W. J. GURD.
Interest Calculator.

Fig.1

Fig.2

Fig.3
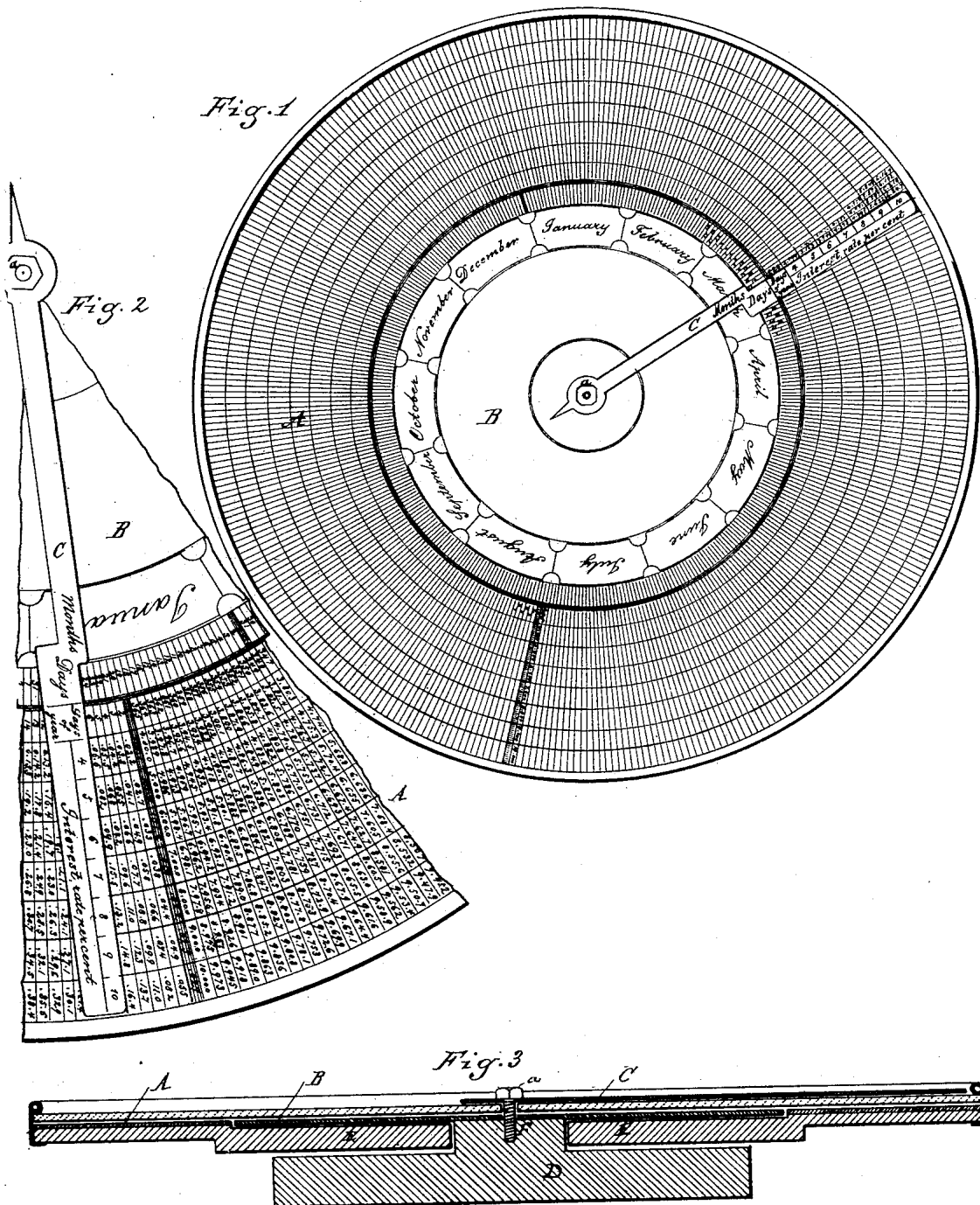
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UNITED STATES PATENT OFFICE.

WILLIAM J. GURD, OF SARNIA, ONTARIO, CANADA.

INTEREST-CALCULATOR.

To all whom it may concern:

Be it known that I, WILLIAM J. GURD, of Sarnia, in the county of Lambton, in the Province of Ontario, Canada, have invented cer-
5 tain new and useful Improvements in Calculators for Interest and Days; and I do hereby declare that the following is a full, clear, and exact description of the same.

The object of this invention is to combine
10 two revolving disks and an indicator, whereby the days from one period to another can be read off by adjustment of the disks, and by the adjustment of a pointer to the days interest therefor at various rates is indicated along the
15 edge of the pointer; and my invention consists in certain improvements in the details of construction of the parts, as hereinafter more fully set forth, and pointed out in the claim.

Figure 1 is a plan view. Fig. 2 is a sec-
20 tional view enlarged. Fig. 3 is a central vertical section.

In the accompanying drawings, which form a part of this specification, A represents an annular disk, and B a center disk, both revolv-
25 ing concentrically, or one may be fixed and the other movable. One of the disks is inscribed in concentric circles with calculations of interest from one to three hundred and sixty-five days, at rates varying from four to ten per
30 cent., each rate occupying one circle. Another circle is inscribed with figures of days consecutively from 1 to 365.

C is a pointer pivoted to the center of the inner dial and extending radially over the
35 outer dial. It is marked with subdivisions corresponding to the concentric lines of the dial, and inscribed with the denominations of the rate at which the interest was calculated, whereby a ready reference is obtained and con-
40 fusion avoided. In like manner the subdivisions are marked to denote the days circle of one year, and the sum of the interest is read from the disk along the radial edge of the pointer.

45 The other disk is inscribed concentrically with names of the months and days of each month, the pointer indicating the circles by marks on the subdivisions corresponding thereto.

50 By the adjustment of the disks A and B the number of days from one period of the year to another can be ascertained by placing the day

of the month from which the period is to be calculated opposite figure 1 of the days in the year, and opposite the day of the month to 55 which the period is to be calculated will be found the number of the days which intervene.

Preferably the sums in the concentric circle are the quotients calculated—say one hundred dollars at the specified rate of interest from one 60 to three hundred and sixty-five days—and any number of concentric circles can be inscribed corresponding to the several rates at which the interest is calculated.

D (see Fig. 3) represents a base-block for 65 supporting the calculator, provided with a central hub, F, adapted to fit in a central orifice in the circular plate E, to the upper face of the outer part of which is secured the ring or disk A. The plate E has a circular central recess 70 adapted to receive the disk B, the upper face of which is flush with the ring A. The disk B is attached centrally to the upper face of the hub F, and is stationary, while the ring A, secured to the outer part of the circular 75 plate E, revolves with it.

The pointer C is pivoted by means of the screw a centrally in the hub F, and is free to revolve on it, so that it may be swung around to occupy any desired position in determining 80 the interest on any uniform sum at one or more rates for any time, the divisions for rates on the pointer lying opposite the calculated interests between the concentric circles on the ring A, the edge of the pointer lying on the 85 desired month and day on the disk B, and also along the interest-spaces between the concentric circles on the ring A, so that the interests at different rates of a uniform sum can be readily read. 90

What I claim as my invention is—

The combination of the base D, having the central hub, F, plate E, provided with a central orifice and central circular recess, revolving ring A, secured to the outer face of said 95 plate, stationary disk B, flush with the ring attached to the hub and fitting in the recess in the plate, and revolving pointer C, centrally pivoted in the hub, substantially as described, and for the purpose set forth.

WILLIAM J. GURD.

Witnesses:
H. S. SPRAGUE,
CHARLES J. HUNT.