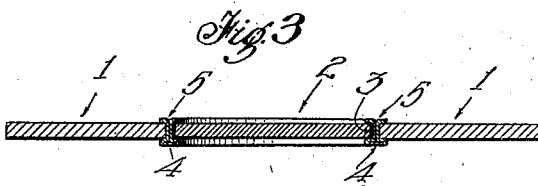
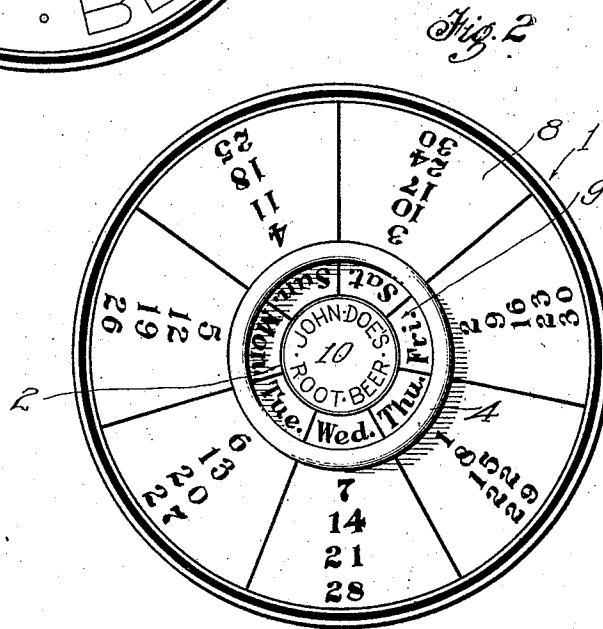
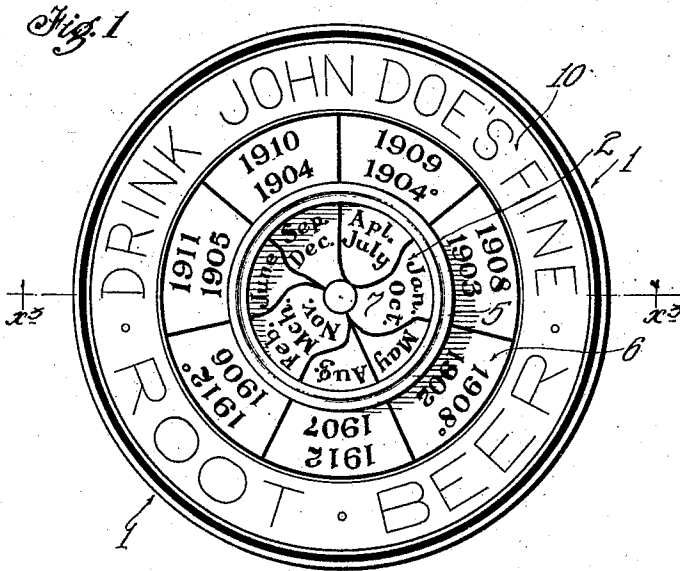


No. 823,723.

PATENTED JUNE 19, 1906.

J. GUIDINGER.
PERPETUAL CALENDAR.
APPLICATION FILED JAN. 3, 1905.



Witnesses

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UNITED STATES PATENT OFFICE.

JOSEPH GUIDINGER, OF LOS ANGELES, CALIFORNIA.

PERPETUAL CALENDAR.

No. 823,723.

Specification of Letters Patent.

Patented June 19, 1906.

Application filed January 3, 1905. Serial No. 239,320.

To all whom it may concern:

Be it known that I, JOSEPH GUIDINGER, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Perpetual Calendar, of which the following is a specification.

The main object of this invention is to provide a device of small size—for example, one that can be carried in the pocket, and which can be used to determine by mere inspection the monthly dates corresponding to given week-days throughout a series of years.

A further object of the invention is to provide a device of this character of extreme cheapness and simplicity of operation.

Another object of the invention is to provide a calendar of this nature which is adapted to be used as an advertising medium.

The accompanying drawings illustrate the invention.

Figure 1 is a front view of the calendar. Fig. 2 is a rear view thereof. Fig. 3 is a section on line x^3x^3 in Fig. 1.

The device comprises two relatively rotatable members 1 and 2. The member 1 may be formed as a disk of cardboard or pasteboard having a central circular opening 3, within which the member 2 is rotatably supported. The member 2 may consist of a cardboard or pasteboard disk of a size to fit and turn within the said opening or within a ring 4, having its edges 5 upset and extending over the edges of said opening, so as to retain the member 2 in place within and on the member 1. The inner member is smaller than the opening in the outer member, and the ring is formed with continuous flanges extending outwardly over the outer member and inwardly over the inner member on both sides of said members, the ring being a single piece bent to form these flanges. On the front face of one of the said members 1 2—for example, the member 1—are imprinted marks 6, designating a series of years, in this case running from the year 1902 to the year 1912. The other member—for example, the member 2—is provided with marks 7, designating the months or groups of months in the year. These faces of the members are herein termed the "front" faces, inasmuch as the device will be set with reference to the marks on these faces and the day then determined by inspection of the marks on the rear faces.

The rear face of one member is provided

with seven groups of marks 8, designating the days of the month, the numerals corresponding to said days from 1 to 31 being distributed throughout these groups, as hereinafter described. The rear face of the other member is provided with marks 9, designating the seven days of the week. It will thus be seen that all the various marks are so arranged that each group occupies one-seventh of the circumference, the marks or groups of marks being angularly equidistant. In regard to the days of the week and the divisions or groups into which the days of the month are divided, this division into seven elements follows the usual calendar arrangement. The separation of the years into seven divisions is made to conform to the arrangement by sevens on the reverse side, and the division of the months into groups is effected by associating certain months together to form groups, the members of each group conforming identically as regards the correspondence of week-days with given months and days in a given year, regard being had to the natural order of succession of the week-days on the reverse side.

In explanation of the proper order and arrangement of the marks on the calendar shown in the drawings the following is submitted. By analytical examination of calendars in common use covering a period of several years it was found that—

First. The days of the week always follow each other in regular order—namely, Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday.

Second. The days of the month are grouped into seven sections, the figures in each section always being the same—namely,

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

except that in months having less than thirty-one days the day or days short are omitted.

Third. The months of the year are grouped into seven sections, the months of any group always beginning on the same day of the week for any given year. For example, (a) January and October of 1905 begin on Sunday. (b) May of 1905 begins on Monday. (c) August of 1905 begins on Tuesday. (d) February, March, and November of 1905 begin on Wednesday. (e) June of 1905 begins

on Thursday. (f) September and December of 1905 begin on Friday. (g) April and July of 1905 begin on Saturday, except that in leap-years the months of January and February begin the previous day of the week—*i. e.*, January of 1904 began on Friday, while October began on Saturday, and February of 1904 began on Monday, while March and November began on Tuesday—this from the fact that the 29th day of February carries the balance of the year, to and including the last day of February of the succeeding year, one day in the week farther ahead.

Fourth. Any month of each succeeding year always begins on the succeeding day of the week it began the previous year—*i. e.*, May of 1904 began on Sunday. In 1905 it will begin on Monday. In 1906 it will begin on Tuesday, and so on, except that the 29th day of February in leap-years, to and including the last day of February of the succeeding year, carries it one day forward. Thus May of 1907 will begin on Wednesday, while in 1908 it will begin on Friday. Each leap-year may therefore be divided into two portions, the first two months conforming to the law of the preceding year and the succeeding months of the leap-year conforming to the new law, which continues in effect until the next leap-year. The marks designating leap-years—such as 1904, 1908, &c.—are therefore repeated in two adjacent columns and a special character, such as “°,” applied to that one of said marks which is to be used for the first two months of the year.

In using the calendar the member 2 is turned so that the particular month desired comes opposite the year in question, regard being had to the break in the leap-years above referred to. On then inspecting the reverse face of the calendar the monthly dates corresponding to any day of the week would be found in a column on the member opposite or directly below the week-day given on member 2.

My invention is not limited to the specific arrangement of the marks shown so long as the principles of operation above set forth are observed.

The device is shown on an enlarged scale in the drawings for better illustration. It will be understood that it can be made much smaller than therein shown.

The device being sufficiently small to be carried in the pocket and sufficiently cheap to be prepared in large numbers at small cost, it forms a desirable advertising medium, the advertising matter (indicated at 10) being placed on either or both faces of either or both members 1 and 2—for example, in the blank space around the outer portion of the front face of member 1 or between the numeral-columns on the rear face of member 1 or within the monthly designations on the rear face of member 2.

What I claim is—

1. A perpetual calendar comprising two relatively rotatable members, the corresponding faces of the members being provided on one side respectively with groups of marks designating the months and the years, and on the other side with marks designating respectively the days of the week and the dates of the month.

2. A calendar comprising two relatively rotatable members, one of the members carrying on its front face marks designating the months arranged in seven angularly-equidistant groups, and the other member carrying on its front face marks designating the years arranged in seven equidistant groups; and one of the members carrying on its rear face angularly-equidistant marks designating the seven days of the week, and the other member carrying on its rear face marks designating the days of the month arranged in seven angularly-equidistant groups, the numbers increasing progressively by seven in each group, and increasing from one group to the next by a difference of one.

3. A calendar comprising an outer member, an inner disk member rotatable within the outer member, the front faces of the said members being provided respectively with seven angularly-equidistant groups of marks designating years, and with angularly-equidistant groups of marks designating months, and the rear faces of the respective members being provided with angularly-equidistant groups of marks designating the days of the month, and with angularly-equidistant marks designating the days of the week.

4. A calendar comprising two relatively rotatable members, one of the members carrying on its rear face angularly-equidistant marks designating the seven days of the week, and on the front face marks designating the months arranged in seven angularly-equidistant groups, and the other member carrying on its rear face, marks designating the days of the month arranged in seven angularly-equidistant groups, the numbers increasing progressively by seven in each group and increasing from one group to the next by a difference of one, said other member carrying on its front face marks designating the years arranged in seven equidistant groups, the marks designating leap-years being duplicated in adjacent groups and one of said duplicate marks having a special designating mark.

5. A perpetual calendar composed of an outer member, and a disk member revolving within said outer member, with the years and months on the front faces of said members arranged in relation to the days of the month and days of the week on the back faces, so that revolving the disk and thus setting a given month and year to register opposite each other will automatically set its back

face to properly register the days of the week over the columns of days of the month for that particular month of that year.

6. A calendar comprising an outer member
5 having an opening, a ring in said opening, and a disk member within the ring, the ring having continuous flanges on both sides of said members extending outwardly over the outer member and inwardly over the inner
10 member.

7. A calendar comprising an outer member having an opening, a ring in said opening, and a disk member within the ring, said inner

member being smaller in diameter than the opening in the outer member, and the said 15 ring being bent on both sides of said members to form flanges extending outwardly over the outer member and inwardly over the inner member on both sides thereof.

In testimony whereof I have hereunto set 20 my hand, at Los Angeles, California, this 27th day of December, 1904.

JOSEPH GUIDINGER.

In presence of—

A. P. KNIGHT,

JULIA TOWNSEND.