W. LEIGH.

VITA METER.

APPLICATION FILED NOV. 30, 1918.

1,317,375.

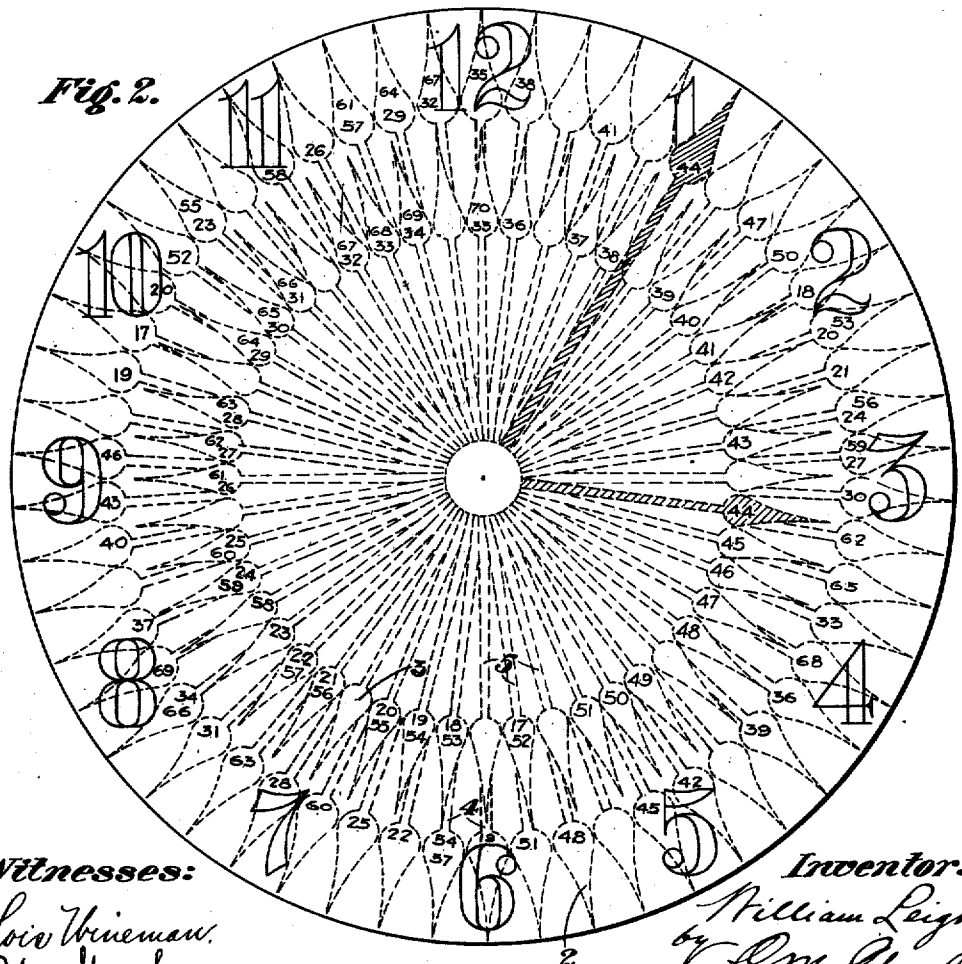
Patented Sept. 30, 1919.

2 SHEETS—SHEET 1.

Fig. 1.

AGE	A.M.	AGE	A.M.	AGE	P.M.	AGE	P.M.	AGE	P.M.
17	5.50	29	9.57	36	12.21	48	4.27	60	8.35
18	6.10	30	10.17	37	12.41	49	4.48	61	8.56
19	6.31	31	10.38	38	1.02	50	5.09	62	9.16
20	6.51	32	10.58	39	1.22	51	5.29	63	9.37
21	7.12	33	11.19	40	1.43	52	5.51	64	9.57
22	7.33	34	11.39	41	2.03	53	6.11	65	10.18
23	7.53	35	12.—	42	2.24	54	6.32	66	10.39
24	8.14	NOON		43	2.45	55	6.52	67	10.59
25	8.34			44	3.05	56	7.13	68	11.20
26	8.55			45	3.26	57	7.31	69	11.40
27	9.15			46	3.46	58	7.54	70	12.—
28	9.36			47	4.07	59	8.14	MIDNIGHT	

Fig. 2.



Witnesses:

Lois Vrieman.

J. M. Geoghegan.

Inventor:

William Leigh

by C. M. Clarke

his attorney

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THE COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

W. LEIGH.

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2 SHEETS—SHEET 2.

Fig. 3.

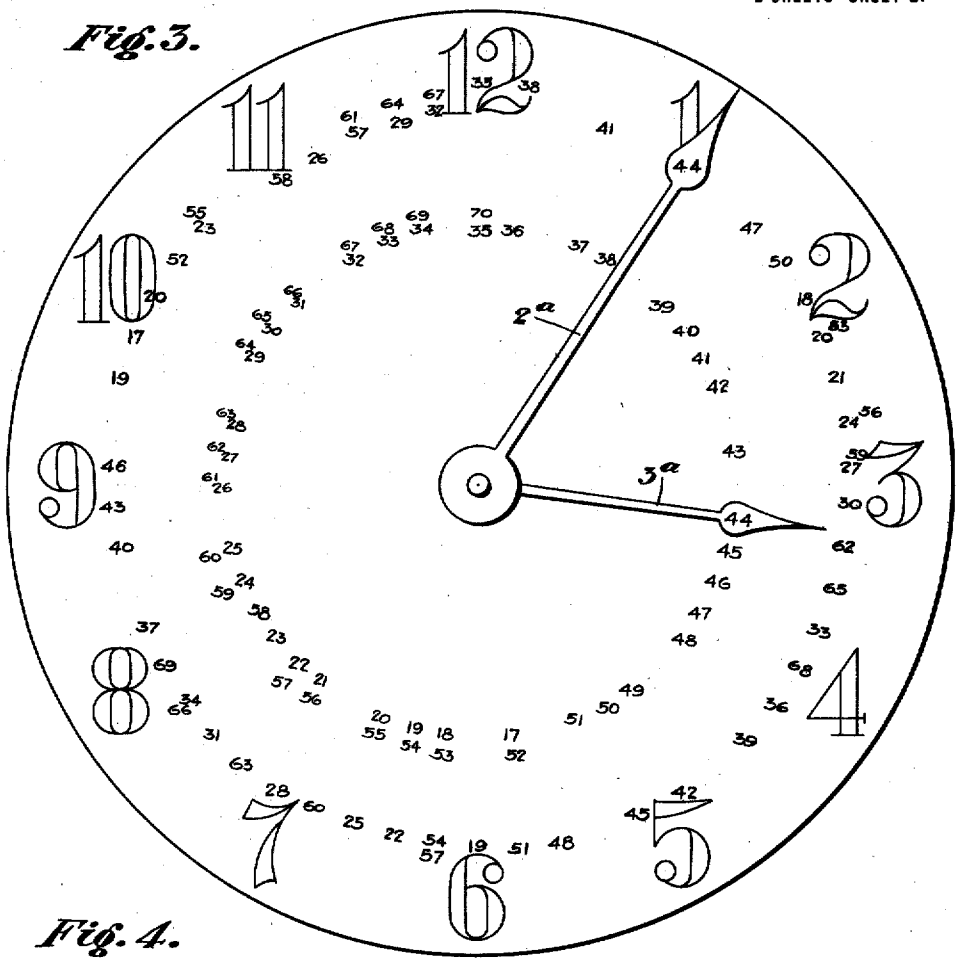
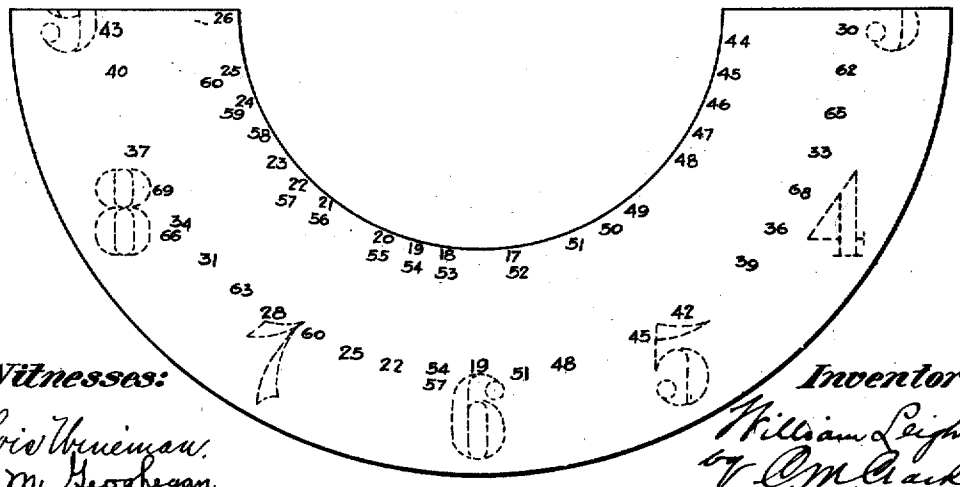


Fig. 4.



Witnesses:

Lois Brueman.

J. M. Geoghegan.

Inventor:

William Leigh

by A. M. Clarke

his attorney

UNITED STATES PATENT OFFICE.

WILLIAM LEIGH, OF CORAOPOLIS, PENNSYLVANIA.

VITA-METER.

1,317,375. Specification of Letters Patent. Patented Sept. 30, 1919.

Application filed November 30, 1918. Serial No. 264,854.

To all whom it may concern:

Be it known that I, WILLIAM LEIGH, a citizen of the United States, residing at Coraopolis, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Vita-Meters, of which the following is a specification.

My invention has in view to provide means for graphically representing upon a time piece, as the dial of a clock or watch, any known period of a lifetime, as the present age of a person, in such manner as to represent at a glance the elapsed time and the presumed unexpired or remaining time of a normal life. It provides, by series of annular positions which are successively occupied by the hands of a clock, age periods corresponding to the progress of the hands throughout the hours of a day, so arranged as to consistently compare any age of a normal lifetime, of say, seventy years, with the progress of the hours and minutes of an entire day, so that as the hands are set to the particular designating annular positions, they will indicate the relative proportionate values of the past and future.

In using the device, which I have denominated a vita meter, and which forms a part of a complete system of presenting the time values of life, I avail myself of the well known fact that practically every person of sufficient age habitually glances at a clock or watch many times in the course of each day to ascertain how much or how little time is still available in which to accomplish certain work. Furthermore, and of importance in connection with my invention, that the true significance of the time of day is ascertained more from the relative positions of the hour and minute hands rather than by any particular study of the exact hour and minute numerals to which the hands are pointing.

In view of the practical application of my invention to any of the purposes to which it may be put, as for instance, a measure of the active and mature working years of life, it is usually unnecessary to utilize or indicate the values of the years of adolescence, and in practical application of the device I have represented it as applied to an indication of the time values between the ages of seventeen and seventy. It will be understood, however, that any other arbitrary selection or range of years may be used to make the graphic comparison with the twenty-four hour period of a day, as represented by a clock dial, of the usual twelve hour divisions from midnight to noon, and noon to midnight. I therefore arrange the annular divisions in the paths of the hour hand and minute hand respectively, in any suitable number, and identify the division locations of each series with age numbers so located and according to a consecutive schedule covering the time to be indicated, in each series, as to correspond throughout the entire time period with the progressive movement of the clock hands.

In the drawings illustrating the invention and its practical application as a working system,

Figure 1 is a schedule covering a period of years of life and the corresponding time of day as represented by a clock;

Fig. 2 is a face view of a clock dial showing the annular series of age numbers in their comparative positions with relation to the hour and minute positions of the hands;

Fig. 3 is a similar view of a dial provided with adjustable hour and minute hands; and

Fig. 4 is a face view of a separate ring section bearing on its face similarly arranged indicia for application to a dial and for utilization therewith.

The schedule, Fig. 1, is self explanatory and indicates the relative time value of each year of a selected life period from seventeen to seventy years, with its corresponding "time of day" of a day of twenty-four hours, from five-fifty a. m. by successively later periods for each additional year of life, to midnight, corresponding to the end of a seventy year life.

In applying this schedule to the dial, I provide an annular series of minute hand outlines 2 and a similar series of hour hand outlines 3 representing the progressive movements of the hands of a clock, each having a radial stem outline 4 and 5 respectively, which outlines may be shown by very light, colored, water marked, or dotted lines, as indicated. Each year of the selected period, as 17 to 70, is represented throughout each series, within its appropriate outline at a position corresponding, both in hour and minute series, to the position occupied by the hour and minute hands, according to the schedule, Fig. 1.

As shown in Fig. 2, some of the outline positions may be identified by two age num-

bers and some may be blank, the accumulative progress of the schedule as worked out on a twelve hour dial requiring such double use in certain cases. If the principle of my vita meter is worked out on the dial of a twenty-four hour clock, such duplication would not occur.

While I have shown in the drawings annular series of numbered positions of a definite number, it will, of course, be apparent that the number of annular positions and their annular spacing may be increased or decreased, either as to the minute hand series or the hour hand series, and I therefore do not wish to be limited to the particular spacing or number of positions as to either series.

Thus, although in illustrating my invention, I have selected the arbitrary period of seventy divisions as representative of the years of a normal life, I do not limit my invention to this number, as it may be appropriate in some cases, without departing from the principal or primary object in view, to use a greater number to represent the years of life, in which case, a correspondingly larger number of year spaces may be provided on the dial, or in case a less number than seventy is used to more correctly indicate years of life, then a correspondingly less number of year spaces will be sufficient. Also, either the entire number of years of any selected age may be utilized, as for instance, from one to seventy, or any number of years either at the beginning or at the end of the arbitrary life period may be omitted, and the intervening more active years utilized as a working basis in carrying out the invention.

Referring further to the amplification of the invention as illustrated in Fig. 2, the dial face represented thereon having the series of outline positions 2, 3, with their stem outlines 4, 5, respectively, and with each position as to each annular series provided with the indicated age numbers as shown, these are arranged with particular relation to the time of day as it would be indicated by the actual hands of the clock, and conforming to the comparative time values of each year as consecutively worked out in the schedule, Fig. 1.

In using the vita meter in the form shown in Fig. 2, it is merely necessary to select any particular life period as represented by the number in each series, and then fill in the outline of each series, both as to pointer and stem, thus giving a visual representation of a pair of hands on the clock face. For instance, selecting the age 44, the particular position on the minute hand series and the hour hand series corresponding to such age may be filled in by pencil or blocked out by any other suitable means, as indicated in shading in Fig. 2, thus giving a visual representation of a pair of actual hands, indicating the hour of the day as 3:05 p. m., and thus noting the comparative values as to past and future years with relation to the arbitrary selected period, to wit, the twenty-four hours of a day.

As indicated in Fig. 3, the invention may also be utilized by using actual minute and hour hands 2^a and 3^a respectively, which may be turned around to any desired position following the same method or principle of construction, thus providing for continuous use of a single dial for making any desired number of indicating comparisons. In such case, the age numbers may be arranged in the two annular series around the dial, in positions corresponding to those shown in Fig. 1, but without the necessity of the outlines 2 and 3, the relative values as to the time of day being substantially the same. The hands in such case may be made of thin metal, celluloid, paper or other suitable material, pivotally mounted at the center of the dial and adapted to be set around to any position, as indicated.

It will be apparent also that the device may be easily utilized, with a little practice, to readily make a comparison of the time of life with the time of day by selecting any particular age identifying number and merely noting its position in each annular series with relation to the corresponding time of day on the dial without the necessary use of the actual hands or of their simulated outline representation.

In using the separate annular ring shown in Fig. 4, presenting both the inner and outer annular year series, such rings may be made either in their entirety or in halves and easily applied to any clock or watch dial, and used in the same manner herein described. In either of the various applications of the invention as presented, the same general principle prevails, and within the scope of the invention and the appended claims it may be variously applied, changed, modified or utilized in connection with the presentation of data, statistics or other information having to do with the passage of time and life values, as for instance, in life insurance, or in connection with any other appropriate subject.

What I claim is:

1. In combination with a clock dial and means for indicating thereon hour and minute positions of any selected time, annular series of age indicating numbers so arranged with relation to the hour and minute indicating positions as to show relatively proportionate stages of a lifetime.

2. In combination with a clock dial, annular series of age-indicating numbers arranged in progressive relation to the time-indicating positions on the dial, and inclosing outlines therefor.

3. In combination with a clock dial, annular series of age-indicating numbers arranged in progressive relation to the time-indicating positions on the dial, and inclosing outlines therefor in simulation of the hands of a clock.

4. In combination with a clock dial, annular series of age-indicating numbers arranged in progressive relation to the time-indicating positions on the dial, and adjustable hour and minute hands adapted to be located in registering position with any selected age-indicating number and to indicate an arbitrary time lapse with relation thereto.

5. In combination with a clock dial, a pre-arranged schedule showing the comparative time values of year periods throughout the hours of a day, and a clock dial having the year periods correspondingly represented thereon in hour and minute series respectively.

In testimony whereof I hereunto affix my signature.

WILLIAM LEIGH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."