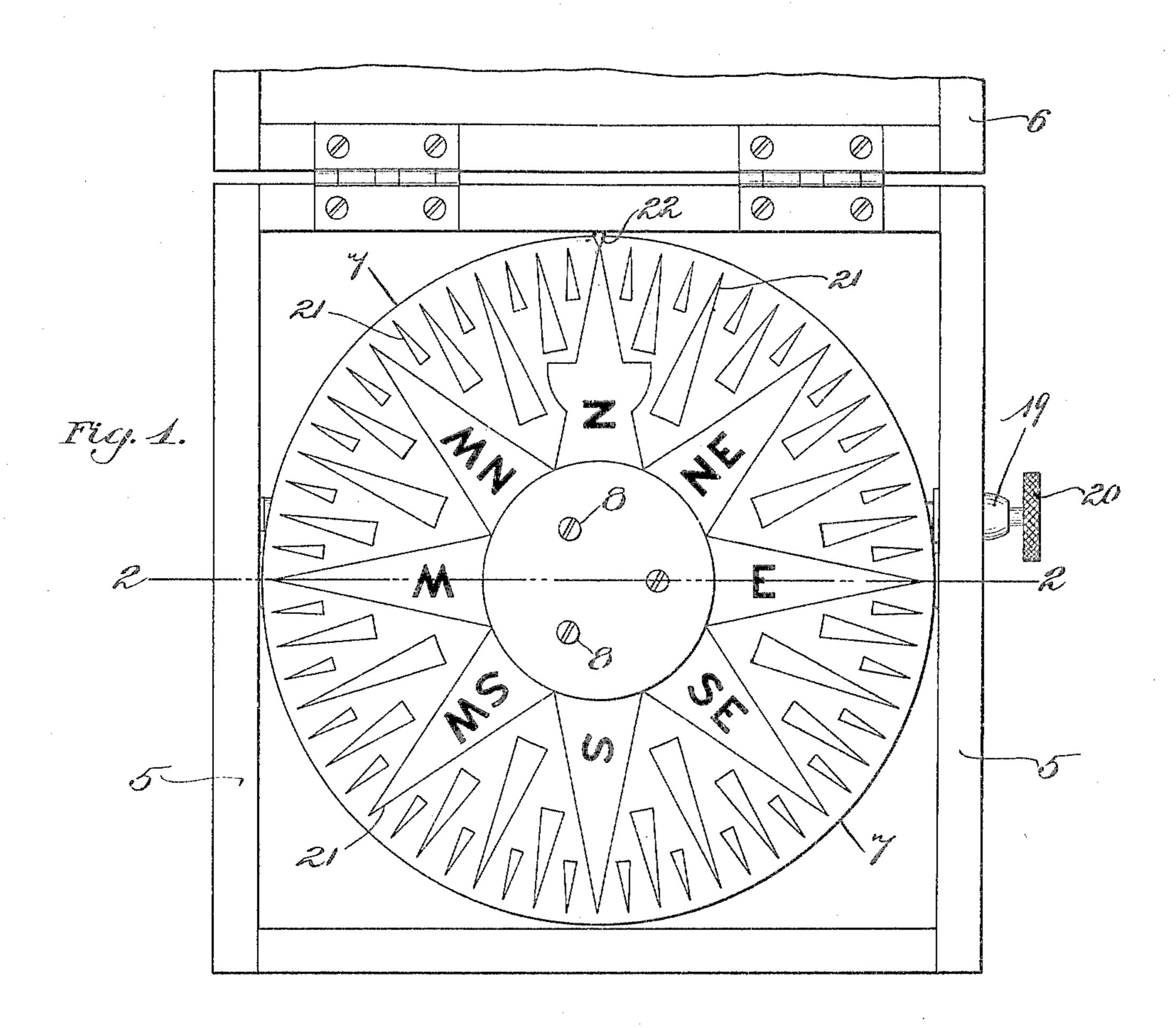
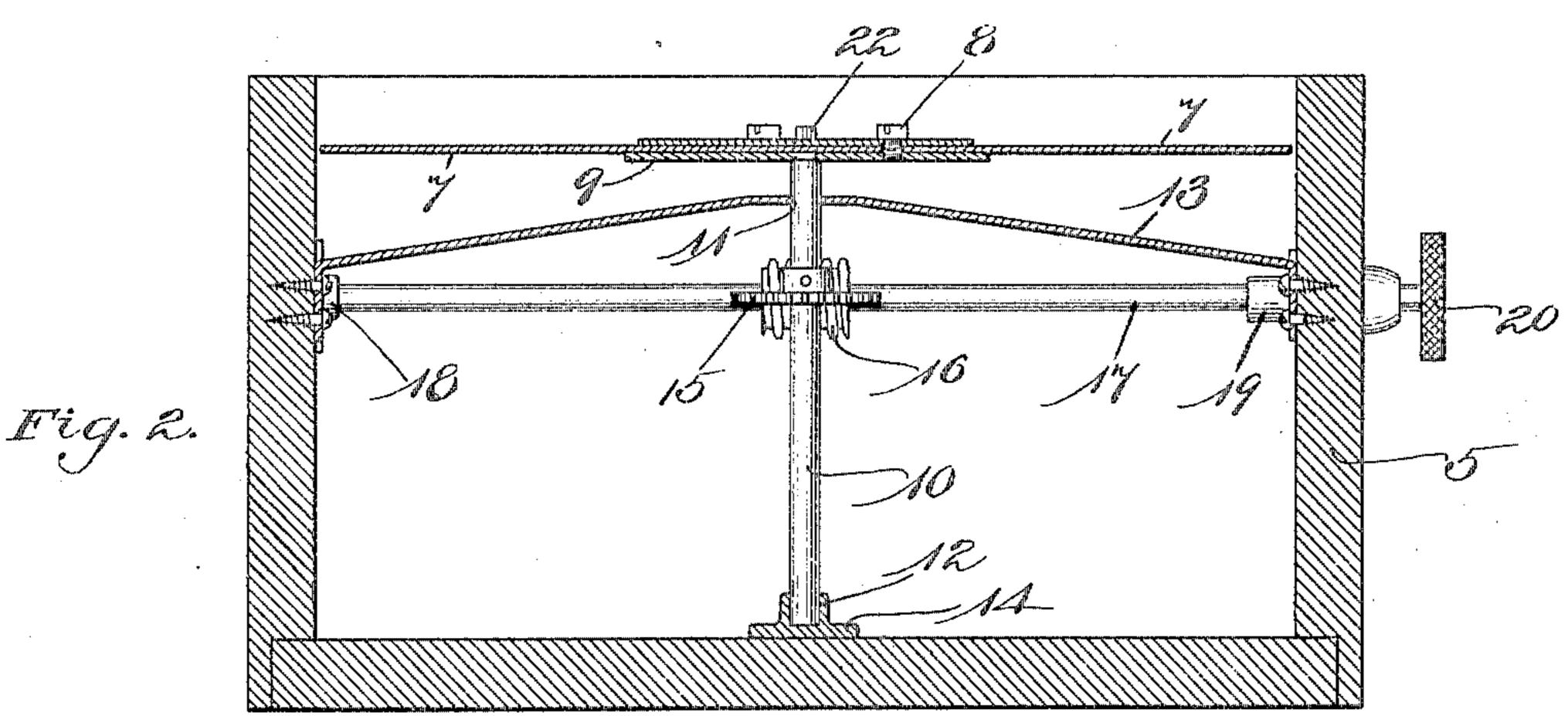
## J. F. BURKE. EDUCATIONAL DEVICE. APPLICATION FILED OCT, 17, 1904.





Withesses:

Tree reter:

James E. Burke.

<u>РИОТО ЛІТНОСТАРИТО ВУ ВАСИЕТТ А WILHELMS LITHO, & FITTE CO. ИСУ YORK.</u>

## UNITED STATES PATENT OFFICE.

## JAMES F. BURKE, OF SOUTH BOSTON, MASSACHUSETTS.

## EDUCATIONAL DEVICE.

SPECIFICATION forming part of Letters Patent No. 793,767, dated July 4, 1905.

Application filed October 17, 1904. Serial No. 228,702.

To all whom it may concern:

Be it known that I, James F. Burke, a citizen of the United States, residing at South Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Educational Devices, of which the following is a specification.

This invention relates to an educational device, the object of which is to teach and to impress upon the mind the different subdivisions of the compass, said device being particularly useful in schools, colleges, yacht clubs, and, in fact, in any association where a knowledge of the points of the compass is desirable.

The invention consists in the combination and arrangement of parts set forth in the following specification, and particularly pointed out in the claims thereof.

Referring to the drawings, Figure 1 is a plan view of my improved educational device with the cover of the casing broken away to save space in the drawings. Fig. 2 is a transverse section taken on line 2 2 of Fig. 1.

25 Like numerals refer to like parts throughout the several views of the drawings.

In the drawings, 5 is a casing provided with a hinged cover 6. In the interior of said casing a disk 7 is fastened by screws 8 to a flange 9, fast to a shaft 10. The shaft 10 is adapted to rotate in bearings 11 12, formed in brackets 13 and 14, respectively, fast to the casing 5. A worm-gear 15, fast to the shaft 10, meshes into a worm 16, fast to a shaft 17. 35 The shaft 17 is rotatable in bearings 18 19, fast to the sides of the casing 5, projects through one side of said casing, and is provided with a handle 20 upon the exterior of said casing, by means of which it may be conveniently rotated.

The upper face of the disk 7 is provided with the different subdivisions 21 21 of the compass. For instance, the disk is divided in the first quarter from north to east as follows:

45 north, north half-east, north by east, north by east half-east, northeast by north half-north, northeast by north, northeast half-east, northeast by east half-east, east by north half-north, east

by north, east half-north, east. The other three quarters—east to south, south to west, and west to north—are also divided into a like number of parts, each part having a name corresponding thereto. Adjacent to the pe-55 riphery of the disk 7 is a stationary index-finger 22, which for convenience is rigidly fastened to one side of the casing 5.

The general operation of the device hereinbefore specifically described is as follows: 60 When the device is used by a teacher for instructing a class of pupils, the teacher rotates the handle 20, thus rotating the shaft 17 and through the worm 16 and worm-gear 15 rotating the shaft 10 and the disk 7 attached there- 65 to until any desired subdivision upon the upper face of the disk 7 is brought in alinement with the index-finger 22, and the pupils then give the name of said subdivision. It is evident that the same may be used by pu- 7° pils in studying the subdivisions of the compass in the manner hereinbefore described by rotating the disk 7 until the different subdivisions upon the disk aline with the indexfinger in order to test their memory as to said 75 subdivisions.

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

1. An educational device comprising in its 80 construction a disk having upon its upper face the subdivisions of the compass, a stationary support upon which said disk is rotatably mounted, and a stationary index-finger adjacent to said disk.

2. An educational device comprising in its construction a disk having upon its upper face the subdivisions of the compass, a rotary shaft to which said disk is attached, and a stationary index-finger adjacent to said disk.

3. An educational device comprising in its construction a disk having upon its upper face the subdivisions of the compass, a rotary shaft to which said disk is attached, a stationary index-finger adjacent to said disk, and 95 mechanism to impart a rotary motion to said shaft.

4. An educational device comprising in its construction a casing, a disk having upon its upper face the subdivisions of the compass, a 100

rotary shaft to which said disk is attached, a stationary index-finger adjacent to said disk, a second shaft journaled in bearings fast to said casing, said shaft projecting through one side of said casing and outside thereof, a handle fast to the outer end of said shaft, and gearing rotatably connecting said shafts.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JAMES F. BURKE.

Witnesses:

CHARLES S. GOODING, ANNIE J. DAILEY.