

C. M. DUNHAM.
INTEREST CALCULATOR.

Patented June 12, 1888.

Fig. I.

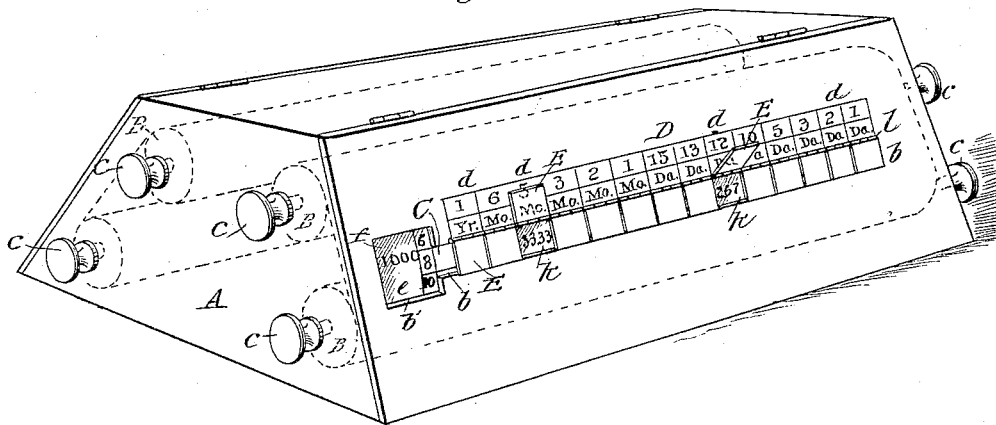


Fig. 2.

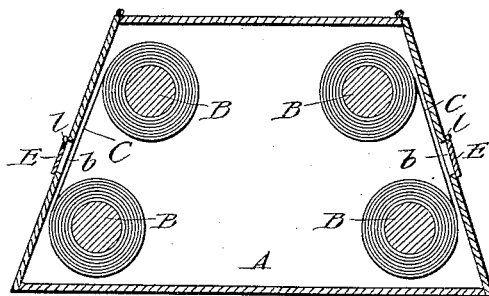


Fig. 3.

[illegible]

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CALVIN M. DUNHAM, OF ST. JOSEPH, MISSOURI.

INTEREST-CALCULATOR.

SPECIFICATION forming part of Letters Patent No. 384,431, dated June 12, 1888.

Application filed January, 11, 1888. Serial No. 260,401. (No model.)

To all whom it may concern:

Be it known that I, CALVIN M. DUNHAM, of St. Joseph, in the county of Buchanan and State of Missouri, have invented a new and useful Improvement in Interest-Tables, of which the following is a full, clear, and exact description.

This invention consists in an adjustable interest-table device and certain combinations of parts making up the same, substantially as hereinafter described, and pointed out in the claims, whereby not only manual labor is largely reduced, but mental labor almost entirely dispensed with, in ascertaining the amount of interest on different sums of money at different rates of interest for different periods of time, the whole forming what may be termed an "instantaneous interest-indicator."

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a view in perspective of an interest-table device embodying my invention; Fig. 2, a transverse section of the same, and Fig. 3 a face view of a portion of a movable principal and interest table used in the device.

The device as represented is a double one—that is to say, it is supposed to be similarly constructed and operated on both or opposite sides, one side being for one kind of money—as, for instance, one side for American money and the other side for English money; but it will suffice here mainly to describe it as of single construction by referring more particularly only to its one side.

A is the frame, in the form of a box, which may be made of metal, wood, or other suitable material, and the sides of which may be hinged at top to open and close, either side having a longitudinal aperture, $b\ b'$, in it, which aperture is preferably made larger at its one end portion, as at b' .

B B are longitudinal rollers within the box, arranged one above the other in proximity to its apertured side. These rollers, which may be of wood, metal, card-board, or other suitable material, and may be turned by attached knobs c outside the end or ends of the box, have attached to them and serve to carry and

operate a tabular sheet, which constitutes a movable principal and interest web C. This web may be made of paper, linen, cloth, or other suitable and flexible material, and is arranged to present a facial exposure between the rollers immediately back or inside of the aperture $b\ b'$, and may be worked up or down by suitably turning the upper or lower roller according to the principal and rate of interest on the web it is required to expose.

Arranged lengthwise over the portion b of the aperture $b\ b'$ is a fixed time-indicator, D, divided up into transverse spaces d , marked to indicate different periods of time, here shown as ranging from one year to one day, but which are arbitrary and may be extended or diminished as required.

The principal and interest web C is divided up on its face into spaces e , running in the direction of the width of the web—that is, in the direction of the length of the rollers—and marked respectively near the one margin f of the web with different amounts of principal, ranging, say, when the principal is American money, from \$1 to \$5,000, (more or less,) and crosswise of these spaces e are any number of divisions or spaces $g\ h$ running lengthwise of the web, which in their turn are subdivided widthwise of the web into squares or spaces $i\ k$. The first column or space, g , next to the marginal portion of the web at the left hand, on which appear the amounts of principal, has its squares i marked within each space e with different rates of interest per annum, here shown as six, eight, and ten per cent.; but these rates may be varied, while the squares k in the columns or spaces h are marked with the different amounts of interest at these rates of interest for the different periods of time marked on the indicator D. The squares or spaces k are arranged to register with the transverse spaces d of the time-indicator D, and so that only one row of said spaces k in direction of the width of the web will be exposed through the portion b of the aperture $b\ b'$, while the principal and different rates of interest in the column g or spaces i in each space e will or may be seen through the portion b' of said aperture $b\ b'$. Arranged over the portion b of the aperture $b\ b'$ is a series of flexible covers, E, corresponding in number to the spaces d of the

time-indicator D and in registering line with them and the squares or spaces k of the web. These flexible covers may be simple pieces or tablets of tin, brass, or other metal or material 5 suspended upon a wire, l , run along the top of the slot or aperture b b' .

To ascertain the amount of interest at the rates indicated in the spaces i , it is only necessary to turn the rollers B B so that the amount 10 of principal along the margin f of the web, upon which it is required to ascertain the amount of interest for a given time, will be exposed through the portion b' of the aperture b b' , and then to lift, with the point of a pencil 15 or otherwise, the flexible cover or covers E under the periods of time in the space or spaces d of the fixed time-indicator D, which show the period or periods the interest is to be calculated for, and the amount of interest for such 20 time or times will be exposed on the uncovered squares or spaces k . Thus, as shown in Fig. 1, supposing the principal exposed to be \$1,000 and it be required to ascertain the amount of in-

terest at the rate of eight per cent. per annum for five months or for twelve days, then upon 25 lifting the flexible covers E under those periods of time on the fixed time-indicator D the amounts of interest for those periods of time for the exposed principal will be given or exposed on the web, as $\$33\frac{3}{100}$ and $\$2\frac{67}{100}$ re- 30 spectively.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. An interest-table consisting of a frame containing rollers, a movable principal and 35 interest web operated by the rollers, a fixed time-indicator, and a series of flexible covers, all constructed and operated as herein shown and described.

2. In an interest-table, the combination, with 40 the frame A, indicator D, and interest-web C, of the flexible covers E.

CALVIN M. DUNHAM.

Witnesses:

S. M. CARSON,
C. M. THOMPSON.