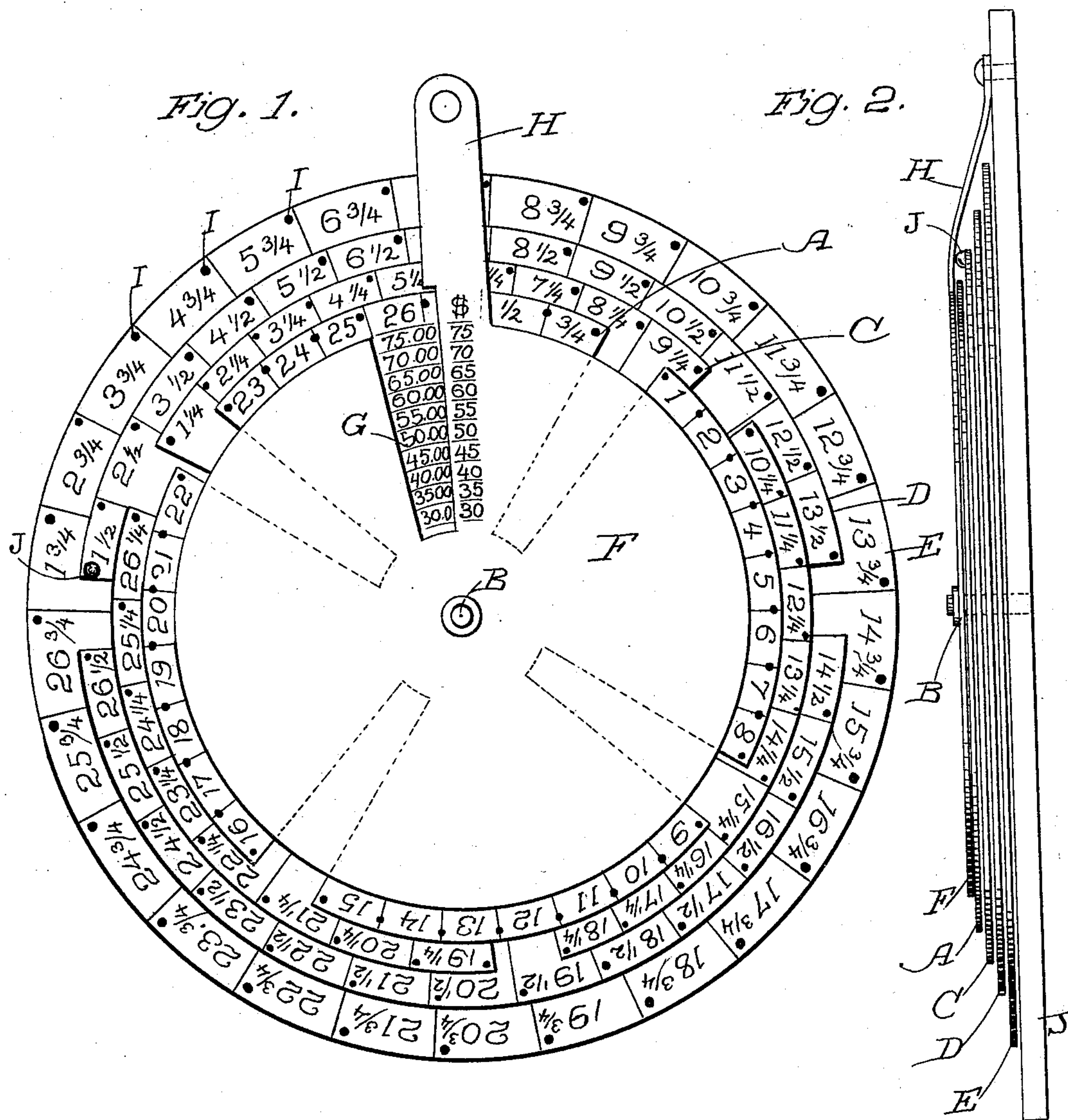


(No Model.)

D. L. ALBERT.
CALCULATOR FOR WAGES.

No. 518,438.

Patented Apr. 17, 1894.



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UNITED STATES PATENT OFFICE.

DAVID L. ALBERT, OF SAN FRANCISCO, CALIFORNIA.

CALCULATOR FOR WAGES.

SPECIFICATION forming part of Letters Patent No. 518,438, dated April 17, 1894.

Application filed November 28, 1893. Serial No. 492,253. (No model.)

To all whom it may concern:

Be it known that I, DAVID L. ALBERT, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Mechanical Calculators; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to a device for mechanically calculating. It is especially adapted to calculating the wages of men in partial periods, whether they are paid by the month or other term.

It consists in certain details of construction which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a face view of my device removed from its base or support. Fig. 2 is an edge view of the same upon a suitable base or support.

The object of my invention is to provide in a single implement, a means for instantly ascertaining the wages of men for any number of days and parts of days at any rate per month.

A is a disk having around its periphery radially spaced divisions which indicate the number of working days in every month, and it is also provided with additional spaces for one fourth, one half and three quarters of a day, or the smallest proportion for which wages are to be paid. This disk is pivoted on a suitable support or base S so as to be movable about its central pivot B. Behind this disk is pivoted another disk C of sufficiently larger diameter to allow the figures around the periphery of the outer disk to be visible, and the periphery of this disk indicates days and quarters of days, as, 1, $\frac{1}{4}$, 2, $\frac{1}{4}$, 3, $\frac{1}{4}$ up to the full number of working days. Behind this disk again, are pivoted similar disks D and E of successively larger diameter, and the disk D having upon its periphery the half days as 1, $\frac{1}{2}$, 2, $\frac{1}{2}$, &c., and the disk E having marked upon its periphery the three quarters as 1, $\frac{3}{4}$, 2, $\frac{3}{4}$, &c. Above all these is fixed the disk F which has a slot G made radially toward its center, one side of the slot standing in radial line from the center to the circumference, and having marked upon it the rate of wages per month, as from \$30 to

\$75. Any other figures or rates may be used, depending upon the class of labor that is being paid for. In line with these radial figures, extends an arm H, the outer end of which is secured to the base or support S, so that the disks all turn beneath this arm.

Concentric circles are made upon the various disks A C D and E, and upon these circles are printed in radial lines the wages payable for the number of days and parts of days which are shown on the periphery of the disks in radial line with these figures.

In order to allow the figures upon the lowest disks to be seen, each of the disks A, C, D, have radial slots made in their peripheries, and when these slots are brought into line, and in proximity with the monthly rate upon the outermost disk it will allow the innermost disk to be inspected. Upon the edge of each of these slots will be fixed a raised knob or button J similar to the one shown upon the disk D in Fig. 1, these buttons being just high enough to strike against the edge of the arm H, and thus prevent the disks from being turned by the frictional contact of the other disks which are being moved beneath or above them. At the same time the projection is so slight that when a little force is applied to the disk, the button will be moved beneath the arm which checks it, and passing beyond it will be free to turn with ease. The outermost disk F has a projecting arm H extending radially outward in line with the figures representing the rate per month, as previously described, and this forms the stop for each of these buttons, and also the stop or guide by which the various disks are set to the desired position. Each of the disks has holes I made around its periphery through which the point of a pencil or other similar pointed instrument is introduced for the purpose of turning the disks. If, for instance, it is desired to turn the disk representing days to bring any particular number of days into position, the pencil is introduced into the hole at the right of the figure representing the number of days, and the disk is then moved around until the pencil strikes the side of the arm or stop H. This arrests the disk with the radial figures which are in line with this number of days, exposed through the slot in the outer disk, and as

these figures are calculated for each rate of wages along the line of the slot, the rate for that number of days is seen at once. In the same manner, if any number of days and an additional quarter are to be calculated the next disk below is turned until that number of days and its fraction are brought to the same point. The upper disk is retained with its open slot in position by the button or stop previously described, so that the figures on the second disk can be inspected from it. If the third disk is to be inspected, the second disk is moved until one of the radial slots in it is brought to position to coincide with the slot in the outer disk by the side of the rates, and in the same manner, the first, second, and third disks are brought to similar positions for the purpose of inspecting the lowermost disk when that is to be used. In each case the stops or buttons at the edge of the slots prevent the disks from being moved out of position, but allow them to be turned by the use of a little more force, when the projections will slip beneath the stop and pass it. The outer movable disk A is perforated with four radial slots which will bring it into the proper position to allow the next disk to be inspected by turning it a partial rotation, it will not be necessary to turn it backward. The second has three slots made in it, and the third one has two, each of the slots having the stop upon its edge as previously described. Now, if any of the lower disks are to be turned when the open slots above them are just past the arm H, these upper disks will be carried along by frictional contact until stopped by the button upon the edge of one of the open slots. The lower disk will continue to be moved until the proper point is exposed through the slots in the upper disk or disks. In this manner it is possible to accurately ascertain the wages of a large number of men who have worked different lengths of time and at different wages per week, month or year, without the slow process of calculating each particular case.

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

1. A calculating device consisting of a series of disks of successively increasing diame-

ter from the top toward the bottom, said disks having marked upon the periphery whole days and whole days and fractions, respectively, an outer stationary disk through which and the inner movable tabular disks a central pivot pin passes, said outer disk having a radial slot made in it with the rate of wages per month marked upon one side of the slot, and an arm extending radially outwardly in line with this table and above the edges of the movable disks so that they pass beneath it, holes made in the peripheries of each of the disks for the insertion of an implement by which they are turned so as to bring any days or fractions of days into line with the radial slot in the outer disk, and corresponding radial slots made through the successive inner disks whereby the lines of figures upon any of the lower disks may be seen through said slots, substantially as herein described.

2. A mechanical calculating device, consisting of a series of disks increasing in diameter from the outermost to the innermost all turning upon a common pivot pin, an outer fixed disk through which the said pin passes, said outer disk having a radial slot made upon one side with the different rates of wages paid per month marked upon the edge of said slot, and a radial arm projecting outwardly in line with said line of figures, figures arranged radially upon each of the inner disks representing the amount of wages payable for any number of days and fractions of days at any rate per month, slots made through each of said inner disks whereby they may be brought to coincide with the slot in the outer disk to allow the figures upon the disks beneath to be inspected when brought into line with said slots, and raised stops upon the edges of said slots adapted to form a contact with the projecting arm of the outer disk, and thus retain the disks in a stationary position with the slots in line while the other disks are being turned beneath them, substantially as herein described.

In witness whereof I have hereunto set my hand.

DAVID L. ALBERT.

Witnesses:

S. H. NOURSE,
H. F. ASCHECK.