Nov. 6, 1956 L. L. SAFRANEK ET AL 2,769,593

FERTILITY PERIOD INDICATOR

Filed July 11, 1955

2 Sheets-Sheet 1

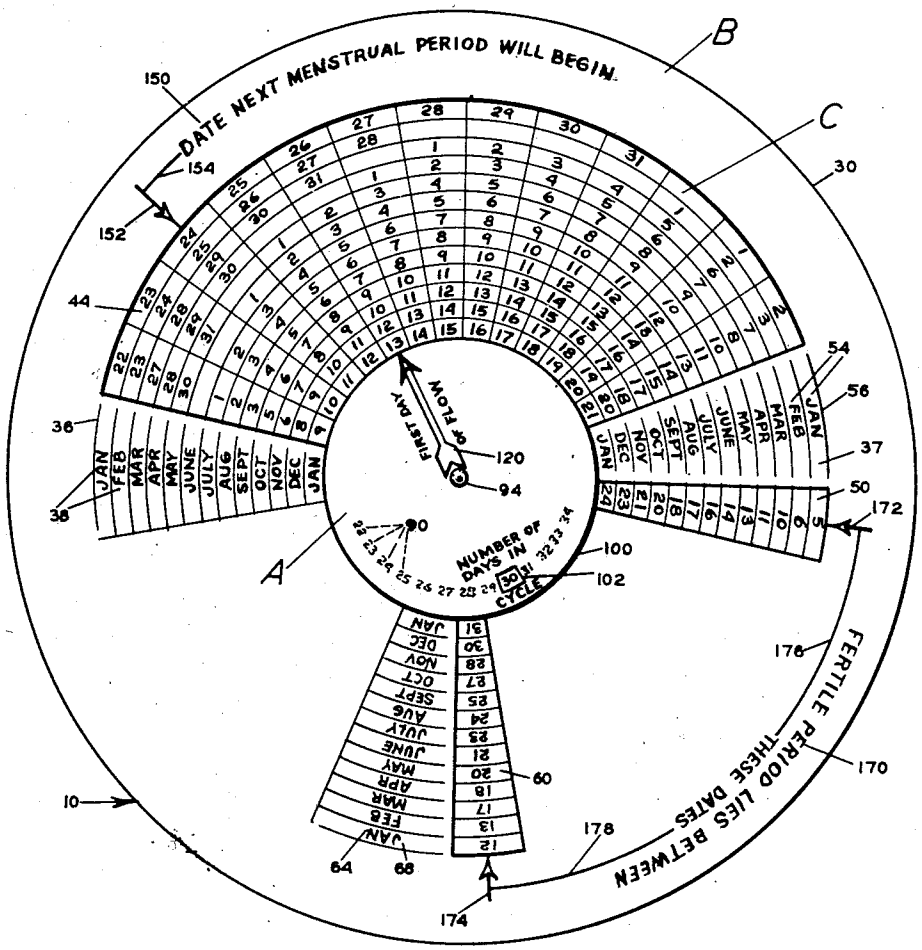


FIG. 1

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2 Sheets-Sheet 2

FIG. 2

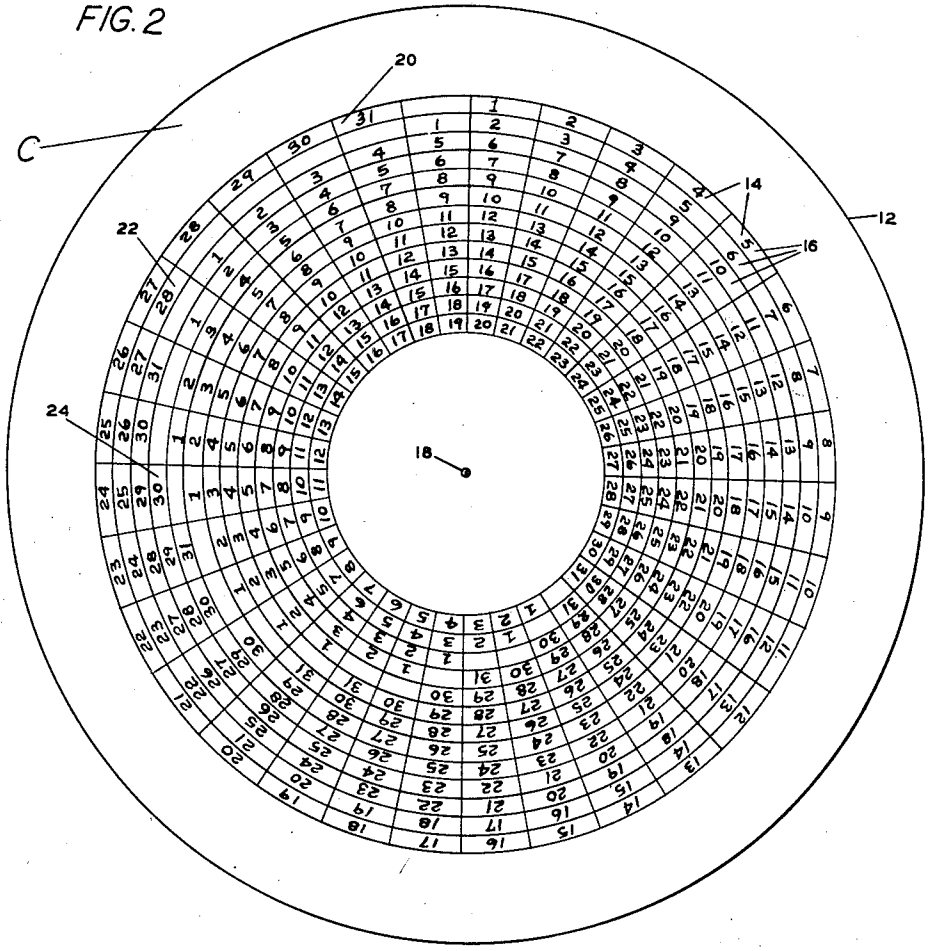
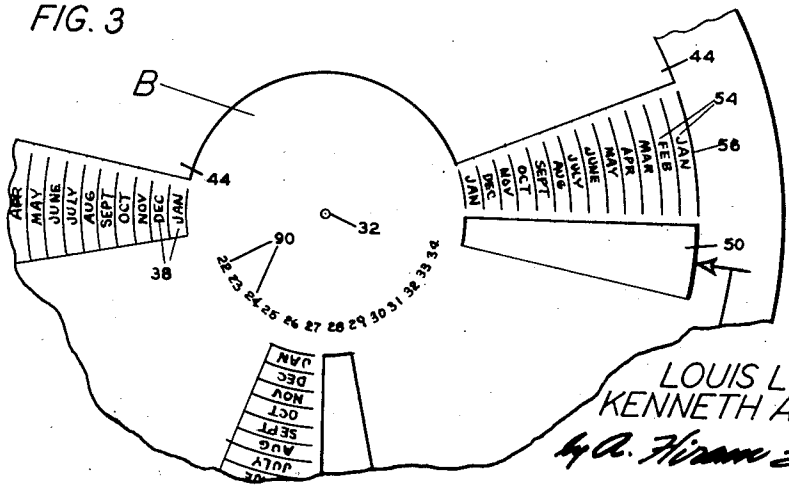


FIG. 3



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FERTILITY PERIOD INDICATOR

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3 Claims. (Cl. 235—88)

This invention relates to a new and improved time interval indicating calendar for indicating the days of fertility of a female, with less danger or error than in indicators of the prior art.

Indicators for determining the fertility period have heretofore been used, however, it is an object of this invention to provide an indicator which allows for the 28, 30 and 31 day months, without the danger of error present in the extra step of computation heretofore necessary, this being accomplished by having all of the dates of the year on one bottom disc.

The patent to Heck 2,638,272, issued May 12, 1953, is a workable indicator except for the danger of error in having the menstrual cycle figures opposite the figures of the days of the month.

Still a further object is to provide a fertility indicator as described which has on one movable member a first date of flow indicia, preferably an arrow, opposite the day numbers of first date of menstrual flow and for indicating the proper day number, rather than using cycle number figures on a movable disc opposite date figures on another movable disc with the greater danger of confusion and error.

The great danger in the use of a fertility period indicator lies in the fact that it may become improperly used, then, as it is being depended upon, pregnancy may happen at a time when it is least desired.

A further object of the invention is to provide an indicator as described, in which only one cycle-length number is visible at one setting of an upper cycle-indicating disc. In the above mentioned patent to Heck, many day numbers of the cycle are visible at once. The resultant confusion can lead to error and pregnancy at an undesired time.

Still a further object of the invention is to provide a more dependable indicator of fertility periods, making use of a window and indicator arrows on the same rotary member to avoid the necessity of numbers on one movable disc opposite numbers on another movable disc as has heretofore caused confusion and danger of error of pregnancy.

Other and further objects and advantages of the present invention will be apparent from the following detailed description, drawings and claims, the scope of the invention not being limited to the drawings themselves as the drawings are only for the purpose of illustrating a way in which the principles of this invention can be applied.

Other embodiments of the invention utilizing the same or equivalent principles may be used and structural changes may be made as desired by those skilled in the art without departing from the present invention and the purview of the appended claims.

In the drawings:

Figure 1 is a top plan view of the fertility period indicator of this invention, certain of the numbers of the days in the menstrual cycle, which are hidden by an upper disc, being shown in dotted lines;

Figure 2 is a top plan view of the lower disc;

Figure 3 is a top plan view of a portion of the center disc.

The fertility period indicator of this invention is generally indicated at **10** in Figure 1 and has a lower member or disc **12**, having the day numbers **14** of the days of a year printed thereon and disposed in rows **16** arranged concentrically with respect to and extending various distances outwardly from, a pivot point **18** disposed at the area-center of the lower member **12**.

It will be seen that each of the rows **16** contains the numbers **14** of the days of a month and that certain of the rows **16** terminate in the numeral 31, for a 31 day month, as indicated at **20**, while others terminate in the numeral 28, as indicated at **22**, and still others terminate in the numeral 30, as best seen at **24**.

A center disc or member **30** is provided and is best seen in Figure 1. The center portion of the center member **30** is best seen in Figure 3.

The center member **30** has a pivot point **32** above the pivot point **18** of the lower member **12**, and the center member **30** has month markings thereon arranged in a radially extending column **36**, the month markings **38** being arranged in rows concentric with and extending various distances outwardly from the pivot point **32** and disposed opposite and in registry with the rows **16**.

The rows of month markings **38** are arranged adjacent the side edge of a window opening **44** cut out of the center disc or member **30**. The window **44** is positioned above and of a substantial size and shape to expose the rows **16** of the day numbers **14** of a year printed on the lower member or disc **12**, as best seen in Figure 1.

On the opposite side of the window **44** a second column of month markings is indicated at **54** and has month numbers **56** thereon arranged in concentric rows opposite the rows **16**.

The rows **16** and the rows **38** are both preferably separated from one another by clear lines so as to hold the danger of confusion and error to a minimum.

The member **30** has a first and larger window **44** therethrough which is disposed above and for exposing certain ones of the day numbers in the columns **14** on the lower member **12**. The center member **30** also has a second window **50** therethrough and of a shape for exposing preferably only one of the columns **16**, the second window **50** being adjacent to the markings **56** in the column **54** of the month markings.

The window **50** is in a position for indicating the first date of the period in which the days of actual fertility lie, the period of actual fertility being only about 48 hours. The center member has a third window **60** therethrough of a shape for exposing another one of the columns **14** different from that exposed by the second window **50**.

The center member **30** is provided with month markings **64** thereon adjacent the third window **60** and along side the third window **60**, the month markings **64** being respectively arranged in positions opposite corresponding ones of the concentric rows **16** and being arranged in a column **68** extending radially outward from the pivot point **32**.

The third window **60** is in a position for indicating the last date of the larger period in which the period of actual fertility is disposed.

The center member **30** has a circular row of cycle numbers **90** arranged concentrically about the pivot point **32** and for indicating the cycle days of the menstrual cycle.

The indicator further has a top disc or top member on it, best seen in Figure 1, which is preferably also of a disc shape.

The top member **100** is of a smaller size than the cen-

ter member **30** for not unduly overlaying the windows of the center member **30**.

The top member **100** has a pivot point at its center disposed above the pivot point of the lower and center members and a securing member **94** is provided and extends through apertures in the centers of the discs **12**, **30** and **100**, whereby these discs are secured together at their pivot points for independent rotation.

The top member **100** further has a window **102** therethrough for exposing and indicating only one of the days **90** of the cycle printed on the center disc **30**.

The top member **100** also has an indicia **120** thereon preferably in the form of an arrow pointing outwardly to the circumference of the top member **100**.

The arrow **120** is disposable opposite the columns **16** of day numbers for indicating a desired one of the columns of day numbers on the lower member **12**, the arrow **120** indicating the first day of the flow. The words "First Date of Flow" are preferably printed on the top disc **100**.

It is also desirable that the top disc **100** be provided with the words "Number of Days in Cycle" adjacent the window **102**.

The center disc **30** is preferably provided with the words "Date Next Menstrual Period Will Begin" printed opposite the window **44**, and between the window **44** and the circumference of the center member **30**. For this reason the window **44** is preferably substantially in the shape of sector of a circle with the outermost edge of the window **44** being of an arc-shape concentric with the pivot point **32** and being spaced from the outer circumference of the disc member **34** permitting the printing of the words **150** thereon.

An indicating arrow **152** is provided in conjunction with the wording **150** and is preferably disposed upon the center member **30** with its point disposed adjacent the edge of the larger first window **44**, and a line **154** is provided leading to the first word of the words **150** for indicating the large first window **44**.

On the opposite side of the center disc **30** and between the second and third windows **50** and **60** words are printed at **170** as follows: "Fertile Period Lies Between These Dates."

Two arrows, **172** and **174**, are placed on the center disc **30** and on the outer edges of the windows **50** and **60** respectively with the points of the arrows pointing inwardly toward the center **32** for indicating the columns **16** of figures disposed in the respective windows **50** and **60**.

Lines **176** and **178** are provided leading from the words **170** to the arrows **172** and **174** to indicate the meaning of the arrows.

The discs are preferably provided with letters to further assist in following the operating instructions and the top disc **100** bears the letter A, the center disc **30** the letter B, and the bottom disc **12**, the letter C.

In operation, the following steps are used:

1. Set the window **102** of the top disc A over the days in the known cycle.

2. Hold the bottom disc C still, and turn the center disc B, letting the top disc A move with the center disc B until the flow arrow **120** on the top disc A points to that one of the columns **16** containing the number of the first date of flow of menstrual fluid, the correct date number for the first date of flow being found only in that column **16** which is directly opposite the correct months, the months **38** being found at the sides of the largest window **44** of the three windows in the center disc **30**.

3. Find in the two small second and third windows **50** and **60** the dates which start and end the fertility period. Read carefully opposite only the correct month.

4. If your cycle changes in length, then first find a fertile period by using your shortest cycle in step 1. Then compute again using your longest cycle. Both of the resulting fertile periods are to be considered parts of your total period of possibility of fertility.

As thus described, it will be seen that this invention has provided a fertility indicator fulfilling the above described objects of the invention.

We claim:

1. A fertility period indicator comprising: a low member having a pivot point, approximately adjacent an area-center of said lower member, said lower member having the day numbers of the days of a year on an upper side thereof and arranged in radially extending columns and also arranged in rows concentric with and extending various distances outwardly from said pivot point, a center member disposed above said lower member and having a first window therethrough disposed above and for exposing certain ones of said day numbers on said lower member, said center member having a pivot-point above the pivot point of said lower member, said center member having month markings thereon adjacent said first window and respectively arranged in positions opposite corresponding ones of said concentric rows, said center member having a second window therethrough and of a shape for exposing one of said columns, said second window being adjacent said month markings for the reading of day numbers in said second window opposite said month markings, said second window being in a position for indicating the first date of a period in which the days of actual fertility lie, said center member having a third window therethrough of a shape for exposing another of said columns different from that column exposed by said second window, and said center member having month markings thereon adjacent said third window and respectively arranged in positions opposite corresponding ones of said concentric rows, said third window being in a position for indicating the last date of said period, said center member having a circular row of day numbers thereon for indicating cycle days and arranged concentric with said pivot-point, and a top member disposed above and having a smaller size than said center member for not unduly overlaying said windows, said top member having a pivot-point above the pivot-points of said lower and center members, said top member having a window therethrough for exposing and indicating one of the days in said circular row of cycle days, said top member also having an indicia thereon adjacent an edge thereof and disposable opposite said columns and for indicating one of said columns of day numbers on said lower member, and means for pivotally securing said members together at their pivot points for independent rotation.

2. A fertility period indicator comprising: a lower member having a pivot point, approximately adjacent an area-center of said lower member, said lower member having the day numbers of the days of a year on an upper side thereof and arranged in radially extending columns and also arranged in rows concentric with and extending various distances outwardly from said pivot point, a center member disposed above said lower member and having a first window therethrough disposed above and for exposing certain ones of said day numbers on said lower member, said center member having a pivot-point above the pivot point of said lower member, said center member having month markings thereon adjacent said first window and respectively arranged in positions opposite corresponding ones of said concentric rows, said center member having a second window therethrough and of a shape for exposing one of said columns, said second window being adjacent said month markings for the reading of day numbers in said second window opposite said month markings, said second window being in a position for indicating the first date of a period in which the days of actual fertility lie, said center member having a third window therethrough of a shape for exposing another of said columns different from that column exposed by said second window, and said center member having month markings thereon adjacent said third window and respectively arranged in positions opposite corresponding ones of said concentric rows, said third window being in

a position for indicating the last date of said period, said center member having a circular row of day numbers thereon for indicating cycle days and arranged concentric with said pivot-point, and a top member disposed above and having a smaller size than said center member for not unduly overlaying said windows, said top member having a pivot-point above the pivot-points of said lower and center members, said top member having means thereon for indicating one of the days in said circular row of cycle days, said top member also having an indicia thereon adjacent an edge thereof and disposable opposite said columns and for indicating one of said columns of day numbers on said lower member, and means for pivotally securing said members together at their pivot points for independent rotation.

3. A fertility period indicator comprising: a lower member having a pivot point, approximately adjacent an area-center of said lower member, said lower member having the day numbers of the days of a year on an upper side thereof and arranged in radially extending columns and also arranged in rows concentric with and extending various distances outwardly from said pivot point, a center member disposed above said lower member and having a first window therethrough disposed above and for exposing certain ones of said day numbers on said lower member, said center member having a pivot-point above the pivot point of said lower member, said center member having month markings thereon adjacent said first window and respectively arranged in positions opposite corresponding ones of said concentric rows, said center member having a second window therethrough and of a shape for exposing one of said columns,

said second window being adjacent said month markings for the reading of day numbers in said second window opposite said month markings, said second window being in a position for indicating the first date of a period in which the days of actual fertility lie, said center member having a third window therethrough of a shape for exposing another of said columns different from that column exposed by said second window, and said center member having month markings thereon adjacent said third window and respectively arranged in positions opposite corresponding ones of said concentric rows, said third window being in a position for indicating the last date of said period, said center member having a circular row of day numbers thereon for indicating cycle days and arranged concentric with said pivot-point, and a top member disposed above and having a smaller size than said center member for not unduly overlaying said windows, said top member having a pivot-point above the pivot-points of said lower and center members, said top member having a window therethrough for exposing and indicating one of the days in said circular row of cycle days, said top member also having means thereon adjacent an edge thereof and disposable opposite said columns and for indicating one of said columns of day numbers on said lower member, and means for pivotally securing said members together at their pivot points for independent rotation.

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2,638,272 Heck ---------- May 12, 1953