No. 894,042. PATENTED JULY 21, 1908.

G. E. O'BRIEN.

WAGE COMPUTING MACHINE.

APPLICATION FILED SEPT. 12, 1907.

2 SHEETS—SHEET 1.

Fig. 1.

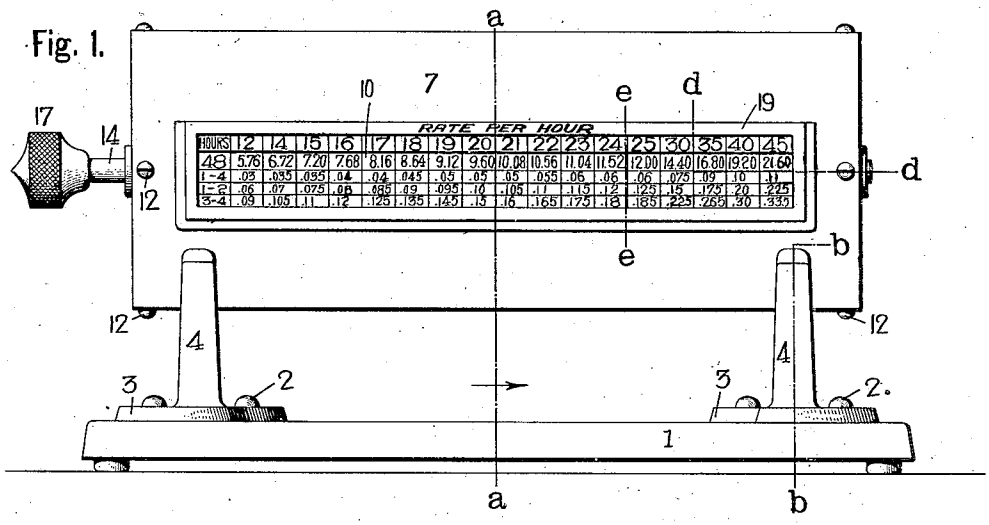


Fig. 2.

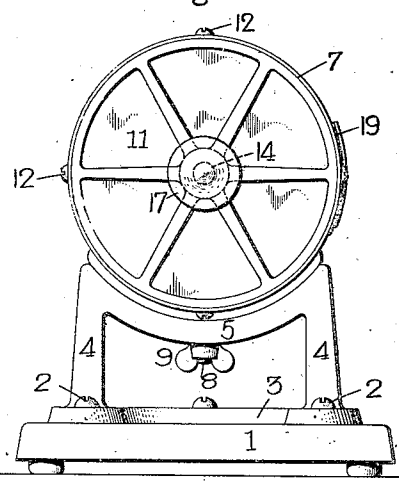


Fig. 3.

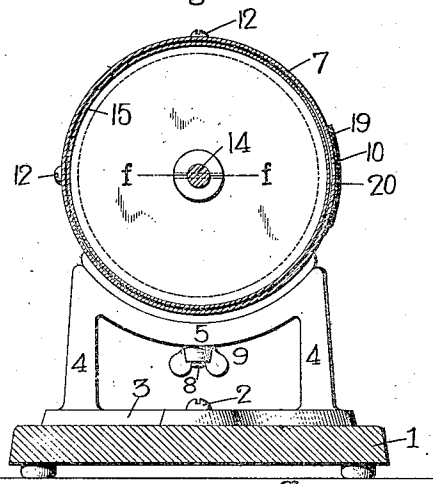


Fig. 4.

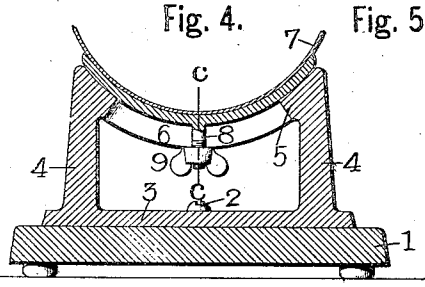


Fig. 5.

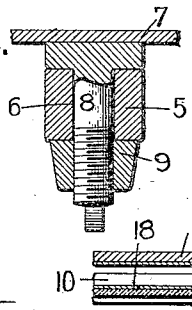


Fig. 6.

Witnesses.

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WAGE COMPUTING MACHINE.

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2 SHEETS—SHEET 2.

Fig. 7.

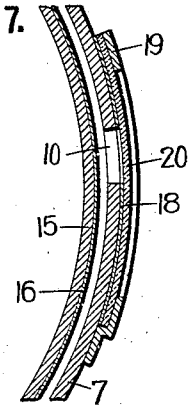


Fig. 8.

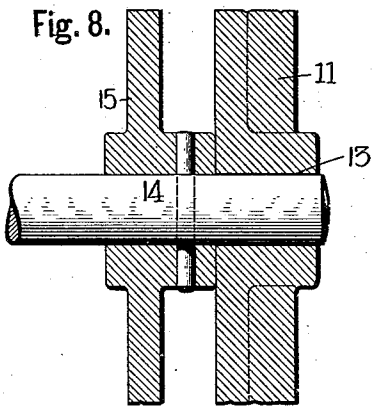


Fig. 9.

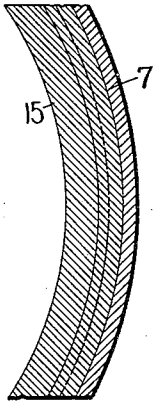


Fig. 10.

18

HOURS.	12	14	15	16	17	18	19	20	21	22	23	24	25	3
1-4	.03	.035	.035	.04	.04	.045	.05	.05	.05	.055	.06	.06	.06	.0
1-2	.06	.07	.075	.08	.085	.09	.095	.10	.105	.11	.115	.12	.125	.1
3-4	.09	.105	.11	.12	.125	.135	.145	.15	.16	.165	.175	.18	.185	.1

Fig. 11.

16

1	.12	.14	.15	.16	.17	.18	.19	.20	.21	.22	.23	.24	.25	
2	.24	.28	.30	.32	.34	.36	.38	.40	.42	.44	.46	.48	.50	
3	.36	.42	.45	.48	.51	.54	.57	.60	.63	.66	.69	.72	.75	
4	.48	.56	.60	.64	.68	.72	.76	.80	.84	.88	.92	.96	1.00	1
5	.60	.70	.75	.80	.85	.90	.95	1.00	1.05	1.10	1.15	1.20	1.25	1
6	.72	.84	.90	.96	1.02	1.08	1.14	1.20	1.26	1.32	1.38	1.44	1.50	1
7	.84	.98	1.05	1.12	1.19	1.26	1.33	1.40	1.47	1.54	1.61	1.68	1.75	2
8	.96	1.12	1.20	1.28	1.36	1.44	1.52	1.60	1.68	1.76	1.84	1.92	2.00	2
9	1.08	1.26	1.35	1.44	1.53	1.62	1.71	1.80	1.89	1.98	2.07	2.16	2.25	2
10	1.20	1.40	1.50	1.60	1.70	1.80	1.90	2.00	2.10	2.20	2.30	2.40	2.50	3
11	1.32	1.54	1.65	1.76	1.87	1.98	2.09	2.20	2.31	2.42	2.53	2.64	2.75	3
12	1.44	1.68	1.80	1.92	2.04	2.16	2.28	2.40	2.52	2.64	2.76	2.88	3.00	3
13	1.56	1.82	1.95	2.08	2.21	2.34	2.47	2.60	2.73	2.86	2.99	3.12	3.25	3
14	1.68	1.96	2.10	2.24	2.38	2.52	2.66	2.80	2.94	3.08	3.22	3.36	3.50	4
15	1.80	2.10	2.25	2.40	2.55	2.70	2.85	3.00	3.15	3.30	3.45	3.60	3.75	4
16	1.92	2.24	2.40	2.56	2.72	2.88	3.04	3.20	3.36	3.52	3.68	3.84	4.00	4
17	2.04	2.38	2.55	2.72	2.89	3.06	3.23	3.40	3.57	3.74	3.91	4.08	4.25	5

Witnesses.

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UNITED STATES PATENT OFFICE.

GEORGE E. O'BRIEN, OF BUFFALO, NEW YORK.

WAGE-COMPUTING MACHINE.

No. 894,042. Specification of Letters Patent. Patented July 21, 1908.

Application filed September 12, 1907. Serial No. 392,517.

To all whom it may concern:

Be it known that I, GEORGE E. O'BRIEN, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented a certain new and useful Improvement in Wage-Computing Machines, of which the following is a specification.

This invention relates to an improved wage computing device and the object of the invention is to rapidly and accurately compute by mechanical means the entire amount due a workman or employee when the hours of employment and wage per hour are known.

The invention also relates to certain details of construction of the device and the wage computing chart or scale forming a part thereof and will be hereinafter described and claimed, reference being had to the accompanying drawings, in which,—

Figure 1 is a front elevation of the improved wage computing machine. Fig. 2 is an end elevation of the improved wage computing machine. Fig. 3 is a transverse section through the improved wage computing machine on line *a a*, Fig. 1. Fig. 4 is a transverse section on line *b b*, Fig. 1, showing the manner of adjustably securing the drum or casing to the supporting brackets. Fig. 5 is an enlarged section on line *c c*, Fig. 4. Fig. 6 is an enlarged fragmentary horizontal section through the improved wage computing machine on line *d d*, Fig. 1. Fig. 7 is an enlarged fragmentary transverse section on line *e e*, Fig. 1. Fig. 8 is an enlarged fragmentary transverse section on line *f f*, Fig. 3, through two of the end pieces showing the bearing of the supporting shaft. Fig. 9 is a fragmentary section on line *g g*, Fig. 6. Fig. 10 is an enlarged fragmentary detached view of the outer scale which is mounted on the casing. Fig. 11 is an enlarged fragmentary view of the chart.

In referring to the drawings in detail, like numerals designate like parts.

This improved device has a base 1, of suitable material upon which upright standards are secured by screws 2, or the like.

Two standards are preferably employed of similar form, each of which consists of a horizontal lower member 3, through which the screws 2, are passed to secure the standard to the base; two vertical side members 4, in separated arrangement and a curved top member 5, extending between and connecting the upper extremities of the side members. The curved top members are provided with longitudinal slots 6.

Upon the standards is mounted an outer casing or drum 7, of cylindrical form and provided with screw threaded extensions 8, which project through the slots 6. Butterfly nuts 9, are fitted upon the lower projecting ends of the extensions 8, for the purpose of locking the casing to the standards.

The casing has a horizontal longitudinal slot or view opening 10, and above the slot are placed in successive order from left to right at approximately regular intervals the word "Hours" and the different wage rates per hour. The words "Rate per hour" appear above the row of indicating wage per hour numbers. Below the slot is placed a scale for indicating the wages due for fractions of an hour at the different scales.

At the left and vertically below the words "Hours" over the slot are arranged the fractions $\frac{1}{4}$ $\frac{1}{2}$ and $\frac{3}{4}$ in a vertical column which indicate respectively a quarter of an hour, one half of an hour and three quarters of an hour. Extending toward the right in three horizontal rows are decimals indicating respectively the wage per fractions of an hour. These decimals are arranged in vertical columns and each column is located vertically beneath the proper wage rate per hour of which it indicates the wage for the fraction thereof according to the fractional hour scale placed at the left of the vertical columns.

The casing or drum 7 has its ends closed by circular end pieces 11 which are secured therein by screws 12 so as to be easily removable. The end pieces are provided with central circular journal openings 13 in which a longitudinal shaft 14 is journaled.

The casing can be regulated to bring the view opening or slot in the best position to be quickly viewed by the eye of the operator by loosening the butterfly nuts 9 and turning the casing extensions 8 in the slots 6 of the two members 5 of the support.

A cylinder 15, slightly smaller in circumference than the casing is mounted on the shaft 14 and attached to its periphery is a wage computing chart which consists of figures in horizontal rows and vertical columns printed upon a suitable sheet of paper 16, or the like.

The horizontal rows of figures are arranged so that they may be viewed through the slot 10, as the cylinder is revolved, the left hand

column indicating the number of hours and being located so that the figure representing the proper number of hours will be exposed in the opening 10 vertically beneath the word "Hours" above the slot in the casing. This column will be hereafter referred to as the hour indicating column.

To the right of the hour indicating column are columns of figures which each indicate the total wages due for the numbers of hours indicated by the numeral horizontally to the left in the hour computing column and at the rate per hour indicated by the numeral located vertically over the slot 10. Each figure or set of figures exposed through the slot is the product of the number of hours indicated by the numeral at the extreme left of the horizontal row in which the figure or set of figures is located multiplied by the wage rate per hour indicated by the numeral or numerals at the top of the slot vertically over said figure or set of figures. Thus in Fig. 1, eight dollars and sixty four cents is the product of forty eight hours multiplied by eighteen cents the rate per hour. These columns will be hereafter designated as the total wage columns.

For illustration referring to Fig. 1 a workman receiving twenty cents per hour would for forty eight and three quarters hours work have coming to him nine dollars and sixty cents which will be found exposed through the slot and vertically beneath the twenty cent rate per hour plus fifteen cents which will be found in the horizontal row to the right of the three quarter fraction of an hour and in the vertical column below the twenty cent wage rate per hour. The chart on the cylinder can be easily changed by loosening the screws 12, removing the end piece 11 and withdrawing the cylinder from the casing. The left projecting end of the shaft is provided with a knurled knob 17 for convenience in turning the cylinder. The scale of the rate per hour and the fractional parts of the hour is printed upon a paper sheet 18 of suitable size and provided with a slot corresponding to the slot in the drum or casing. Upon the outer surface of the casing is fastened a strip 19 in proximity to the slot 10 which is separated sufficiently from the surface of the casing to provide a groove in which the sheet 18 and a protecting cover 20 of celluloid or similar transparent material is fitted and supported see Fig. 6.

It will be observed by referring to Fig. 1, that the strip 19 does not extend over the slot so that the sheet 18 and its protecting cover can be easily removed or replaced in position.

The great advantage of this device is that given the number of hours worked and the rate per hour, the amount due can be instantly ascertained thereby saving the laborious labor of manually computing the same.

In computing with this device the operator turns the cylinder to expose through the slot the number of hours desired and then follows the slot toward the right with his eye to the figure or set of figures exposed in the slot vertically below the desired rate per hour which is the total amount due for the full hours desired at the required rate per hour.

If the employee's time includes a fractional part of an hour, the amount due for said fractional part can be ascertained from the table below the slot and easily added mentally by the operator to the told amount due for the full hours to give the entire amount due to the employee.

The purpose in making the strip 18, and the sheet 16, removable is to provide means for easily changing, reversing or altering the scale and chart when desired.

I claim as my invention:—

1. In a device of the class described, a base provided with slots, an outer casing having extensions adjustably fitting in the slots of the base; said casing being also provided with a view opening and a scale of different rates of wages per hour in proximity to said opening and a cylinder within the casing having a wage computing chart with the hours in a column and the wage figures in columns corresponding to the hour column and arranged in line with the proper wage rate of the scale on the casing.

2. In a device of the class described, a base having slotted supports, an outer casing having extensions fitting in the slots in the supports of the base; said casing being also provided with a longitudinal slot and a scale of different rates of wages per hour in proximity to the slot and an inner cylinder rotatably mounted in the casing and having a chart containing a column of hours and columns of total wages due which are adapted to be successively exposed through the slot in the casing by rotation of the cylinder.

3. In a device of the class described, the combination with a casing having a view opening and extensions, of a support for said casing consisting of a base, standards mounted on the base and each including a horizontal lower member, vertical side members and a curved top member in which the casing is mounted; said curved top members having slots in which the extensions of the casing adjustably fit, substantially as set forth.

4. In a device of the class described, the combination with a casing having a view opening and the extensions, of supports for said casing having slots through which the extensions fit, substantially as set forth.

5. In a device of the class described, the combination with a casing having a view

opening and screw threaded extensions, of supports for said casing having slots through which the extensions fit and lock nuts on the projecting ends of said extensions, substantially as set forth.

6. In a device of the class described, the combination with a casing having a longitudinally extending view opening and screw threaded extensions, of supports for said casing having curved top members in which the casing is mounted; said curved top members being provided with slots through which the extensions fit and lock nuts on the projecting ends of said extensions, substantially as set forth.

7. In a device of the class described, a support having slotted members, an outer casing provided with extensions adapted to be adjustably secured in the slots of the slotted members and said casing having a longitudinal slot the position of which may be regulated by adjusting the casing in the slotted members of the said support and said casing also being provided with a scale of different rates of wages per hour above the slot and a scale of wage rates for fractional parts of an hour below the slot arranged in vertical columns and vertically below the proper wage rate per hour of which they denote fractions and an inner cylinder rotatably mounted in the casing and having a chart containing a vertical column of hours and vertical columns of total wages due which are adapted to be successfully exposed through the slot in the casing by rotation of the cylinder and above the fractional scale, each figure or set of figures exposed through the slot being the product of the number of hours indicated multiplied by the wage rate per hour located vertically above the figure or set of figures.

8. In a device of the class described, the combination with a casing having a view opening and the extensions, of supports for said casing having curved members provided with longitudinal slots through which the extensions fit and lock nuts on the projecting ends of said extensions, substantially as set forth.

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Witnesses:
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