(No Model.)

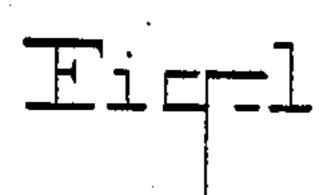
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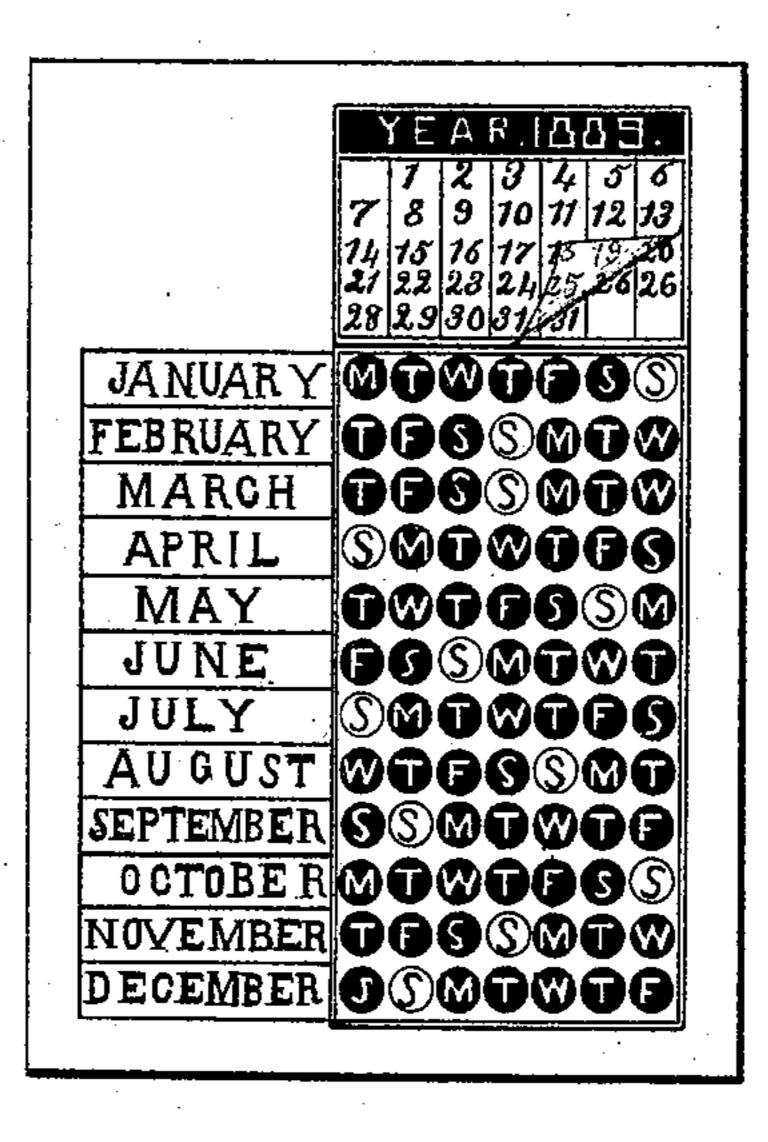
C. K. HAMILTON, Jr.

CALENDAR.

No. 405,160.

Patented June 11, 1889.





YEAR. BED.

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

Fig-Z

	Z 3 4 5 E
	ZI ZZ Z3 Z4 Z5 Z6 Z7
	ZBZ93031
JAN. 0	CT. MONTUEWEDTHUFRISATSUN
MAY	TUEWEDTHUFRISATSUNMON
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Seo. H. Knight. fr.

Charles stemmedy Hamilton for.

By Mary Hamilton for.

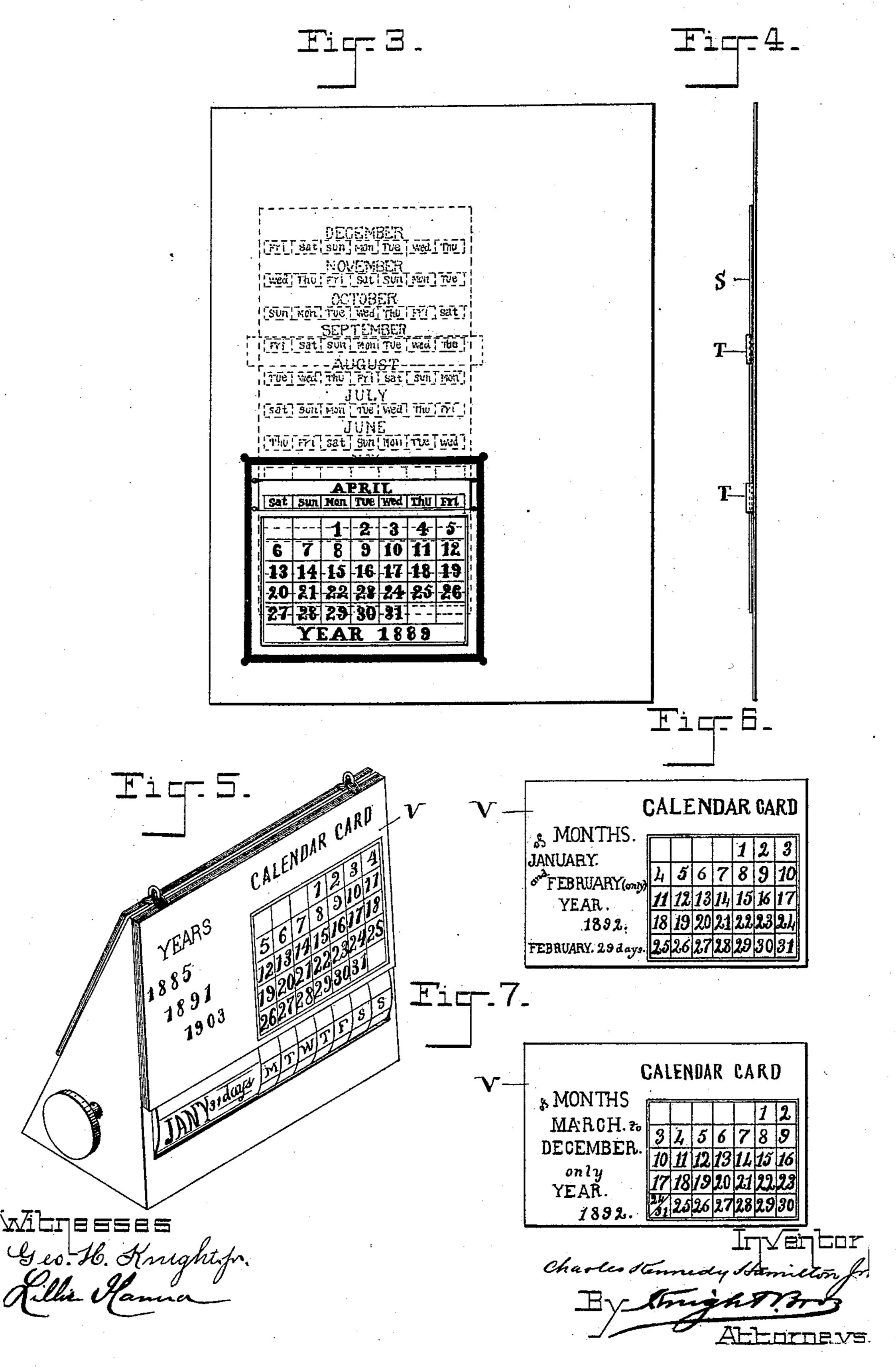
ALLOTTEYS

3 Sheets-Sheet 2.

C. K. HAMILTON, Jr. CALENDAR.

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3 Sheets—Sheet 3.

C. K. HAMILTON, Jr. CALENDAR.

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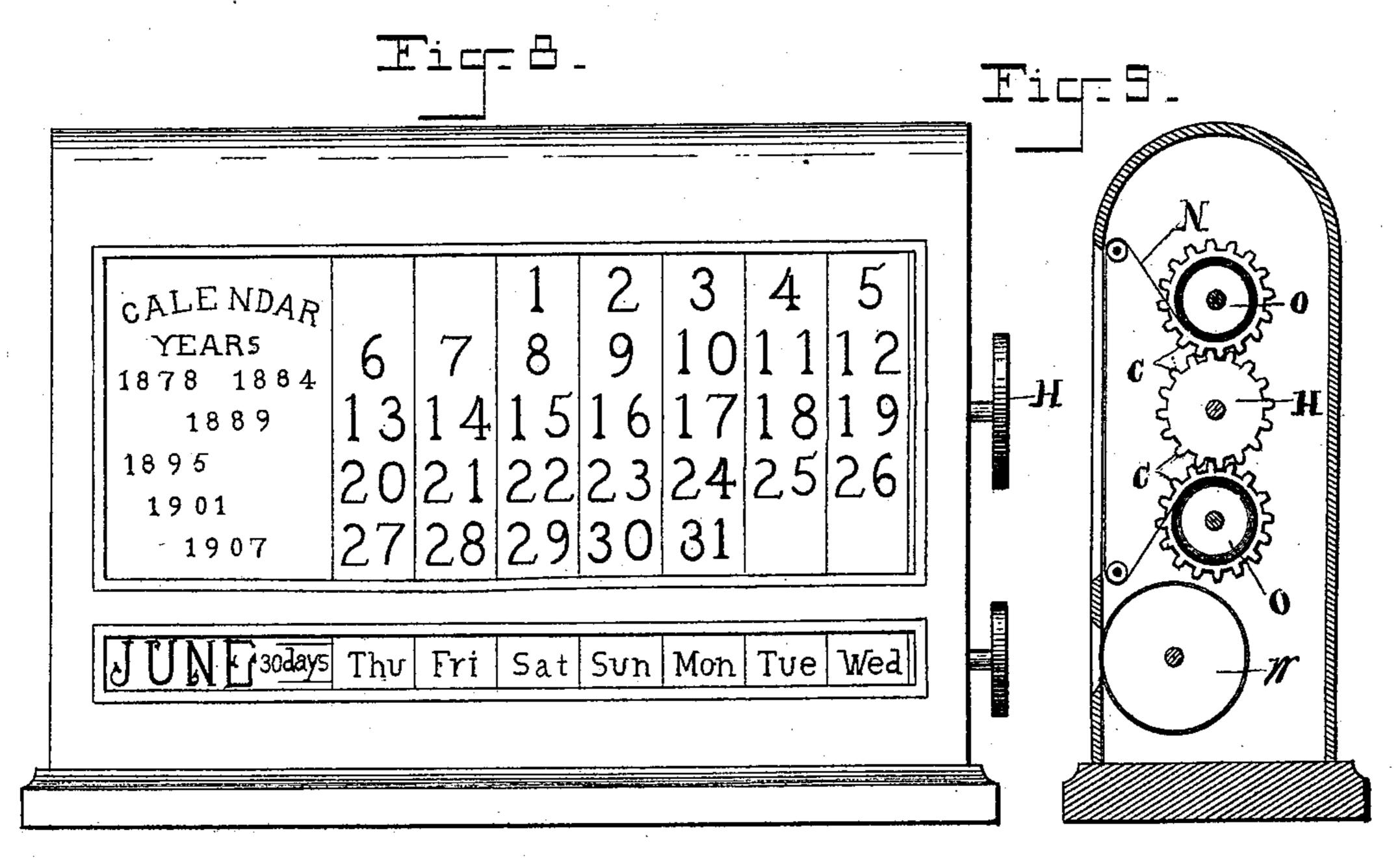
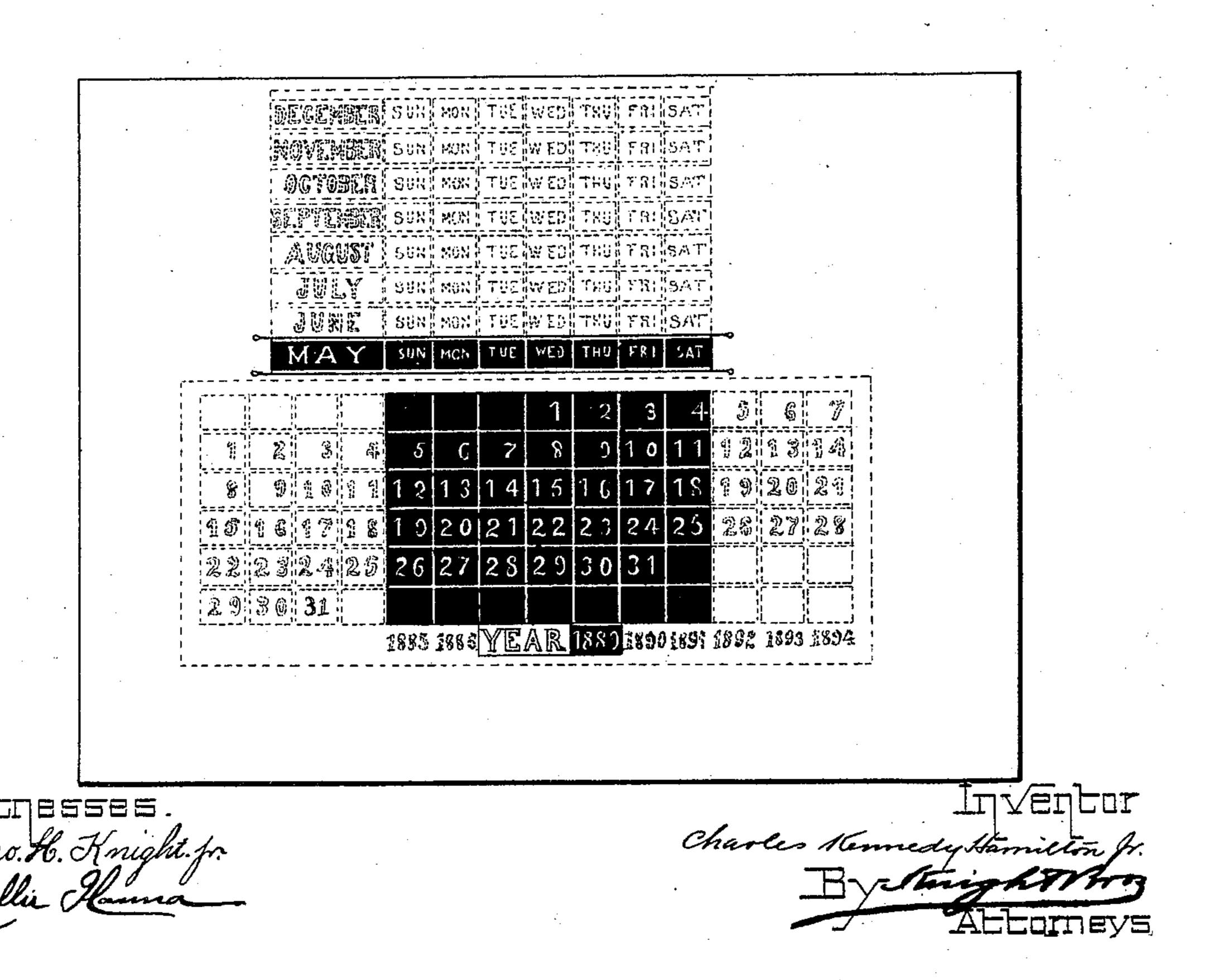


Fig-10.



United States Patent Office.

CHARLES KENNEDY HAMILTON, JR., OF BROOKLYN, NEW YORK.

CALENDAR.

SPECIFICATION forming part of Letters Patent No. 405,160, dated June 11, 1889.

Application filed February 26, 1889. Serial No. 301, 240. (No model.)

To all whom it may concern:

Be it known that I, CHARLES KENNEDY Hamilton, Jr., a citizen of the United States, residing at Brooklyn, in the county of Kings, 5 State of New York, have invented certain new and useful Improvements in Calendars, of which the following is a specification.

The object of my invention is to produce a calendar which will be practically perpetual to in its nature, or at least extend over a long period of years, and I will here state that the novel principle hereinafter disclosed may be, as far as details go, modified and altered, abridged or enlarged in various ways, and be 15 embodied in almost any kind or shape of calendar without departing from the spirit of my invention or from the main or central feature of my discovery. This main or central feature of the improvements hereinafter dis-20 closed consists in the broad classification of the days of the week, the days of the month, the months themselves, and the years; and in reference to the latter the years can be carried as far backward and as far forward as 25 desired, this feature depending largely on the nature and style of the calendar and the particular use it is to be put to.

The classification referred to above may be described as follows: The year—such, for in-30 stance, as the year 1889—is arranged in connection with the days of the month—that is to say, they are placed upon the same card, tablet, or slip, or upon the same endless apron or roll, or upon the same roller or slide, as the 35 case may be, and according to the particular construction or fashioning of the calendar. In addition to this and in connection with it I make a special arrangement of the days of weeks, with months upon another and sepa-4c rate card or roller or other complementary device. This system of classification or division is always maintained no matter what form or construction the calendar assumes, as will be hereinafter explained in connection 45 with the drawings, and I wish it to be particularly understood that the value of my invention depends upon the discovery that the above-described cards or rollers are classified

or divided as explained, and the fact that they 50 are capable of adjustment at long or comparatively long intervals of time will render the | having seven columns subdivided into twelve

calendar perpetual, or practically so. The combinations are always effected by simply selecting the "year-card" and "month-card" and placing them together, when the days of 55 week and days of month immediately combine to produce absolutely and accurately the desired result. Such arrangement is made possible by the fact that as there are but seven days of the week, and as one or more 60 of the months must necessarily commence on one of these days, I can, with seven pads or slips, apart from the special provision made for leap-years, construct a practically continuous calendar. It will be seen, therefore, 65 that a useful feature of my improvements consists in the ability afforded to give a practically perpetual calendar—say applicable to ten years back and ten years to come, besides the current year—which to every busi- 70 ness man would be a great convenience. The expansion of this calendar in either direction, however, is practically unlimited and may be continued as far as desired. It will be seen also that several years may be 75 selected, which commence on the very same day of the week, and that consequently the respective months of those years commence on the same days of the week, month for month. Thus 1894, 1900, and 1906 commence 80 on Monday. 1889, 1895, 1901, and 1907 commence on Tuesday. 1890, 1896, 1902, and 1908 commence on Wednesday. 1891 and 1903 commence on Thursday. 1892, 1897, 1904, and 1909 commence on Friday. 1898 85 and 1910 commence on Saturday. 1893, 1899, and 1905 commence on Sunday. 1892, 1896, and 1908 are leap-years, and are especially provided for. The pads or slips, of course, have appropriate captions or headings—as, 90 for example, 1889, 1895, 1901, 1907.

Referring to the accompanying drawings, which form a part of this specification, Figures 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10 illustrate several different modes of carrying out my 95 invention. The week-days may, as shown, be distinguished, for convenience, by their respective initials, Sunday being distinguished by black or colored initials, the rest being white, or vice versa.

Fig. 1 shows a table of the days of the week

spaces, making in the aggregate as many horizontal lines. To the left of these is a column of twelve spaces, one for each month, beginning with January. The first line of week-5 days contains in proper sequence the days of the week from Monday to Sunday. The second and third lines corresponding to February and March, respectively, both commence with the Thursday initial, as does also that for to November. The lines for April and July commence with the initial for Sunday, because for any year, except a leap-year, February is exactly four weeks and each of the succeeding months just so many weeks and frac-15 tions of a week in advance of its predecessor. The table of week-days is surmounted by a table of month-days arranged for some particular years—say, for example, the years 1889, 1901, and 1907—and is inscribed with those years. The arrangement of months and days of the week once being accurately ascertained need never be rearranged or changed. There may be several of these tables of years and month-days, an additional es one for the year 1890 being shown to the right of Fig. 1. This one may be pasted or otherwise secured under the 1889-year table. At the end of the year the topmost or exposed tablet may be torn off or turned under, aco cording to the particular construction of the calendar. For use with any other year or year-groups (not leap-year) it is only necessary to substitute the month-day table for the years, such as shown, which represents the 5 pad or slip for the years required—as, for example, the years 1890, 1896, 1902, and 1908.

The week-day table for leap-years differs from that shown in said figure. by reason of the disarrangement caused by the introduco tion of an entire day between February 28 and March 1 in setting the initials of the third and each subsequent line one day in advance of those shown in said figure; but as it is not my purpose at any time to change 5 the one simple arragement of month in connection with the days of the week, as already stated, I prefer to provide a special card or cards, as shown in Fig. 7, which shall advance the days of the month one day, commencing o with March.

Fig. 2 differs from Fig. 1 in grouping on one line all the months which commence on the same week-day. This reduces the monthlines from twelve, as in Fig. 1, to seven, as in 5 Fig. 2. This form is very desirable where it is intended to place the calendar in a small space, such as a pocket memorandum-book.

Fig. 3 is a front elevation of another form of calendar, showing my invention applied. o Fig. 4 is a longitudinal section of this construction. In this form the month-days and the particular year are printed on the same slip or tablet, as heretofore explained in connection with the previously-described designs. 5 The week-days and months are printed on

cally. Straps T are provided to hold the parts in proper relative position.

In Fig. 5 I show another calendar embodying my invention. This is the tent or pyra- 70 mid calendar, and the month-days and years are printed or engraved on tablets V, which are pivotally supported in the top of the calendar, so that they swing over to the back, one for each year, thus bringing out the next 75 succeeding year.

Special cards or tablets are provided in case of leap-years, as shown in Figs. 6 and 7. The card or tablet shown in Fig. 6 is only intended for January and February, while the 80 other tablet—namely, that shown in Fig. 7—is intended for the remaining ten months.

Fig. 8 shows my invention applied to a calendar having revolving tablets. The monthdays and years are mounted on an endless 85 apron N, which is placed on the rollers O O. The handle H is attached to a third roller H', which is connected by cog-gearing C to the rollers OO. By turning the handle the proper year and its accompanying month-days ap- 90 pear. This portion of the apparatus need not be touched for another year. It is set for that year. The months and week-days are mounted on another roller W, which is also provided with an operating-handle. On the 95 periphery of this roller is placed the months of the year and the days of the week, and this roller is to be operated once a month, in order to bring the proper month into position. These various parts are shown to better ad- 100 vantage in Fig. 9.

In Fig. 10 I have shown another form of my invention, the two tablets sliding in the card transversely of each other. The particular year is printed on the month-day card, as 105 usual, the card of the calendar being cut away centrally at the point M, so as to expose the year (such as 1889) as the card is pushed along from year to year. The exposure of any particular year in this form exposes the 110 month-days in their proper sequence and continuity and sets them for the entire year. Whereas the calendar-card in any month calls for thirty-one days, and it is well known that the months vary from twenty-eight to thirty- 115 one days, to determine the number of days in any given month it is only necessary to consult the day of the week upon which the first day of the following month commences—as, for example, the month of February in 1889 com- 120 mences on Friday; how many days are there in February? We look for the first day of March, which commences on Friday, consequently the last day of February will fall on Thursday, and the month is therefore twenty- 125 eight days in length. Take June for another example—June 1 is Saturday, July 1 is Monday, therefore Sunday is the last day of June, which falls on the 30th. The month of June is therefore thirty days in length. In leap- 130 years this idea will be carried out the same another slip S, which is adapted to slide verti- I in every respect as here stated.

Having thus described my invention, the following is what I claim as new therein and

desire to secure by Letters Patent:

1. In a calendar, a card or tablet having the 5 year or years and month-days printed or otherwise inscribed upon it, in combination with another card or tablet having the months and week-days inscribed thereon, as shown and described.

2. A calendar having one portion containing the years and month-days, in combination with another part having the months and weekdays, one of said parts being adjustable relatively to the other, as shown and described.

3. The calendar, constructed substantially as hereinbefore described, consisting of one part having the month-days or years on one part and the months and week-days on another part, the parts being relatively adjust-20 able one to the other, or both parts being adjustable in any of the manners and forms herein shown.

4. A calendar which consists of the combi-

nation of the following elements, to wit: a table of week-days in seven columns whose ini- 25 tial letter corresponds with the first weekdays of each respective month, a column of months to one side of and corresponding to said week-day table, and a pad of which each sheet is inscribed with one or more year- 30 groups that commence with the same weekdays, and a table of month-days whose ordinals correspond to the week-days for the inscribed years, as and for the purposes set forth.

5. A calendar having the year or years and month-days associated together and printed thereon in one portion and the months and week-days associated together on another portion, substantially as and for the purposes set 40 forth.

C. KENNEDY HAMILTON, JR.

Witnesses: MAZIE V. BIDGOOD, GEO. H. KNIGHT, Jr.