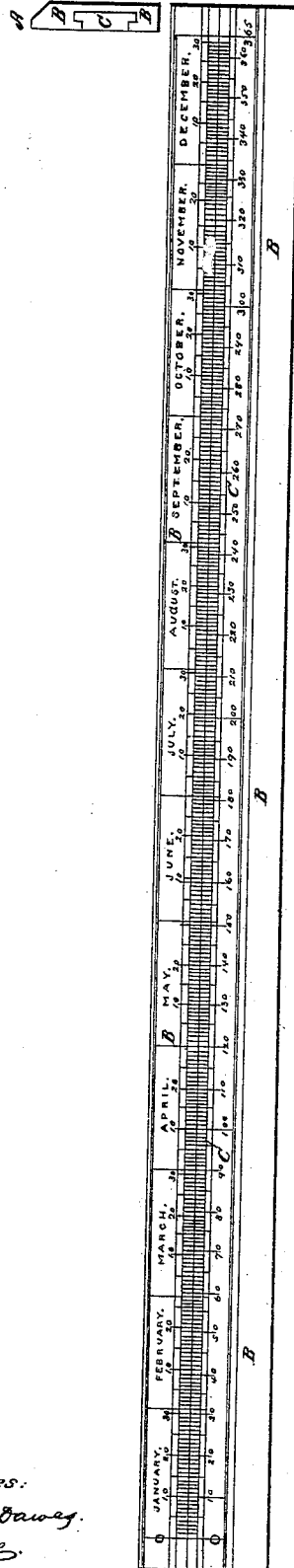


J. P. SMITH.

Slide Rule.

No. 2,907.

Patented Jan'y 10, 1843.



Witnesses:
Francis N. Dawley.
W. H. Bennett.

Inventor:
J. P. Smith.

UNITED STATES PATENT OFFICE

JOHN P. SMITH, OF NEW YORK, N. Y.

IMPROVEMENT IN SLIDING RULES.

Specification forming part of Letters Patent No. 2,907, dated January 10, 1843.

To all whom it may concern:

Be it known that I, JOHN PRESTON SMITH, of the city, county, and State of New York, accountant and book-keeper, have invented and made and applied to use certain new and useful improvements in the marking and numbering of rules, by which the common slide-rule is rendered useful in mercantile calculations of time for interest, so as to give on inspection the definite number of days from any given day in the year to any other given day, and the date or expiry of any given number of days from any given date, which will materially facilitate thereby the averaging of accounts in mercantile business, and for which improvements I seek Letters Patent of the United States; and I do hereby declare that the said improvements, and the mode of making and using the same, are fully and substantially set forth in the following description, and shown in the drawing annexed to and making part of this specification, wherein—

The small detached figure A is a cross-section of the principal figure, and shows the mode in which the slide C is fitted into the stock B of the rule, so that the face of the slide is equal to about one-third the whole width of the rule.

On the upper edge of the slide C there is to be made a regular set of equal divisions, numbered beneath from 0 on the left to 365 on the right, and on the opposite lip of the slide-groove in the rule is to be made an exact fac-simile of the same divisions; but these are to be numbered on the rule above the lip, according to the number of days in each month, and above this is to be the names of each month, inclosed within a small oblong square formed by extending the line of each final day of each month upward, and finishing so that the final day of the aggregate number of days in all the months of the year closes at 365 on the slide C.

It will readily be seen that the mode of marking may be reversed by placing the months on the slide and the days of the year on the rule, if so chosen.

The mode of using this rule is that as the numbers on the slide C show ninety days from the first of January to fall on the thirty-first

of March, so the setting 0 on the slide to any other given day will immediately show by inspection the clear number of days to any other given day within the year, or, in other words, the expiry of any given number of days from any given date. When any terminal date goes beyond the thirty-first December, the number of days from the given date to the thirty-first December being noted, the number of days from the first January to the terminal date are to be added to the first number obtained by passing the first number on the slide back to the first January, which will give the total number of days required, and when the expiry of a similar given or known number of days is required, the number previous to the thirty first December being deducted in the same way, gives the date after the first January, the expiry of which is the date required. In leap-years one day must be added to dates falling after the twenty-eighth February.

The advantages of this invention are that the implement serves the accountant or book-keeper as a common rule for use on his desk, and is at the same time a means either of determining any number of days on which to calculate interest, or the operator can by the same instrument; when averaging or equating payments, determine by inspection the day on which an equation falls due, without the necessity for having almanacs and time-tables on his desk to interfere with his books and papers.

I do not claim to have invented a slide-rule; but

I do claim as new and of my own invention and desire to secure by Letters Patent—

The marking the slide with the number of days in the year and marking the months and days of the months on the rule, or vice versa, when such mode of marking is applied to a slide-rules for the purposes above described.

In witness whereof I have hereunto set my hand, in the city of New York, this 30th day of November, 1842, in the presence of the witnesses subscribing hereto.

J. P. SMITH. [L. S.]

Witnesses:

FRANCIS H. DAWES,
W. SERRELL.