or window 12. The century disc 3 and the year disc 2 are similarly adjusted to bring the numbers corresponding to the century and year and their associated key number factors into their respective view openings 10 and 9. The sum of the key number factors gives the key number to the desired calendar which may be identified thereby and brought into view in the view opening 6.

All years ending in 00 are leap years except 1800 and 1900.

For January and February of each of the leap years (that is, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1300, 1400, 1500, 1600, 1700 and 2000) add six (6) to the sum of the key number factors to obtain the correct calendar key number.

In this way the correct calendar for any month from the year one to the year twenty one hundred A. D. may be obtained.

We claim:

1. A perpetual calendar comprising a calendar disc having concentric circular series of calendar receiving spaces and heading receiving spaces, the calendar receiving spaces bearing the recurring monthly calendars, the heading receiving spaces bearing identifying key numbers for the calendars, a cover disc for the calendar discs having a viewing opening through which any one calendar may be seen, a year disc having concentric series of spaces bearing numbers representing the years and key number factors respectively, a cover disc for the year disc having a viewing opening through which any year number and its associated key number may be viewed, a century disc having concentric arcuate series of spaces bearing numbers representing the centuries and key number factors, a cover disc for the century discs having a viewing opening through which any one of the numbers representing the centuries and its associated key number factor may be viewed, a month disc having concentric series of spaces bearing indicia representing the months and key number factors, a cover disc for the month disc having a viewing opening through which any one month representing indicia and its key number factor may be viewed and means for pivoting the discs for independent rotary movement about different axes.

2. A perpetual calendar comprising a calendar disc having calendar receiving spaces and heading receiving spaces, the calendar receiving spaces bearing the recurring monthly calendars, the heading receiving spaces bearing identifying key numbers for the calendars, a cover disc for the calendar discs having a viewing opening through which any one calendar may be seen, a year disc having spaces bearing numbers representing the years and key number factors respectively, a cover disc for the year disc having a viewing opening through which any year number and its associated key number may be viewed, a century disc having spaces bearing numbers representing the centuries and key number factors, a cover disc for the century discs having a viewing opening through which any one of the numbers representing the centuries and its associated key number factor may be viewed, a month disc having spaces bearing indicia representing the months and key number factors, a cover disc for the month disc having a viewing opening through which any one month representing indicia and its key number factor may be viewed and means for pivoting the discs for independent rotary movement.

3. A perpetual calendar comprising tabular means having a plurality of calendar receiving spaces and heading spaces bearing the complete and correct recurring monthly calendars and identifying key numbers for the calendars respectively, a cover cooperable with the tabular means and having a viewing opening of a size and shape to permit of the viewing of any one complete and correct monthly calendar at a time, the other calendars being concealed from view by the cover, and cooperable tabular means and covers, the cooperable tabular means having spaces bearing indicia representing years, centuries and months, each of such indicia having associated therewith key number factors, the covers having viewing openings through which the underlying indicia may be viewed.

4. A perpetual calendar comprising tubular means having a plurality of calendar

receiving spaces bearing the complete and correct recurring monthly calendars, there being one complete and correct monthly calendar in each of the plurality of calendar receiving spaces each monthly calendar having its numbers grouped in rows to correspond to the weeks of the month and rows to correspond to the days of the week whereby a normal and easily readable monthly calendar is always had, cooperable tabular means having spaces bearing indicia representing years, centuries and months, said tabular means and said cooperable tabular means having means identifying any of the calendars with any selected arrangement of the cooperable tabular means.

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