(No Model.)

G. F. HAWLEY.

CALCULATOR.

No. 342,796. Patented June 1, 1886.

Fig. 1.

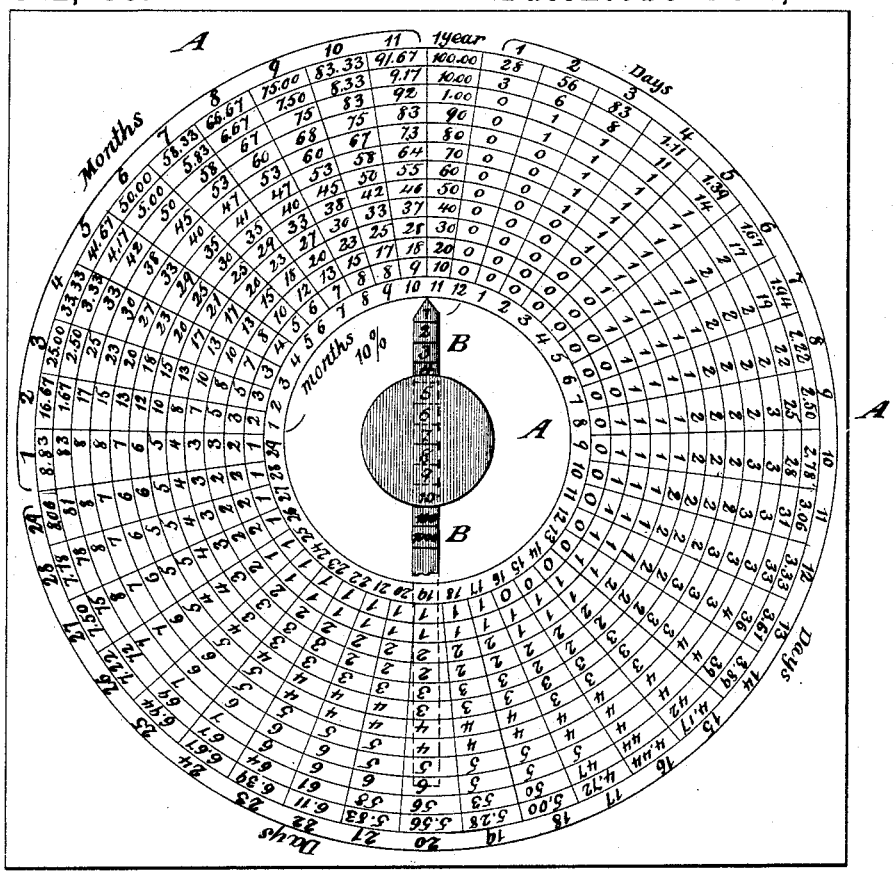
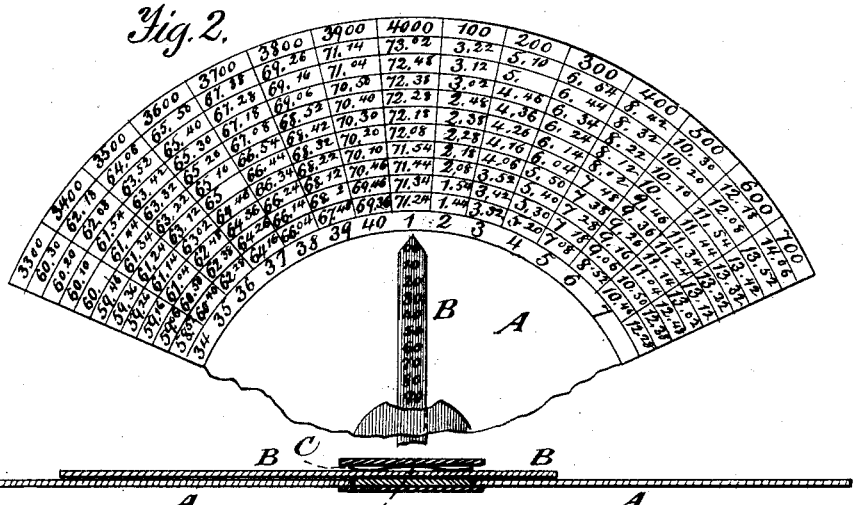


Fig. 2.



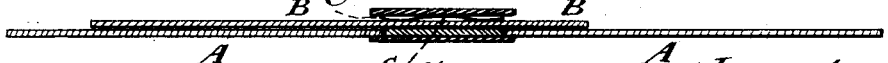


Fig. 3.

Witnesses.
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UNITED STATES PATENT OFFICE.

GEORGE F. HAWLEY, OF MARQUETTE, NEBRASKA.

CALCULATOR.

SPECIFICATION forming part of Letters Patent No. 342,796, dated June 1, 1886.

Application filed February 9, 1886. Serial No. 191,374. (No model)

To all whom it may concern:

Be it known that I, GEORGE F. HAWLEY, a citizen of the United States, residing at Marquette, in the county of Hamilton and State of Nebraska, have invented certain new and useful Improvements in Calculators; 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The object of the invention is to make a grain-table for merchants who deal in wheat, rye, oats, barley, or other grains, to facilitate the transaction of business and economize time.

Figure 1 of the drawings is a plan view of the table. Fig. 2 is a plan view of the bushel-calculators; and Fig. 3 is a diametrical section of Fig. 1.

In the drawings, A represents the table, which I preferably make of heavy card-board; but it may be formed of any suitable material. On the upper face I arrange radial columns of figures for each day of a month, for any number of months up to eleven, and for one year. On an interior circular column is a corresponding notation.

B represents the indicator, which is preferably made of light wood, held to the center by a light spring, C, and adapted to slide up and down over the center of table. Thus it will be seen that the table may be conveniently rotated, so as to bring the indicator into desired position.

On the indicator is notated units, tens, hundreds, and thousands. For example, in order to find the interest on nine dollars for twenty-seven days, slide the indicator across the center of table until figure 9 is directly over the inside circular space, then turn the table until the day's number "27 column" comes under the indicator, when the latter will point directly at the amount required.

In Fig. 2 of the drawings it will be observed that the table is notated so as to obtain the number of bushels and the fractions thereof in any given number of pounds of grain. In this case, for example, the grain may by law require fifty-six pounds to the bushel. The indicator is then marked in tens up to one hundred. If it is wished to obtain the number of bushels in three thousand eight hundred and sixty pounds, slide the indicator and turn the table until "60" on the indicator is just to the right of the "38" on the inside space, and the point of indicator will be turned to "68$\frac{5}{56}$."

In order to reduce bushels to pounds, move the indicator and rotate the table until the point of indicator is directed to the bushels to be reduced, when the figures to the left of the indicator and the two figures on the indicator at the inside space will represent the pounds.

In Fig. 1 of the drawings the outer and inner circles are correspondingly notated with the days of a month and the months of a year, while the intermediate radial columns of figures represent the amounts of interest. The indicator is notated with various aggregates or amounts on which interest is to be calculated at the rate of ten per cent. per annum. If it is desired to find the interest on one thousand dollars for twenty-six days, move up the "$1000" on indicator, and turn the table until "26" comes under "1000," and the pointer will indicate the amount of interest to be seven dollars and fifty cents in a month having twenty-nine days.

On Fig. 2 of the drawings the outer and inner circles of figures represent the number of pounds in hundreds, while the intermediate columns of figures represent the number of bushels with their fractions. The indicator is noted with tens, and the figures are based upon fifty-six pounds to the bushel. If it is desired to find the number of bushels in one thousand four hundred and ninety pounds of the grain, bring the "90" on the indicator beside the "14" on the inner circle of figures, and the indicator will point to "62$\frac{16}{56}$" as the correct answer.

What I claim as new, and desire to protect by Letters Patent, is—

In a calculator, a rotary table and a diametrically sliding indicator combined and relatively notated, substantially as described, whereby the sliding of the indicator and turning of the table will bring the desired result in front of the indicator, in the manner set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEO. F. HAWLEY.

Witnesses:
W. D. MOORE,
CHARLES E. LIND.