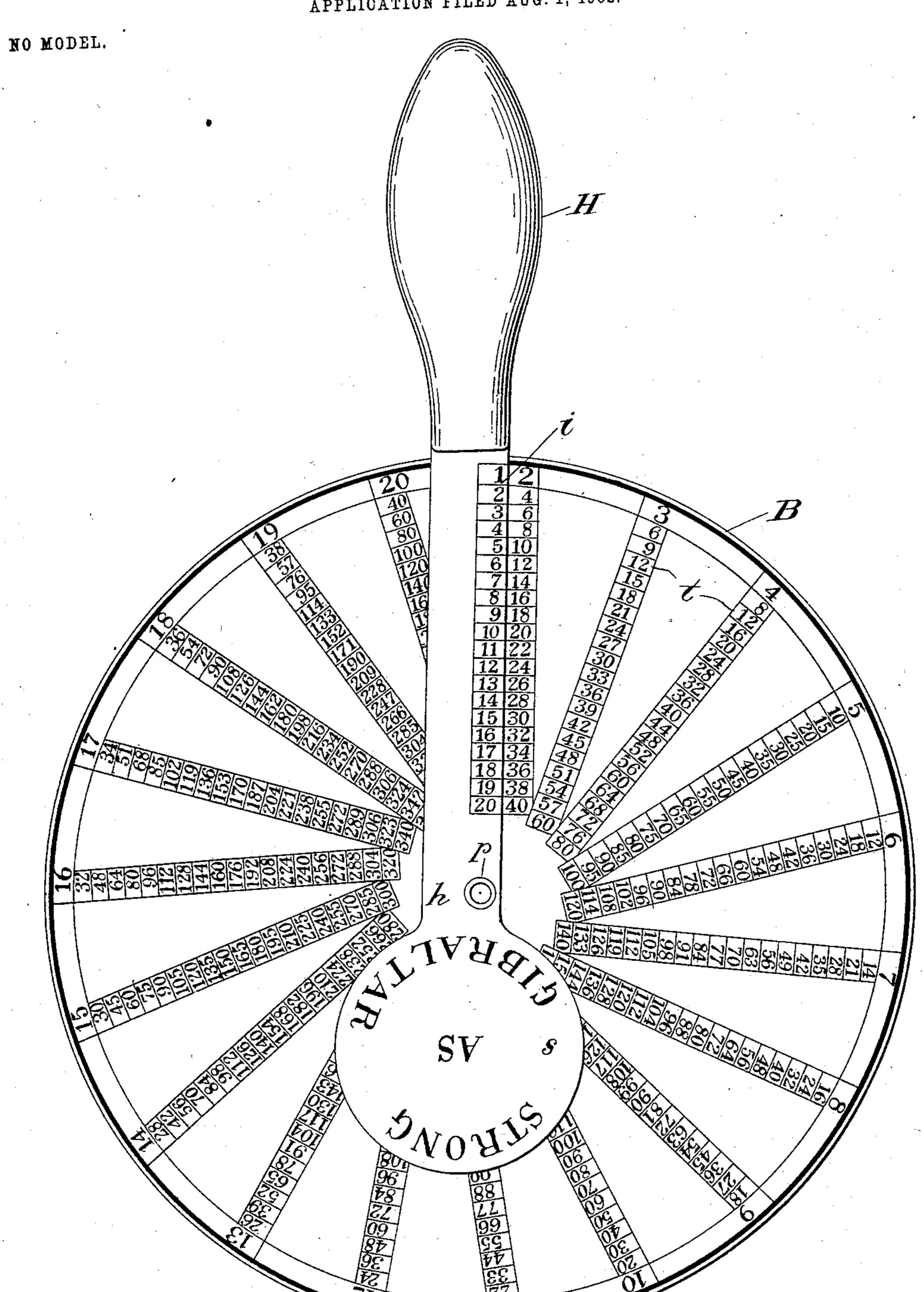
No. 725,984.

L. D. NELKE. FAN.

APPLICATION FILED AUG. 1, 1902.



Witnesses:

## United States Patent Office.

LOUIS D. NELKE, OF BROOKLYN, NEW YORK.

## FAN.

SPECIFICATION forming part of Letters Patent No. 725,984, dated April 21, 1903.

Application filed August 1, 1902. Serial No. 118,011. (No model.)

To all whom it may concern:

Be it known that I, Louis D. Nelke, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Fans, of which the

following is a specification.

This invention relates to fans, and especially to fans for advertising purposes; and to its main object is to provide a fan the body. of which is movable relatively to the handle and bears tables any one of which may be brought adjacent to an indicator on the handle, and particularly to show the product of 15 two numbers, one of which may be on the handle of the fan and may be the multipler, while the other or multiplicand may be at the top of its table on the fan-body, the product of every multiplier by a multiplicand being 20 so placed as to stand opposite its multiplier on the handle of the fan when the table corresponding to its multiplicand is brought adjacent to such handle. Hence by simply turning the fan to the desired row of figures rep-25 resenting the respective products of any multiplicand by the corresponding multipliers in a row of indicating-numerals on the handle of the fan the product of any two numbers within the range of the tables on the fan-body 30 will be instantly indicated, thus avoiding the necessity for performing the ordinary tedious process of calculating such product by multiplying the numbers.

The principal feature of my present invention is the application to a fan of such a set of tables and the employment of the handle of the fan as an indicator for showing instantly the product of any two numbers.

In the drawing accompanying this speci-40 fication and forming part of the present application I have shown a side elevation of a fan constructed in accordance with my present invention and having the fan-body bearing a set of tables and movable relatively to 45 a handle having an indicator coacting with the tables of the fan-body.

In this construction, B designates the fanbody, which is preferably circular and has a central opening through which may pass an o eyeletor rivet located on the handle and constituting the pivot of the fan-body. For advertising purposes this fan-body will usually be

made of stiff paper or card board, and the tables and other matter—such as advertising matter, for example—will usually be printed di- 55 rectly thereon. In this case the side of the fan-body shown has a plurality or circuit of tables disposed about the center of the fanbody, the numbers in each table being arranged in columns or rows extending toward 60 the periphery of the fan-body. Each of these columns is a different table of products, there being on the side shown nineteen different tables substantially equidistant from one another, each designated generally by t. At 65 the tops of these columns of tables are the respective multiplicands "2" to "20," inclusive, to which the tables t correspond. Each number in each table or column is the product of the multiplicand at the top of such 70 column by a multiplier on the handle of the fan corresponding in position with the position of such product in its column on the fanbody.

The handle of the fan may be of any suit- 75 able construction and is designated in a general way by H. It consists ordinarily of a piece of wood or other suitable material kerfed to form two sides or forks. At the inner ends thereof the two sides of the handle 80 may be connected and spaced by an eyelet or rivet, such as p, constituting the pivot on which the fan-body is mounted to turn. This pivot, it will be noticed, passes through the two side pieces h of the handle near the side edges 85 thereof instead of through the centers of said pieces in order to permit the tables on opposite sides of the fan-body to run in the same direction and still coöperate properly with the indicators at the edges of the two 90 sides of the handle.

Each indicator preferably consists of a column of consecutive numbers, which may be printed on a suitable slip of stiff paper or cardboard and then glued or otherwise segured to the handle. Here the indicator is designated generally by *i*, and consists of the numbers "1" to "20," inclusive, so disposed as to correspond in position to the positions of the respective numbers in the tables of products not the body of the fan. Each of the indicating-numerals on the handle is a multiplier for each of the multiplicands disposed about the periphery of the fan-body at the tops of

the corresponding tables of products, and the product of any multiplicand by any multiplier in the column on the handle is instantly indicated by simply turning the fan-body 5 until such multiplicand, with its table, is adjacent to the indicator, when the number opposite the particular multiplier will show the

desired product.

It will be noticed that the indicating edge 10 of the handle is not radial, but instead is disposed tangentially with respect to the center of the fan-body. The various columns of multiplication-tables are also disposed tangentially around such center in order that 15 the edge of the column of products may be close to and parallel with the indicating edge of the handle when such table of products is brought into indicating relation with the handle. The relative positions of the tables and 20 indicator at the other side of the fan are the same as those shown at t and i.

The spaces between adjacent columns of multiplication-tables may be either blank or filled with advertising matter, as may be de-25 sired; but I prefer to provide each side of the handle of the fan with an enlarged extension, such as s, at that side of the pivot p which |

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is opposite or beyond the corresponding indicator-table. This extension will usually have suitable advertising or other matter thereon 30 and may be formed from the same piece of stiff paper or cardboard as the indicator itself.

What I claim is—

A combined fan and multiplier, comprising 35 a handle having a row of indicating-numerals thereon, and having its indicating edge tangent to the pivot of connection with the fanbody, and a fan-body mounted to turn relatively to said handle and bearing a circuit of 40 multiplication - tables disposed tangentially around the center of the fan-body in adjacent rows adapted to be brought adjacent and parallel to the row of indicating-numerals on said handle, each table having at the top 45 thereof its respective multiplicand.

Signed at New York, in the county of New York and State of New York, this 31st day of

July, A. D. 1902.

LOUIS D. NELKE.

Witnesses: EDGAR A. FELLOWS, C. S. CHAMPION.