M. Gibson. Sheet 1. Justreets.

Calendar

JY=50,430.

Patented Oct. 10, 180 5.

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Witnesses:

J. P. Hale Jr. O. A. Swortkins.

William Gibson Fy his attorney. R.H. Eddy

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Inventor: Am Gibson by his actiony RH-Elity

## UNITED STATES PATENT OFFICE.

WILLIAM GIBSON, OF LANARK, SCOTLAND, ASSIGNOR TO HENRY BAXTER AND JOHN A. FITCH, OF HIGHGATE, VERMONT.

## IMPROVEMENT IN PERPETUAL ALMANACS.

Specification forming part of Letters Patent No. 50,430, dated October 10, 1865.

To all whom it may concern:

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Be it known that I, WILLIAM GIBSON, of Lanark, in the shire of Lanark, Scotland, have invented a new and useful Perpetual Almanac or Office-Calendar; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 denotes a front elevation, and Fig. 2 a vertical and transverse section, of it. Fig. 3 is a front view of its perforated disk and the surrounding ring. Fig. 4 is a representation of the figures and the arrangement thereof as placed on the back or unperforated disk to which the ring is fastened or from which it projects.

The apparatus or calendar above mentioned is composed of, first, one circular card or disk, marked A on the drawings. This card has several columns of figures, commencing at such a distance from the circumference of it as to admit of a ring being pasted on the card, which ring circumscribes the figures and is hereinafter referred to, and marked B. The said columns of figures run radially toward the center of the disk A, and are arranged at equal distances from each other, and so far from the center of the disk as to admit of a circular space to be covered by a circle containing the centuries and ranges, such circle being part of the perforated card or disk, and being represented in Fig. 3. The said radial columns contain the following figures, arranged as shown in Fig. 4:

The said card or disk A has a hole through its center to admit of an axle, E, proceeding from a standard, F, raised perpendicularly on a base, G. The ring marked B has its diameter equal to that of the card A, and is of suitable width to encompass the radial series of figures of the card A. The seven days of the week are printed on the face of the ring B. The twelve months of the year and the respective days of each month—running in the following order: Monday, May 31; Tuesday, August 31; Wednesday, February 28-29, March 31, November 30; Thursday, June 30; Friday, September 30, December 31; Saturday, April 30, July 31; Sunday, January 31, October 31—are also arranged on the ring in manner as shown in Fig. 3.

A circular card, C, is encompassed by the ring A, and is provided with a circular aperture to receive the axle and allow the ring to be revolved thereon. The said card C has

First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventlı.
91 85 80—L	97 92L 86	98 87 81	99 93 88—L	{ L00 4th Range. } 94 83	95 89 84—L	96—L 90 79
74	75	76—L	82 81	77 77	78	73 Co T

seven triangular apertures running toward its center at equal distances from each other, and large enough to exhibit through the card the columns of figures of card A. The said card C has on its outer edge the first seven letters of the alphabet, one at the base of each of the apertures. Thus the said letters run in regular alphabetical order around—thus, A, B, C, D, E, F, and G. Seven columns of figures, exhibiting the thirty-one days of the month, are placed at proper distances on the said card C, and otherwise arranged, as shown in Fig. 3, on card marked C. Thus, between A and G are 1, 8, 15, 22, and 29. Between G and F are 2, 9, 16, 23, 30. Between F and E are 3, 10, 17, 24, 31. Between E and D are 4, 11, 18, 25. Between D and C are 5, 12, 19, 26. Between C and B are 6, 13, 20, 27. Between B and A are 7, 14, 21, 28. Toward the center, at termination of aperture A, is "21st century, 1st range." Attermination of aperture F is "18th century, 2nd range." At termination of aperture D is "19th century, 3rd range." At the termination of aperture B is "20th century, 4th range." E is the axle upon which the two disks before alluded to, when put together and attached, turn, the revolution of them, herein referred to, being necessary to point out the daily dates for an office or counting-house.

68—L 7072—L 67 63 71**6**9 62 64—L 65 61 5766 5956-L52**—**L 60-L55 515853 455048-L**49** 54 46 47 35 44—L **3**9 40—L 42 43 41 33 28—L 34 23 17 36-L29 37 382724-L32-L2530  $\frac{22}{11}$  $\frac{18}{7}$ 2120-L2619 16-L12-L1514  $\mathbf{5}$ 1 © 10 6 8----4—L C,  $\mathbf{E}$ 

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F in the drawings is the back part or standard of the frame, it serving to support the center-pin or axle E.

H is a detachable part of the frame, and supports a card-holding case or box, K. This card-box K is to contain six cards having the name and number of days of two months printed on each, those of one month being on one side of a card, and those of another month being on the opposite side of such card.

A vertical slider, marked L in the drawings, and having an aperture made through it near its top, is applied to the detachable part H, so as to be capable of being moved vertically thereon. It serves to point out the monthly dates or days of the month, which, on revolving the disks, will be indicated at the aperture of the slider. The disks and the ring, when attached or applied together as aforesaid, represent two circular cards, one of which is capable of being revolved within the other. The first seven letters of the alphabet are agents, which, in connection with the months on the larger circle, aided by the colums of figures on the disk A, called the "index," serve to point out the dates from year to year, the same as a yearly almanac, the whole being a yearly register of every date in any particular year, according to the present mode of computing time, from the first year of the Christian era unto ages of time thereafter, and enabling a person, when simply knowing the last four figures of any year, to ascertain any date in such year.

Take the following examples: First, to find what day of the week the 16th of June, A. D. 1860, fell on, 1860 being in the nineteenth century, turn the circle with apertures in it so as to bring the 19th century under Monday of outside rim and under the sun in the inside column of figures, we shall find 60 in the inside column of figures, and find the letter above it G; but as 60 is a leap year G is only the letter for January and February, and the first to the left—viz., A—is the letter for the rest of the year. Then turn the circle with apertures so that A will come under the month desired on the outside rim—viz., June—we

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The slide-case and card-box united in the frame afford an excellent mode of marking or denoting daily dates for an office or countinghouse, when used according to the instructions hereinafter given. In order by the instrument to ascertain dates from any past, present, or future year, the detachable part H, with its card-box and slide, should be removed from the disks and their supporting-frame, the part H being applied thereto in any manner by which it may be readily removed or replaced, as occasion may require. The removal of the part H having been so effected, we may proceed as follows:

then see that the 16th of June, 1860, fell on Saturday.

Example in future time: say March 20, 37,955, which is the three hundred and eightieth century, which, divided by 4, to find the range, leaves no remainder, which shows it to be in the fourth range. Turn the circle so that the fourth range may come under Monday on outside rim. Find 55 in column of figures, and above it is C, we find the letter for that year is C. Turn the circle so that C may come under the month desired on outside rim—viz., March—and we find the 20th of March, 37,955, will fall on Sunday.

For office use it is only necessary to turn the whole circle one place each day, and move the slide down once a week, bringing the date under aperture in slide or index.

## I claim---

 The combination and arrangement of the perforated and unperforated disks, the ring, and the slider, the whole being applied to a supporting standard or frame, and being made and marked substantially as described.
In combination with the disks, the ring, supporting-frame, and slider, the detachable piece H, carrying the card-box and the slider, the whole being substantially as and for the purpose specified.

WM. GIBSON.

Witnesses: N. D. WAIT, M. S. WAIT.

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