

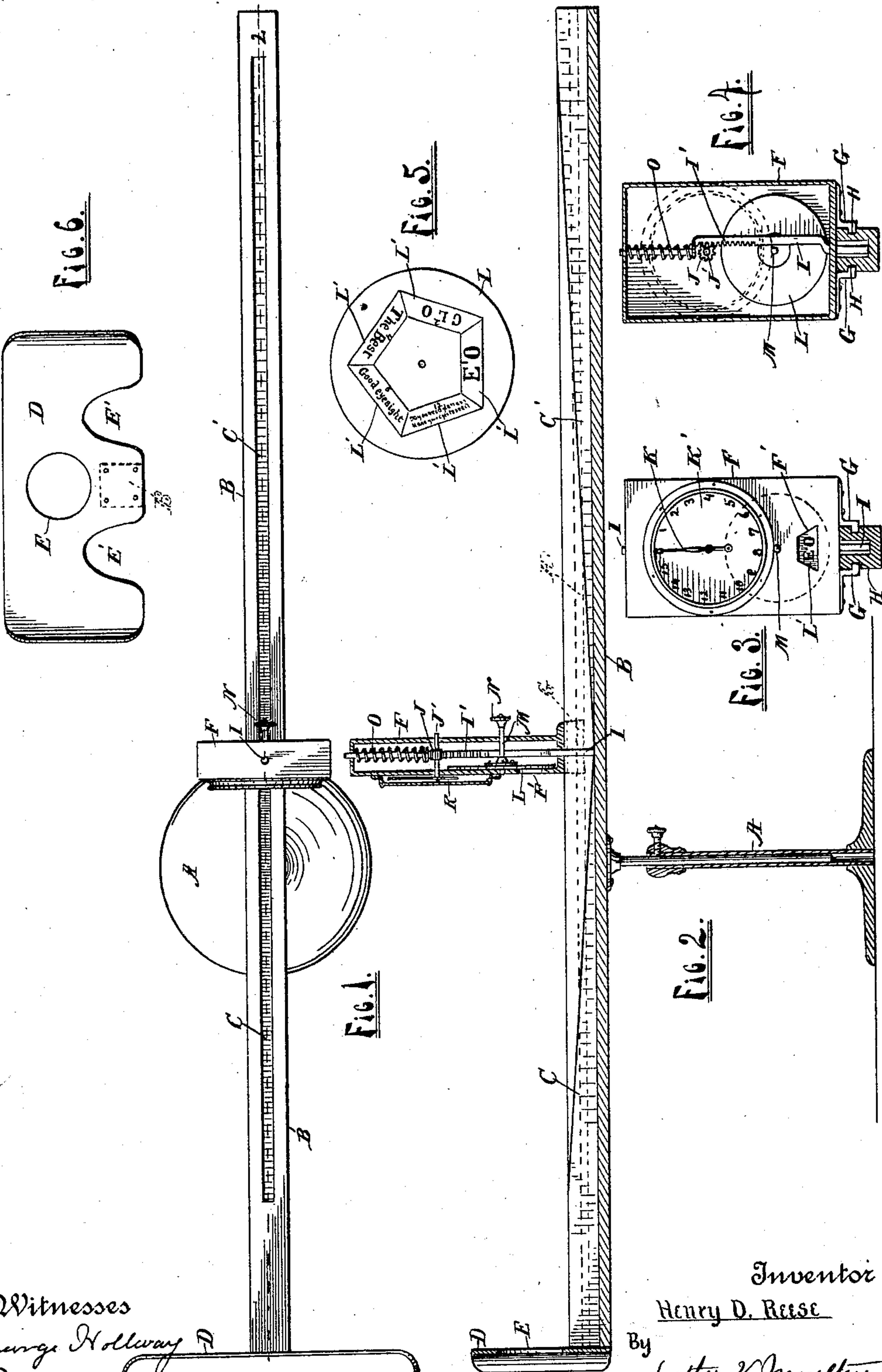
No. 682,638.

Patented Sept. 17, 1901.

H. D. REESE.
EYE TESTER.

(Application filed Nov. 17, 1900.)

(No Model.)



Witnesses
George Hollway
Palmer A. Jones.

Inventor
Henry D. Reese
By
Luther V. Moulton
Attorney

UNITED STATES PATENT OFFICE.

HENRY DOBSON REESE, OF ABBEVILLE, SOUTH CAROLINA, ASSIGNOR TO
D. ED. KENNEDY AND CHARLES C. CUTTS, OF CORDELE, AND PARKER
A. HENDERSON, OF SEVILLE, GEORGIA.

EYE-TESTER.

SPECIFICATION forming part of Letters Patent No. 682,638, dated September 17, 1901.

Application filed November 17, 1900. Serial No. 36,861. (No model.)

To all whom it may concern:

Be it known that I, HENRY DOBSON REESE, a citizen of the United States, residing at Abbeville, in the county of Abbeville and State of South Carolina, have invented certain new and useful Improvements in Eye-Testers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in eye-testers; and its object is to provide the same with novel means for indicating the focal distance measured and to provide the device with certain new and useful features hereinafter more fully described, and particularly pointed out in the claims.

My device consists, essentially, of a bar having attached at one end a shield and provided with inclined surfaces extending oppositely from the normal or neutral point, a case adapted to traverse the bar and carrying a vertically-movable rod engaging the inclined planes of the bar, a dial on the case, having a scale thereon to indicate distances from the shield, and an index traversing the dial and operated by the movement of the rod, as will more fully appear by reference to the accompanying drawings, in which—

Figure 1 is a plan view of a device embodying my invention; Fig. 2, a longitudinal vertical section of the same on the line 2 2 of Fig. 1; Fig. 3, a front elevation of the case; Fig. 4, a rear elevation of the case with the back removed; Fig. 5, an enlarged plan of the rotary disk, and Fig. 6 a detail of the shield.

Like letters refer to like parts in all the figures.

A represents a suitable vertically-adjustable stand upon which is mounted a horizontal bar B, having a groove in its upper surface of varying depth presenting inclined planes extending oppositely from the neutral or deepest point near the middle of the bar. In the sides of the bar are grooves H H, with which grooves are engaged clips G G to slidably secure the case F to the bar. Said case is of suitable dimensions and at the front is provided with a suitable opening F', through

which a portion of the rotative disk L may be seen. Said disk is within the case and mounted on a shaft M, extending through the case and provided at the rear and outside the case with a suitable milled head N, whereby the shaft and disk may be rotated to bring various portions L' of the face of the disk successively opposite the opening F'. These portions may be printed in various sizes of letters and are preferably numbered to aid in calculating the focus of lenses required in a given case. On the front of the case is a dial K', having a suitable scale thereon, and journaled in the axis of the dial is a shaft J', carrying an index K and also having a pinion J, engaged by a rack I' on a vertically-movable rod I in the case and at its lower end engaging and traversing the inclined planes C C', whereby as the case is moved along the bar the rod I is raised and lowered to traverse the index K over the dial, and thus indicate on the dial the position of the case on the bar. This scale may be graduated in inches from the end of the bar having the shield D; but I prefer a scale which, together with the index-numbers on the disks, will indicate the focus of the lens required in any particular case. The shield D is attached to the end of the bar B in a plane at right angles thereto and is provided with a central opening E, opposite which the eye to be tested is placed. In the lower edge of the shield are recesses E' E' to receive the nose, and the outer ends of the shield are curved rearward to better shield the eye that is not being tested from the light.

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

1. The combination of a bar having oppositely-inclined planes, a case slidable on the bar and having a dial and an index traversing the dial, and a vertically-movable rod engaging the inclined planes and moving the index over the dial, substantially as described.

2. The combination of a bar having oppositely-inclined planes, a case slidable on the bar and having a dial, a shaft in the axis of the dial and journaled in the case, an index on the shaft traversing the dial, a pinion on

the shaft, a vertically-movable rod in the case having a rack engaging the pinion and engaging and traversing the inclined planes of the bar at one end, substantially as described. 5

3. The combination of a bar having an inclined plane, a shield having an opening and attached to the bar, a case slidable on the bar, a dial and index on the case, a vertically-movable rod in the case and engaging the inclined plane of the bar, and means for connecting the rod and index whereby the rod moves the index, substantially as described. 10

4. The combination of a bar having inclined planes in its upper side and grooves in its vertical sides, a case slidable on the bar and having clips engaging the side grooves in the bar, a vertically-movable rod in the case and engaging the inclined planes, an index moved by the rod and a dial traversed by the index, substantially as described. 15 20

5. The combination of a bar having inclined planes, a case slidable on the bar and having a dial and an opening at the front, a rotative disk in the case having portions of its surface visible in succession through said opening, means for rotating the disk, an index traversing the dial, a vertically-movable rod in 25

the case operating the index and engaging the inclined planes of the bar, substantially as described. 30

6. The combination of a bar having oppositely-inclined planes, a case slidable on the bar, a vertically-movable rod in the case and engaging and traversing the inclined planes, a rack and a spring on the bar, a dial on the case, a shaft journaled in the case in the axis of the dial, and a pinion on the shaft engaged by the rack, substantially as described. 35

7. The combination of a bar having inclined planes, a shield having an opening in the middle and recesses in the lower side, a case slidable on the bar and having an opening and a dial, a rotative disk partially visible through said opening, means for rotating the disk, an index traversing the dial, a vertically-movable rod in the case operating the index and engaging and traversing the inclined planes, substantially as described. 40 45

In testimony whereof I affix my signature 50 in presence of two witnesses.

HENRY DOBSON REESE.

Witnesses:

EDWIN L. HIRSCH,
W. SMITH MARTIN.