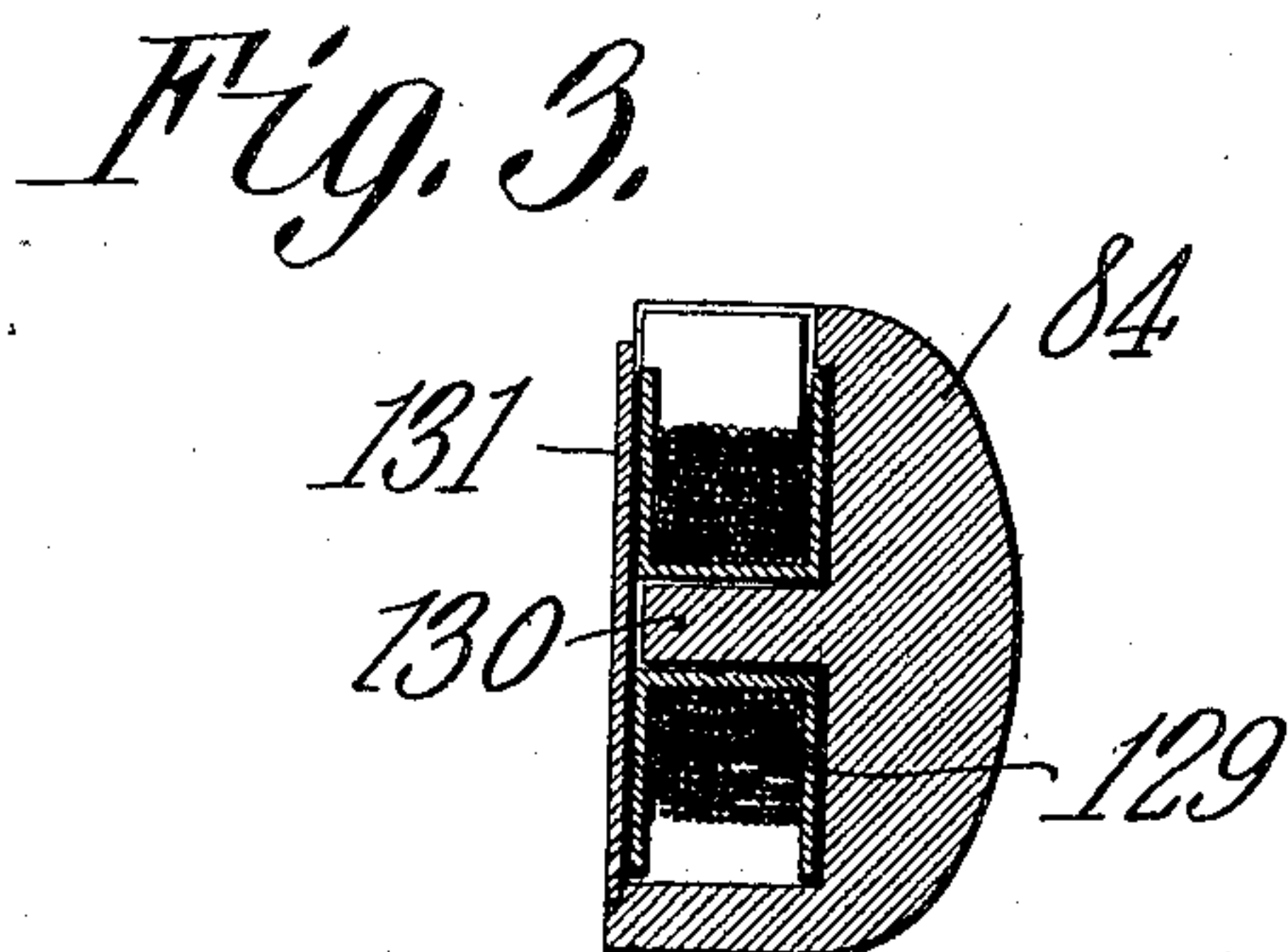
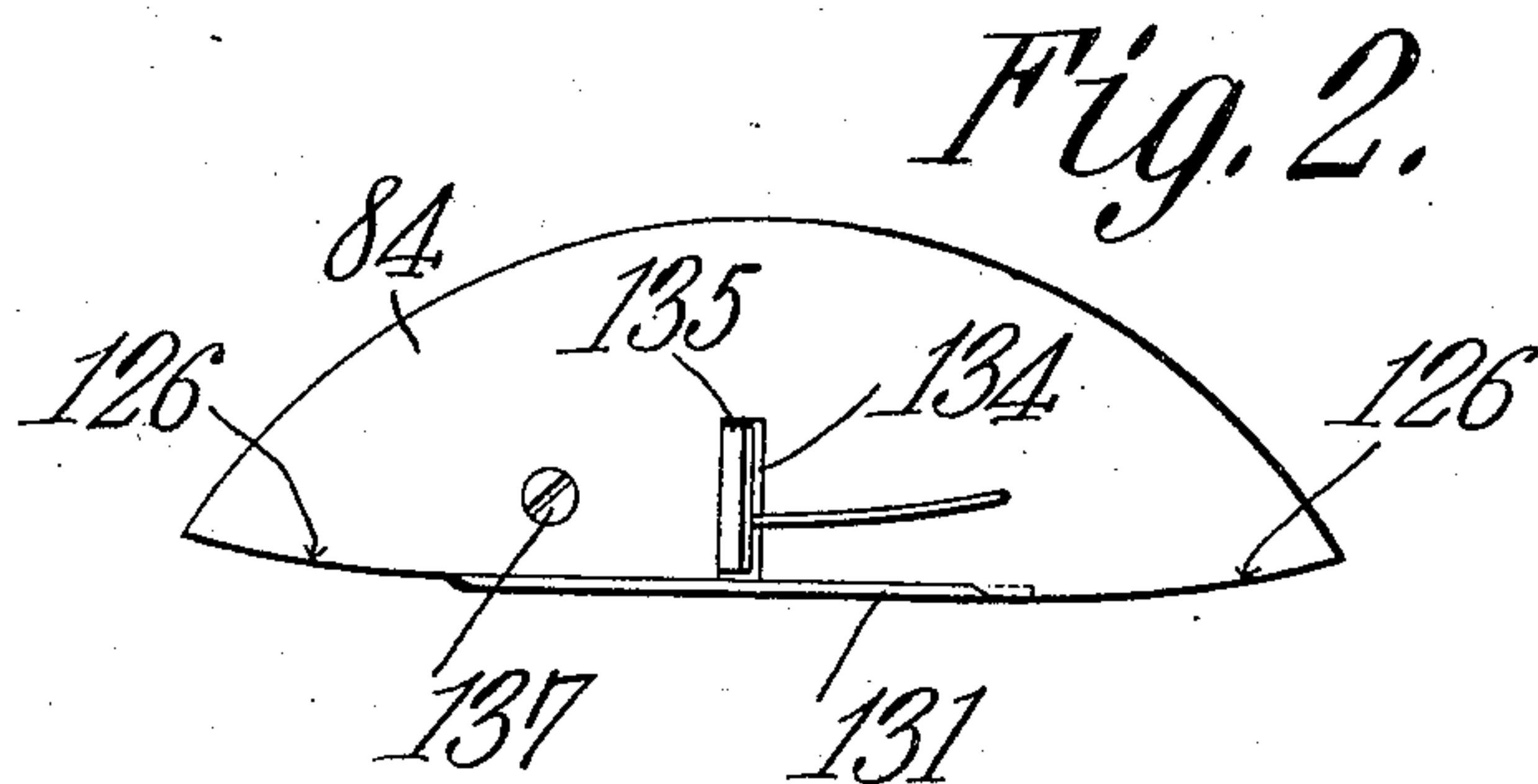
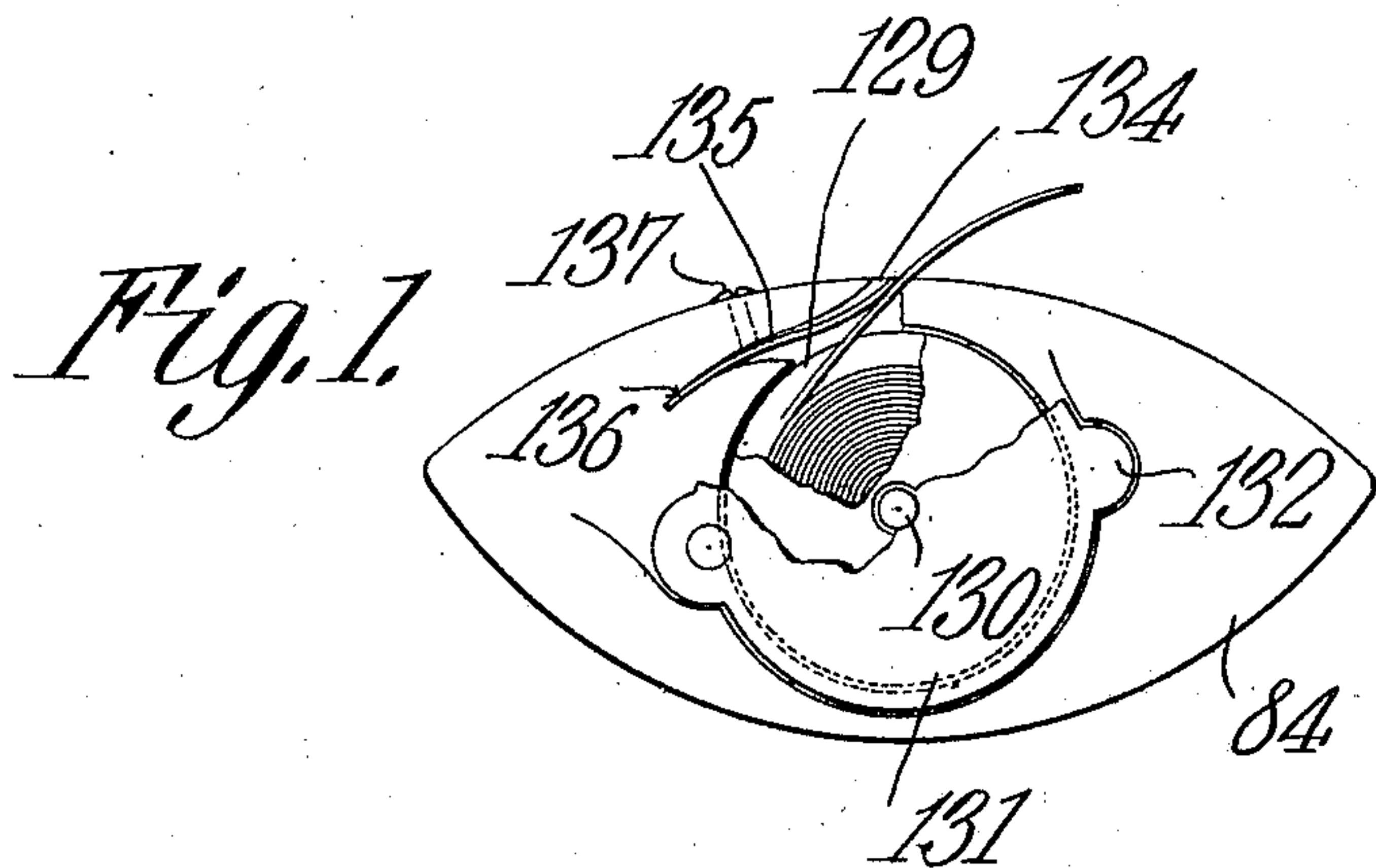


No. 887,039.

PATENTED MAY 5, 1908.

C. F. & M. T. GOFORTH.  
SEWING MACHINE SHUTTLE.

APPLICATION FILED JUNE 24, 1907.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

CHARLES F. GOFORTH AND MARSHALL T. GOFORTH, OF WICHITA, KANSAS.

## SEWING-MACHINE SHUTTLE.

No. 887,039.

Specification of Letters Patent.

Patented May 5, 1908.

Original application filed November 20, 1906, Serial No. 344,296. Divided and this application filed June 24, 1907.  
Serial No. 380,523.

*To all whom it may concern:*

Be it known that we, CHARLES F. GOFORTH and MARSHALL T. GOFORTH, citizens of the United States, residing at Wichita, in the county of Sedgwick and State of Kansas, have invented a new and useful Sewing-Machine Shuttle, of which the following is a specification.

This invention relates to sewing machine shuttles of that class in which the shuttle takes two loops, one on the forward, and the other on the backward movement, thus making double the number of stitches produced by an ordinary machine, without increase in the speed of movement of the shuttle.

One object of the invention is to provide a double pointed shuttle which may pass through the needle loop on both the forward and the backward movement.

A further object of the invention is to provide a shuttle in which the thread tension is so arranged as to operate with equal force on both the forward and backward movement of the shuttle.

With these and other objects in view, as will more fully hereinafter appear, the invention consists in certain novel features of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that various changes in the form, proportions, size and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings:—Figure 1 is a face view, partly in section, of a double pointed shuttle constructed in accordance with the invention. Fig. 2 is a plan view of the same. Fig. 3 is a transverse sectional view of the shuttle.

Similar numerals of reference are employed to indicate corresponding parts throughout these several figures of the drawings.

The present application is a division of an application for Letters-Patent filed by us on November 20, 1906, under Serial No. 344,296.

The shuttle 84 has a slightly curved face 126, that is arranged to slide against a curved flange that is arranged on an arc struck from the axis of the shuttle carrier, which, in this instance, is pivotally mounted. The back of the shuttle is rounded and tapers gradually toward loop entering points, one at each end of the shuttle.

The shuttle is provided with a recess for the reception of a circular reel 129 that is mounted on a pin 130, and the reel is held from displacement by a pivoted closing plate 131 that is seated within a shallow recess formed in the face of the shuttle, there being a slight projection 132 extending from the plate at a point diametrically opposite the pivot, and seated within a small recess in order to hold the plate from turning movement on its axis.

The shuttle is provided at the top with a thread discharge slot 134, in which is a tension plate 135, one end of which is seated within a recess 136 in the body of the shuttle and engaging this plate is an adjusting screw 137 by which the tension may be varied. The arrangement of the tension plate is such that the tension of the thread will be the same without regard to the direction in which the shuttle is moving.

As described in the application above referred to, the shuttle is arranged to take two loops during each complete oscillatory movement, and, therefore, will form double the number of stitches that may be formed by an ordinary machine, without increase in speed.

We claim:—

A sewing machine shuttle comprising a body portion having a curved front face and a convexed rear face, the shuttle tapering towards points at both ends, a circular recess arranged in the front face to receive the reel, a pin arranged within the recess and on which the reel may be mounted, there being a slot extending from the recess through the wall of the shuttle and leading from said front face inward, the slot being disposed about mid-way of the ends of the shuttle, a leaf spring mounted in the slot and tending to force the shuttle thread against one wall thereof, said spring tending to exert equal retarding force on the thread during movement of the thread in both directions, and means for adjusting said spring.

In testimony that we claim the foregoing as our own, we have hereto affixed our signatures in the presence of witnesses.

CHARLES F. GOFORTH.  
MARSHALL T. GOFORTH.

Witnesses:

CHAS. G. YAUKEY,  
G. C. WHITLOCK,  
A. T. HELLAR.