

M. TODD.

INTEREST CALCULATOR.

No. 271,949.

Patented Feb. 6, 1883.

Fig. 1.

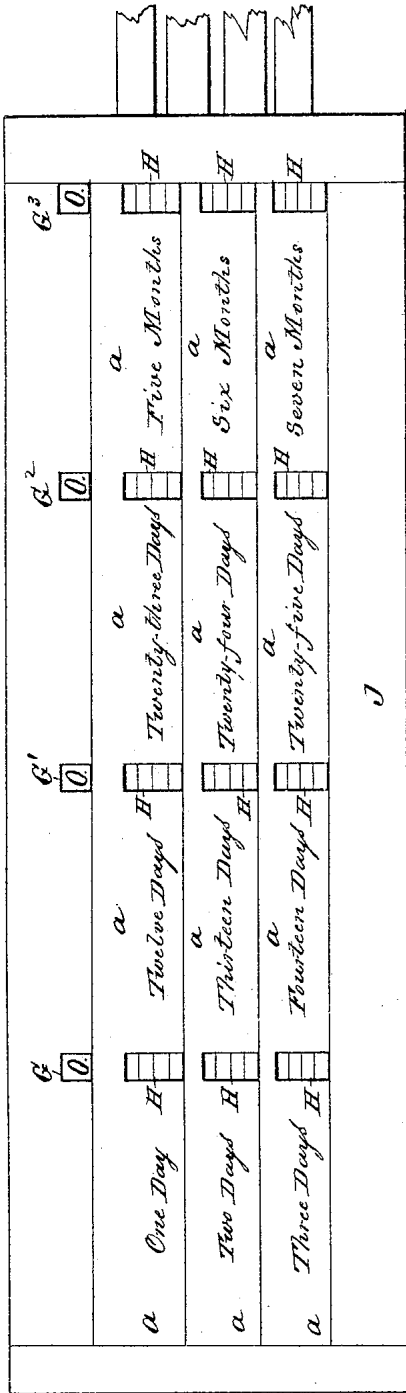


Fig. 2.

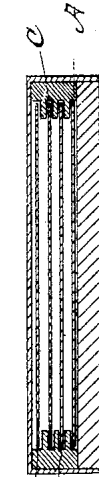


Fig. 3.

WITNESSES:

W. W. Hollingsworth
Chas R. Wright

INVENTOR:

M. Todd

BY

Rum & Co
ATTORNEYS.

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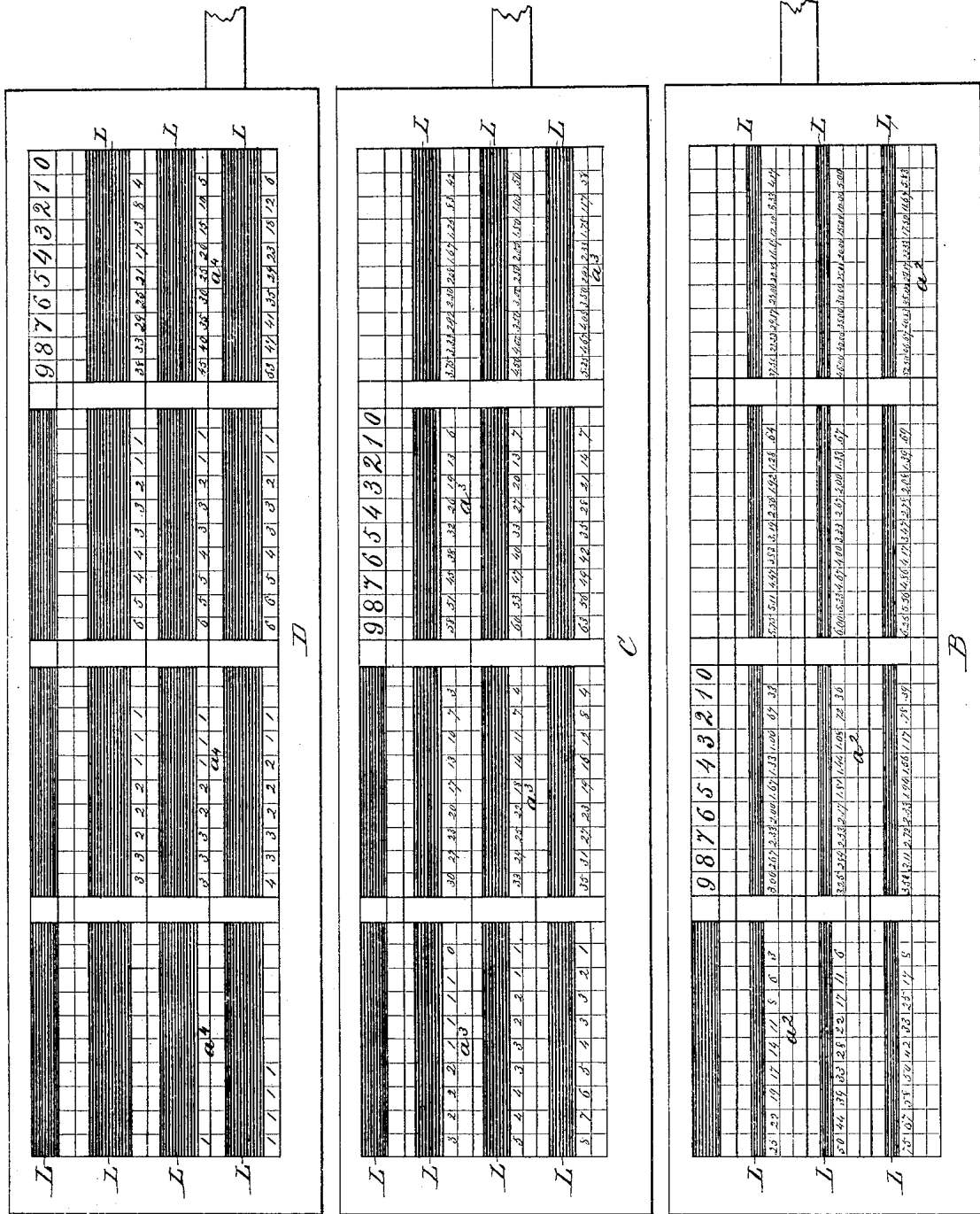


Fig. 6.

WITNESSES:
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Fig. 5.

Fig. 4.

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UNITED STATES PATENT OFFICE.

MARSHALL TODD, OF DANVILLE, INDIANA.

INTEREST-CALCULATOR.

SPECIFICATION forming part of Letters Patent No. 271,949, dated February 6, 1883.

Application filed April 17, 1882. (Model.)

To all whom it may concern:

Be it known that I, MARSHALL TODD, of Danville, in the county of Hendricks and State of Indiana, have invented a new and Improved Interest-Calculator, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved device for facilitating the computing of the interest on any desired sum of money for any desired number of days, months, or years.

The invention consists in a box having its top divided into a series of subdivisions, marked "one day," "two days," "three days," &c., which subdivisions are each provided with an aperture, through which the interest-numbers on sliding cards in the box can be seen. These cards are each provided with a row of numerals from 0 to 9, inclusive, which numerals on one card express units, on the other tens, or hundreds, or thousands. By drawing out the cards until the numerals expressing the desired number of units, tens, hundreds, &c., will show in apertures in the cover of the box, the interest on these sums will appear in the apertures of the subdivision in the cover of the box.

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

Figure 1 is a plan view of the box containing the sliding cards of my improved interest-computer. Fig. 2 is a cross-section of the same. Fig. 3 is a plan view of the chart containing the interest on thousands. Fig. 4 is a plan view of the card containing the interest on hundreds. Fig. 5 is a plan view of the card containing the interest on tens. Fig. 6 is a plan view of the card containing the interest on units.

The interest-computer is contained in a box provided with a cover, J, which is provided with a number of subdivisions, a , which are marked "one day," "two days," "three days," &c., "one month," "two months," "three months," &c., or "one year," "two years," "three years," &c. The subdivisions a are arranged in vertical rows, and at one end each subdivision a is provided with an aperture or opening, H, through which numerals on charts or cards below the cover can be seen. As the

subdivisions a are arranged in vertical rows, the apertures H at the ends of these compartments will also be in vertical rows, as shown. Above the uppermost aperture, H, of each row apertures G G' G^2 G^3 are provided in the cover J of the box. This box contains four or more charts or cards, A, B, C, and D, subdivided in the same manner as the cover J of the box.

The card A is provided on the left-hand side and along the upper edge with a row of numerals from 0 to 9, inclusive, which numerals express thousands. For instance, "2" stands for two thousand, and "8" for eight thousand, and so on. Below these numerals, or in corresponding positions in the subdivision a' , the interests for one, two, three, or more days are arranged. For instance, in the subdivision a' corresponding in position with the subdivision marked "one day" on the cover J the interests on one thousand, two thousand, three thousand, four thousand, &c., dollars for one day are arranged below the numerals 1 2 3 4, &c., or they are arranged correspondingly. In the subdivision a' corresponding with the subdivision marked "two days" on the cover J the interests on one thousand, two thousand, three thousand, &c., dollars for two days are arranged, and so on for any number from one to nine of thousands of dollars, and for from one to thirty days and one to twelve months, and as many years as may be desired.

The card B (shown in Fig. 4) is provided along the upper edge, in the space adjacent to that similarly numbered in the card A, with a row of numerals from 0 to 9, inclusive, which numerals indicate hundreds. The card B is divided into subdivisions a^2 a^2 , &c., in the same manner as the cover J, and these subdivisions contain numerals representing the interests on one hundred, two hundred, three hundred, and four hundred dollars, arranged in the same order as the numerals 1 2 3 4, &c., for one, two, three, four, five, &c., days, or months, or years. This card B is above the card A, and for this reason must be provided with longitudinal slots L L, through which the interest-numbers on the lower card, A, can be seen.

The card or chart C is provided with the numerals from 0 to 9, inclusive, arranged along its upper edge, in the space adjacent to that

similarly numbered in the card B, these numerals indicating tens. The subdivisions a^3 of this card C are provided with the numerals indicating the interests on ten, twenty, thirty, 5 forty, fifty, &c., dollars for one, two, three, or more days, in the same manner as the other cards. This card C is above the card B, and is provided with the longitudinal slots L L, through which the interest-numbers of the 10 cards A and B can be seen.

The card D is provided with the numerals from 0 to 9, inclusive, arranged along its upper edge, in the space adjacent to that similarly numbered in the card B, these numerals 15 indicating units. The subdivisions a^4 a^4 of this card D are provided with numerals indicating the interests on one, two, three, four, &c., dollars, in the same manner as other cards. The card D rests on the card C, and is provided 20 with longitudinal slots L, through which the numerals of the lower cards can be seen.

The operation is as follows: For instance, if the interest on nine thousand three hundred and fifty-six dollars at ten per cent. for three 25 days is required, the lowest card, A, is pulled out at the end of the box until the numeral 9 of this card shows in the aperture G of the cover J of the box. "\$7.50" will show in the aperture H of the subdivision of the cover J 30 marked "three days." Seven dollars and fifty cents is the interest on nine thousand dollars for three days. Then the card B is pulled out at the end of the box until the numeral 3 of this card B appears in the aperture G' of the 35 cover J. "25 cents" will then appear in the aperture H of the subdivision a of the cover J marked "three days." Twenty-five cents is the interest on three hundred dollars for three days. Then the card C is pulled out at the end 40 of the box until the numeral 5 of this card shows in the aperture G² in the cover J. Then "4 cents" will show in the aperture H of the cover J marked "three days." Four cents is the interest on fifty dollars for three days. Then the 45 card D is pulled out at the end of the box until the numeral 6 of the card D shows in the aperture G³ of the cover J. Then "1 cent" will show in the aperture H of the subdivision a of the cover J marked "three days." One 50 cent is the interest on six dollars for three days—that is, the interest on six dollars for three days is one-half cent, but is counted as one cent. Then the sums \$7.50, \$0.25, \$0.04, and \$0.01 are added, and the sum of seven 55 dollars and eighty cents is obtained, being the interest on nine thousand three hundred and

fifty-six dollars at ten per cent. for three days. In the same manner the interest can be computed for any desired time.

It is evident that different cards will be re- 60 quired for the different rates of interest.

The cards or charts can be made of cardboard, metal, or any other suitable material.

I do not limit myself to the construction 65 shown of my interest-calculator, and may make the cards larger or smaller, as may be required, the principle remaining the same.

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

1. In an interest-calculator, the combina- 70 tion, with a box having its cover divided into a series of marked subdivisions provided with apertures, of sliding cards or charts arranged one above the other and provided with numerals indicating the interest-values, which 75 numerals show through the apertures in the cover of the box, as set forth.

2. In an interest-calculator, the combination, with a box having its cover divided into 80 a series of marked subdivisions provided with apertures, of sliding cards or charts arranged one above the other and containing respectively the interest-values of units, tens, hundreds, and thousands, &c., from 1 to 9, inclusive, which interest-numbers on these cards 85 show through the apertures of the cover of the box, substantially as herein shown and described, and for the purpose set forth.

3. In an interest-calculator, the combination, with a box having its cover divided into 90 a series of subdivisions provided with apertures, of sliding cards or charts containing respectively the interest-values of units, tens, and hundreds, &c., which cards are subdivided the same as the cover of the box, and 95 have longitudinal slots, through which the numerals on the lower cards can be seen, substantially as herein shown and described, and for the purpose set forth.

4. In an interest-calculator, the combination, 100 with the cover J, divided into subdivisions a , and provided with apertures G, G', G², G³, and H, of the interest charts or cards A, B, C, and D, subdivided the same as the cover J, the cards B, C, and D being provided with 105 longitudinal slots L, substantially as herein shown and described, and for the purpose set forth.

MARSHALL TODD.

Witnesses:

C. E. FARABEE,
JAMES A. DOWNARD.