J. W. A. NICHOLS.

DATE FINDER.

APPLICATION FILED JULY 28, 1913.

1,187,371.

Patented June 13, 1916.

2 SHEETS—SHEET 1.

Fig. 1.

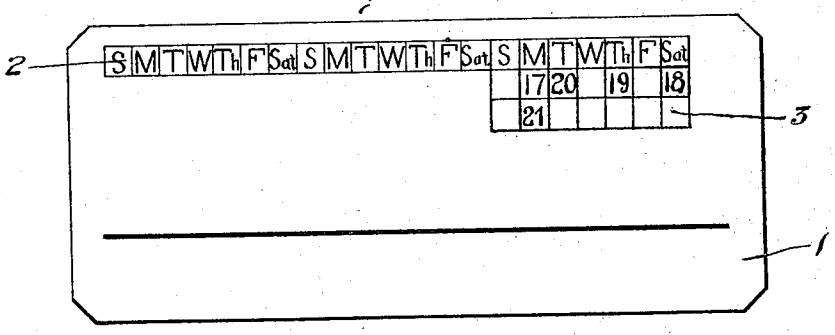


Fig. 2.

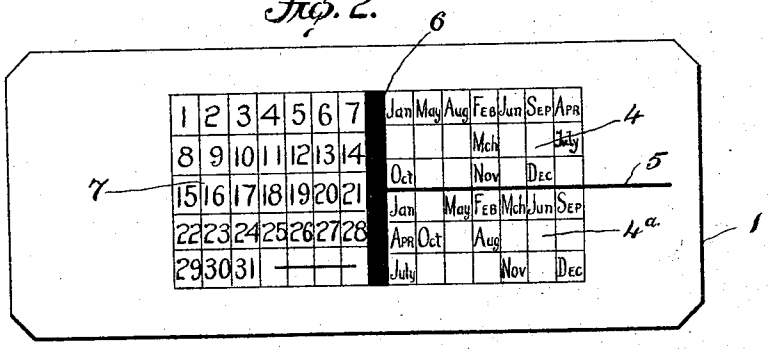
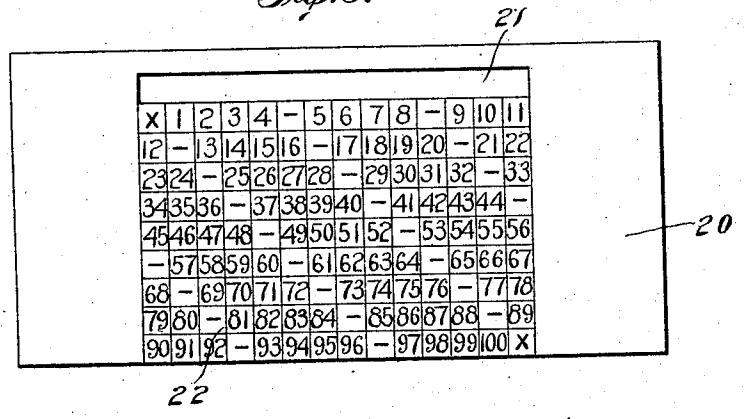


Fig. 3.



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2 SHEETS—SHEET 2.

Fig. 4.

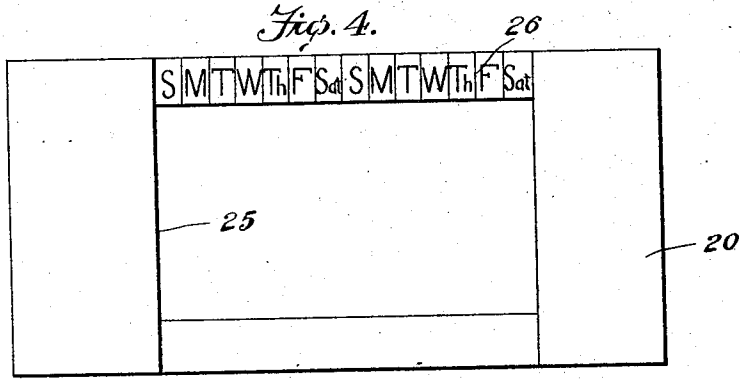


Fig. 5.

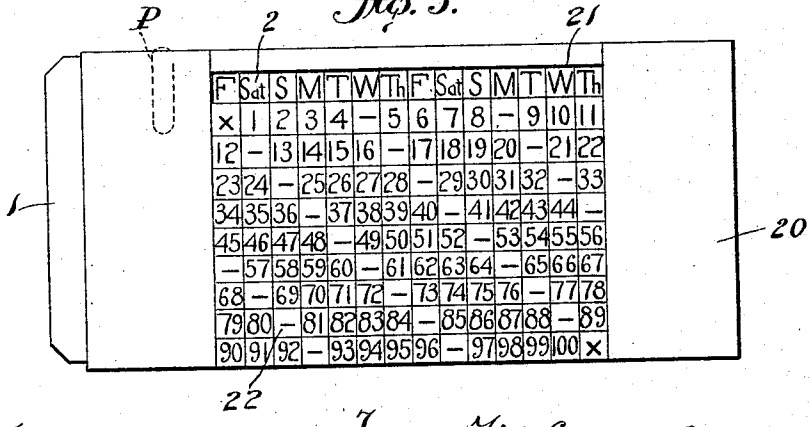


Fig. 7.

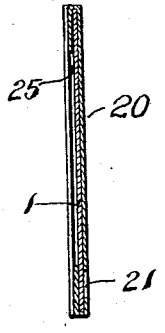
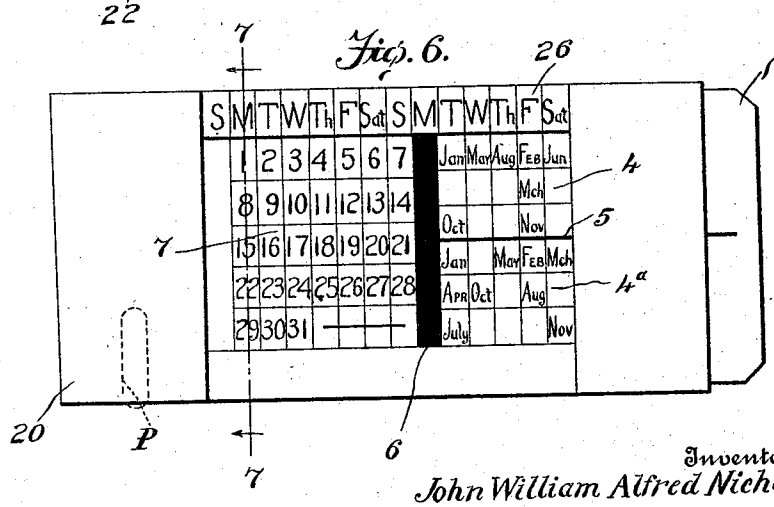


Fig. 6.



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UNITED STATES PATENT OFFICE.

JOHN WILLIAM ALFRED NICHOLS, OF TACOMA, WASHINGTON.

DATE-FINDER.

1,187,371. Specification of Letters Patent. Patented June 13, 1916.

Application filed July 28, 1913. Serial No. 781,678.

To all whom it may concern:

Be it known that I, JOHN WILLIAM ALFRED NICHOLS, a citizen of the United States, residing at Tacoma, in the county of Pierce and State of Washington, have invented certain new and useful Improvements in Date-Finders; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to calendars, and more especially to those having a characteredslide; and the object of the same is to produce an improved date finder which when set for the present month may be used as a calendar.

A further object is to produce a device of this kind which can be made of but two pieces of material and of a size so small that it may be inserted into the vest pocket—thereby economizing space and reducing the cost of manufacture.

These and other objects are accomplished by the construction hereinafter more fully described and claimed and as shown in the drawings wherein—

Figure 1 is a plan view of the obverse and Fig. 2 a plan view of the reverse of the slide member of this device. Fig. 3 is a plan view of the obverse and Fig. 4 a plan view of the reverse of the sheath member of this device. Fig. 5 is a plan view of the two members of this device associated in a manner hereinafter described, with the obverse of both members exposed; and Fig. 6 is a similar plan view of both members with their reverse faces exposed. Fig. 7 is a sectional view on the line 7—7 of Fig. 6.

The parts of this device may be made of paper, metal, celluloid, or other material; and its exact shape as well as its dimensions are unimportant excepting that attention is called to the fact that it contains so little in the way of tables, figures, and letters (possibly also instructions) printed or otherwise formed upon the two parts of the device, that the latter may be inserted in the vest pocket. I speak herein of printing, as that is the means I prefer to make use of for inscribing the parts with the legends thereon, but do not wish to be limited to that means of so inscribing them.

On the above understanding, the device contains but two parts mechanically speaking, one of which is a slide 1 and the other part or piece is a sheath 20. The former is nothing more than a rectangular piece of material such as paper. The sheath is a rectangular piece of material initially, but its ends are brought around and cemented or pasted to each other, and then the whole is flattened out into a tubular member of slightly greater width (up and down) than the width of the slide 1, and of slightly less length so that the extremities of said slide, or at least one of them, will project beyond the sheath to be grasped by the operator. In one face of the sheath is formed a long slot 21 and in the other face of the sheath is formed a rectangular opening 25. It follows that when the slide is moved through the sheath, whatever is printed upon it in position to appear through the slot will be seen by the operator, and the same may be said of whatever is printed upon its reverse side in position to appear through the opening.

Across the top of the face of the slide 1 is a row of letters 2 indicating days of the week, there being about twenty or twenty-one of said letters so as to indicate three weeks for a purpose which will appear below. Beneath seven of these letters is a table 3 comprising two rows having seven squares in each row, and the squares are inscribed with numbers from seventeen to twenty-one inclusive, which numbers are arranged in the squares as shown in Fig. 1. This I will call the century table. On the reverse of the slide 1 at one end thereof is a table 4 and a table 4^a, one above the other and one duplicating the other as far as the following description goes, their difference being that one is to be used for ordinary years and the other as the table 4^a for leap years. Each table has three rows of seven squares each, and the squares are inscribed with abbreviations indicating the months. On the understanding that the table 4^a is used one time in four (except on even centuries) I will hereinafter refer only to the table 4, which we will call the month table. A heavy line 5 separates the two tables, and at their left end is a heavy upright panel 6 separating these tables from another table 7 having five rows of seven squares each and inscribed with figures like an ordinary calendar, beginning in the upper left hand corner with the numeral 1. This I will call the date table. The squares

in all the tables and on the row 2 are of the same size.

On the face of the sheath 20 below its slot 21 is formed a table 22 consisting of nine rows having fourteen squares in each row, and the squares inscribed with numerals as seen in Fig. 3; and this I will call the year table. The slot 21 is so disposed that when the slide moves through the sheath, the row 2 of week days at the top of the face of the slide is exposed through the slot 21, while the table 3 on the slide is hidden by the table 22. On the reverse or back of the sheath 20 above the opening 25 is a row 26 of letters or of abbreviations incating week days, there being about fourteen in this row; and this side of the sheath is formed to coöperate with the reverse of the slide, the opening 25 being of sufficient height to expose both the tables 4 and 4ª or the month table or calendar 7, and to permit either table to be set in any position under the days of the week. Such being a fact it it clear that if the table 7 is set under the week days so that the numeral 1 stands under that day which is the first day of the present month, this will be the current calendar whatever the month and whatever the year, and therefore this date finder may thus be used as a calendar.

With the above construction of parts, the use of this device as a date finder is as follows (and instructions to this effect may be printed somewhere on the article, although I have not so shown them in the drawings): Let us assume that we are called on to answer the question "What day was October 12, 1792?" First the table number 3 is used to find the day of the week on which occurred the first day of that century. Looking in table 3 in the last column where occurs 18 which indicates the eighteenth century, we find that that century began with Saturday. The slide 1 is now moved into the sheath 20 so that the number 1 in table 22 will stand below Saturday in the row 2, and we find that 92 is in the column headed Sunday, so that the year 1792 began with a Sunday. Now turn the device completely over and adjust the slide so that "Jan." in table 4ª (this being a leap year) will stand beneath Sunday in the row 26, and we find that "Oct." in this table is beneath Monday in said row, so that October began with Monday. Now adjust the slide a little farther within the sheath so that the table 7 or regular calendar is brought into use under the same row 26 with the 1 beneath Monday, and we find that the twelfth of the month fell on Friday. Therefore the answer to the original question propounded is that the twelfth of October, 1792, occurred on a Friday. The same rule may be followed for finding the day of the week of any date past or future without limit according to the Gregorian or common calendar. A device of this kind is extremely useful to those whose business it is to ascertain the day of the week of given dates, either forward or backward, but in addition this device may be used as an ordinary calendar as above suggested, and in that case I would suggest that the two parts be clamped together by some means, as for instance by an ordinary paper clip P as indicated in dotted lines in the drawings. Each month the slide will be adjusted within the sheath so that the number 1 in the table 7 will appear under the proper letter which is in the row 26 above the opening 25; and thereafter this calendar may be permitted to lie on the desk or may be carried in the pocket, and of course such a device as a paper clip would prevent it from becoming moved, although when needed as a date finder the clip could be removed and the operation described above carried out.

The reason why so much information may be obtained from a device which is really so small, is because of the four tables employed; one, which is the century table 3, is on one side of the slide and works alone, two (or three if we call the table 4ª another table) are on the other side of the slide and coact with one opening in the sheath, and the remaining table is on the other side of the sheath and coacts with the row 2 of letters on the slide. So that it would seem that both faces of both the slide and the sheath are employed, although as they are employed at different times and for different purposes the adjustment of one member relatively to the other is uninterrupted. As above suggested I do not wish to be limited to the materials or proportions of parts, nor to the location of the tables upon the sheath and slide. For example, the century table and the tables 4, 4ª, and 7 may all be printed upon the face of the sheath instead of upon the slide, in which case the opening in the sheath would be reduced to a slot and operated from week-day abbreviations on the slide, identically as in the use of the year table on the reverse side of the sheath.

What is claimed as new is:

A date finder comprising a horizontally elongated sheath having near the upper edge of its obverse face a horizontally elongated slot, a year table on said face consisting of nine horizontal rows of fourteen blocks containing consecutive year numbers ranging from zero to one hundred, the reverse face of the sheath having formed therein a horizontally elongated rectangular opening, a horizontal row of fourteen blocks on said reverse face above the opening and containing characters representing two full weeks and a fraction of a third week, a horizontally elongated slide in the sheath, a horizontal row of twenty-one blocks on the obverse face of said slide containing characters represent-

ing three full weeks to be displayed through the slot in the obverse face of the sheath for coöperation with the year table beneath said slot, a century table on said obverse face of the slide consisting of seven upright columns of two blocks each, said columns containing the numbers of numerous centuries and being disposed beneath seven of the first named blocks on the obverse face of the slide, a month table near one upper corner of the reverse face of the slide consisting of three horizontal rows of seven blocks containing characters designating months of ordinary years, a substantial duplicate of said month table below it but having differently arranged month names for use in leap years, and a calendar table on the aforesaid reverse side of the slide disposed to one side of the two month tables, said calendar table consisting of five horizontal rows of seven blocks containing month dates ranging from one to thirty-one, the three last named tables all coöperating with the blocks above the opening in the reverse face of the sheath.

In testimony whereof I have hereunto set by hand in presence of two subscribing witnesses.

JOHN WILLIAM ALFRED NICHOLS.

Witnesses:
FRANK D. NASH,
H. W. LUEDERS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."