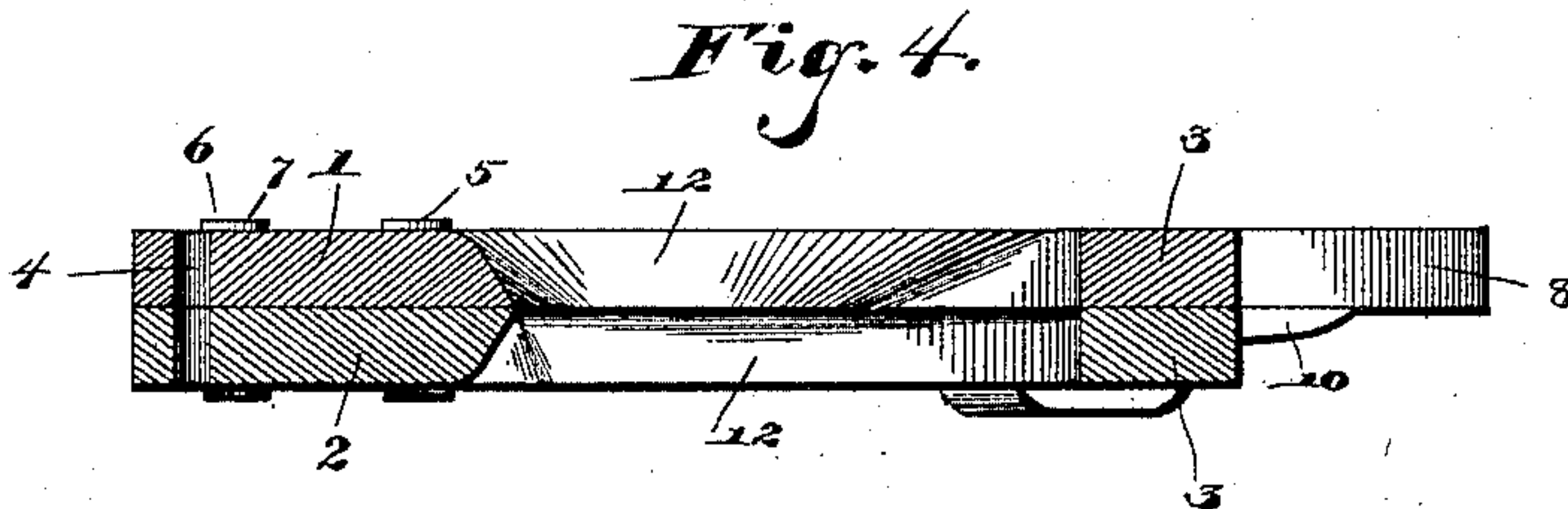
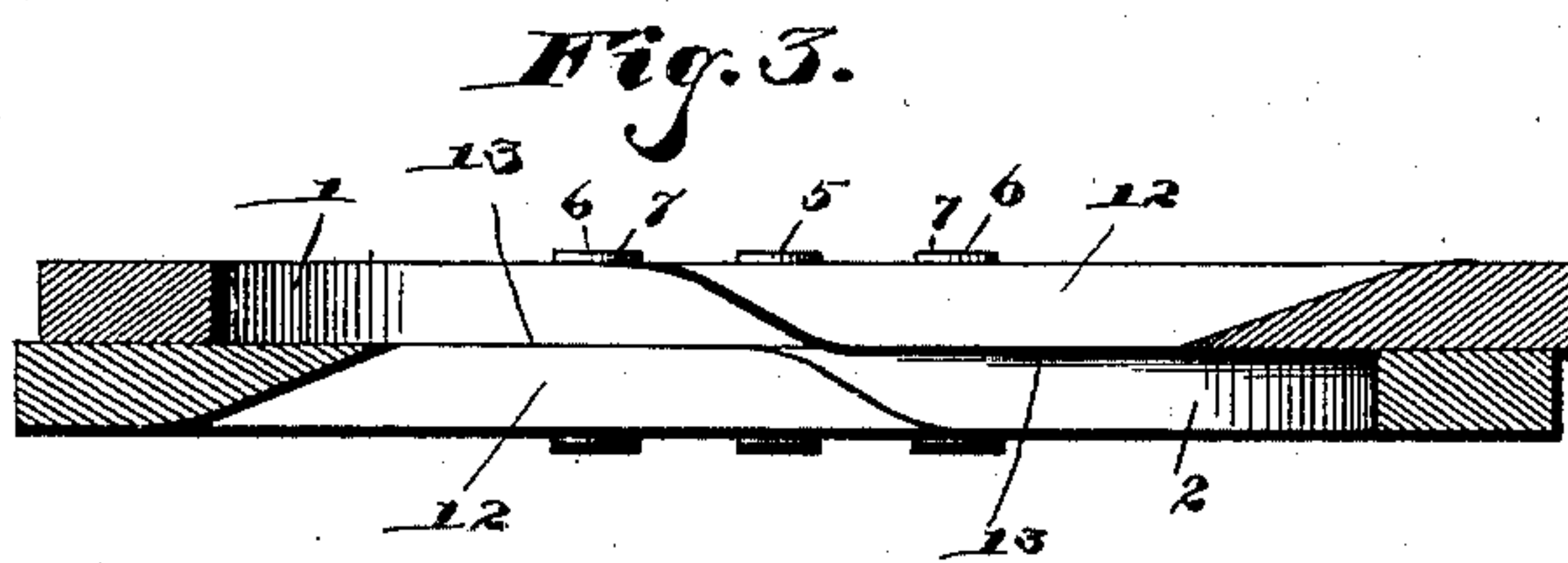
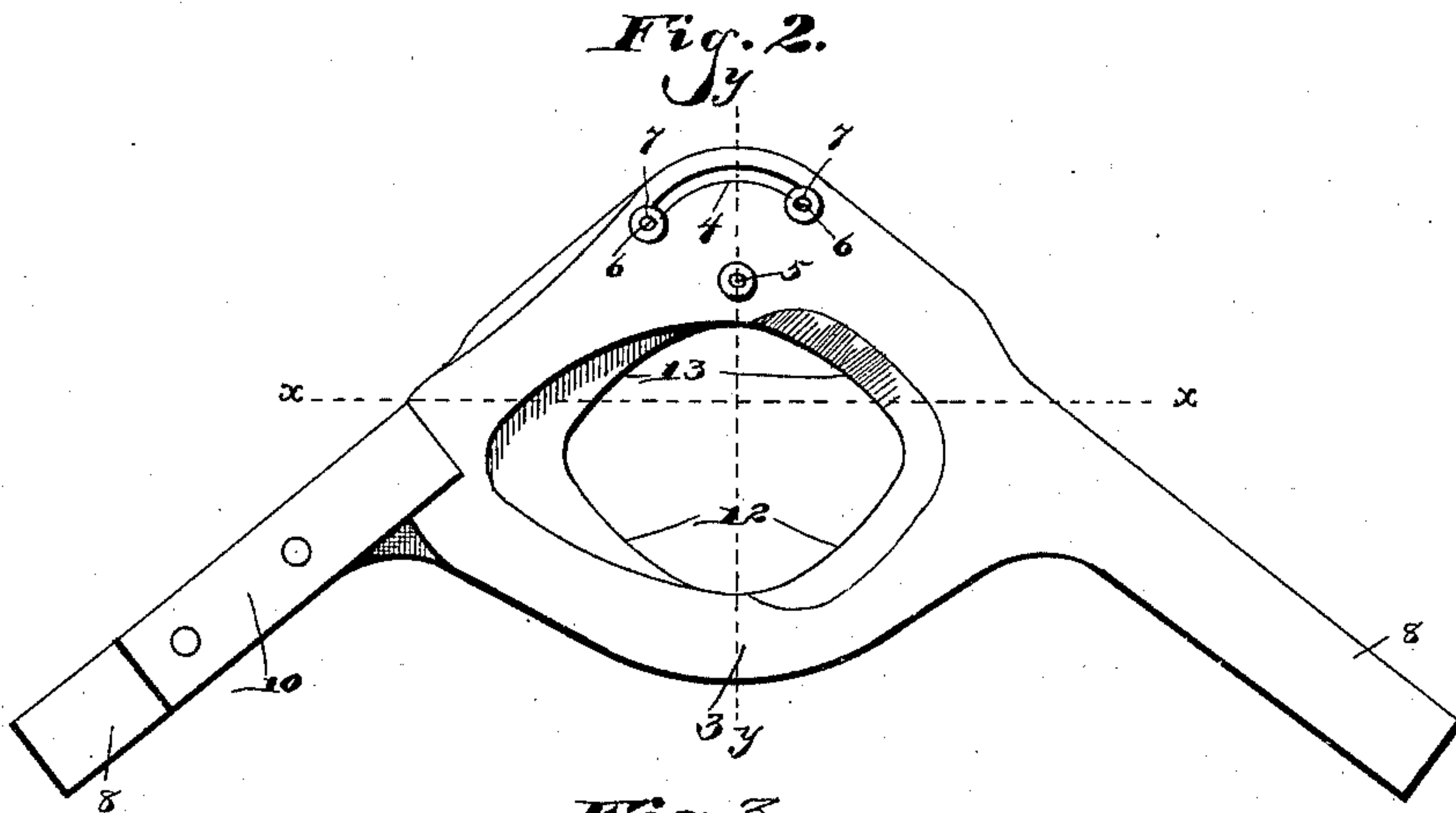
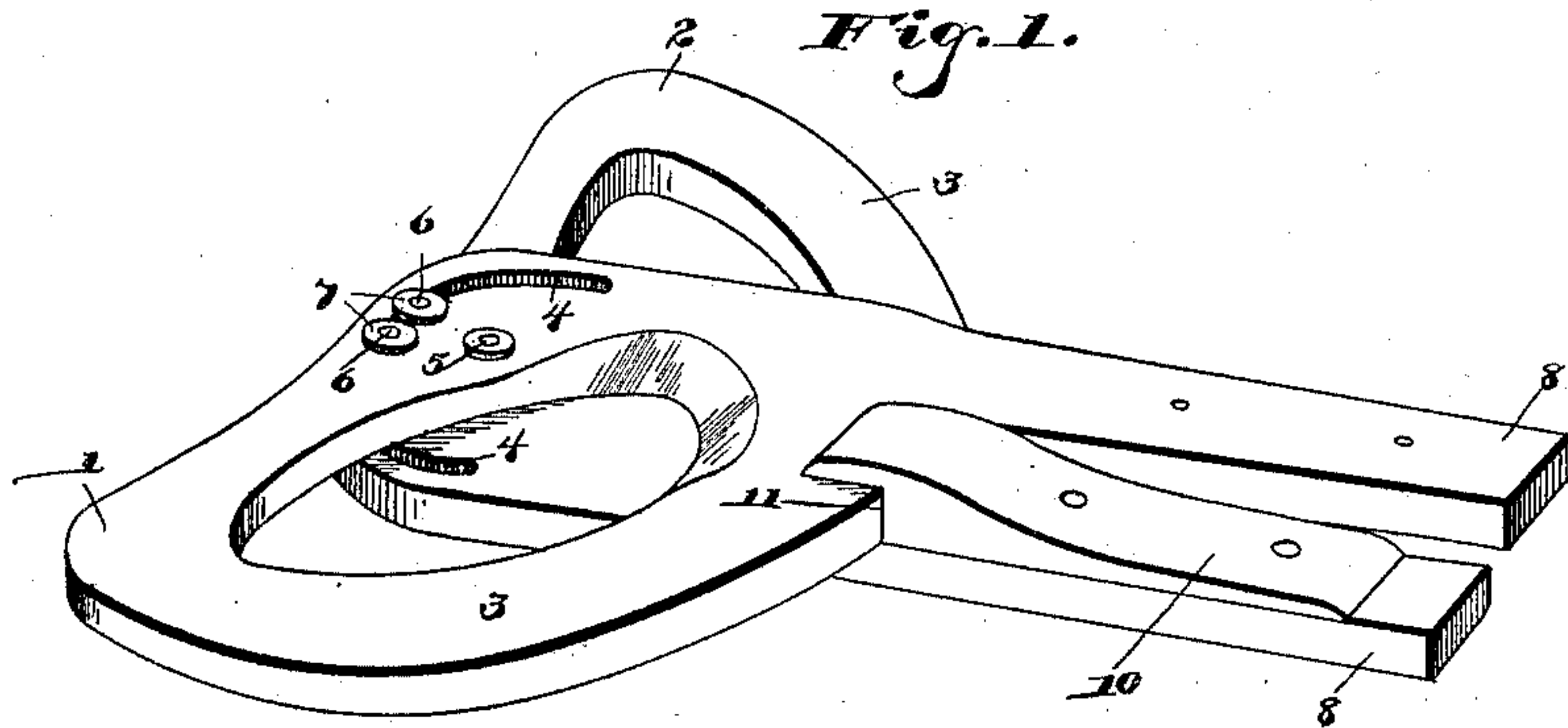


(No Model.)

T. FIELDS.
DEHORNING SHEARS.

No. 432,663.

Patented July 22, 1890.



Witnesses:

Samuel Ker.

M. S. Luval.

Tom Fields, Inventor

By his Attorneys,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

TOM FIELDS, OF LEE'S SUMMIT, MISSOURI.

DEHORNING-SHEARS.

SPECIFICATION forming part of Letters Patent No. 432,663, dated July 22, 1890.

Application filed April 30, 1890. Serial No. 350,070. (No model.)

To all whom it may concern:

Be it known that I, TOM FIELDS, a citizen of the United States, residing at Lee's Summit, in the county of Jackson and State of Missouri, have invented new and useful Dehorning-Shears, of which the following is a specification.

This invention has relation to shears adapted for dehorning cattle; and the objects of the invention are to provide an exceedingly cheap, light, and powerful pair of shears capable of making a clean and close cut, and which may be easily operated, all as will hereinafter appear.

With the above general objects in view the invention consists in certain features of construction, hereinafter mentioned, and particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective of a pair of shears constructed in accordance with my invention, the same being in a closed position. Fig. 2 is a plan view, the shears being open and in position to take over a horn. Fig. 3 is a transverse section on the line $x x$ of Fig. 2. Fig. 4 is a longitudinal section on the line $y y$ of said figure.

Like numerals of reference indicate like parts in all the figures of the drawings.

In practicing my invention I construct the shears of two similar and opposite members 1 and 2, each member comprising a segmental-shaped plate 3, the right-angular portion of which is provided with a curved slot 4, concentrically arranged with relation to a pivot-bolt 5, which passes through the two members at said right-angular portions. Each member is provided at one end of its slot with an inwardly-disposed stud 6, the stud of one member being located at that end of the slot opposite to the stud of the opposite member, and the stud of one member takes into and is adapted to ride within the slot of the opposite member, said studs being headed beyond the slots, as at 7, and each forming a guide for the circular movement or swing of the members. The opposite ends of the plates are extended to form shanks 8, each of which may be secured to a suitable operating-handle of sufficient length to secure the proper leverage. The inner face of each of the shanks is also provided with a keeper 10, riveted to the shanks, and having

at their inner ends recesses 11, which receive the curved portions or edges of the plates 3 and serve to maintain said plates in snug contact with each other, and thereby prevent any swinging apart of the plates when the knives or cutters, hereinafter mentioned, are in the act of cutting any hard substance. The plates 3 are each provided with an elliptical opening 12, said opening substantially following the external contour of the plates and having their opposite edges inwardly beveled to form shear-blades 13, the shear-blade of one member being designed to coact with that of the opposite member in the act of cutting.

To operate the device, the members are spread, as shown in Fig. 2, and introduced over a horn as close to the head of the animal as is deemed desirable, after which the handles are brought toward each other, and, by reason of the curvature of the blades or cutting-edges 13, said edges combine to form a shear-cut, as will be apparent. In this manner an exceedingly clean cut is formed, the shear-like movement also contributing to the ease of operating said shears. The location of the pivot tends to produce a most powerful leverage, and by my invention horns may be removed with the utmost ease and application of an exceedingly small amount of power.

Having thus described my invention, what I claim is—

1. In dehorning-shears, the combination, with two opposite members, each comprising a plate of segmental shape pivoted near their right-angular portions and terminating in handles at the opposite sides of the plates, said plates being provided with openings, the opposite edges of which are beveled to form shear-blades, substantially as specified.

2. In shears, the combination, with opposite members, each of which consists of a segmental-shaped plate pivoted at its right angle and beyond its pivots provided with a curved slot concentric with the pivot, studs projecting from each plate into the slot of the opposite plate, and the plate provided with handles and with elliptical openings, the opposite ends of the openings being inwardly beveled to form cutting-blades, substantially as specified.

3. The combination of the opposite members 1 and 2, each comprising the segmental-shaped plate 3, terminating in the shanks 8, provided with handles and provided with
5 keepers 10 upon their inner sides overlapping the curved portions of the opposite plate, the pivots 5, passing through the plates at their right-angular portions, said plates being provided with the curved slots 4, con-
10 centric with the pivot, the studs 6, passing from each plate into the slot of the opposite

plate, and the elliptical openings 12, having cutting-edges 13 at the outer ends of the openings, substantially as specified.

In testimony that I claim the foregoing as 15 my own I have hereto affixed my signature in presence of two witnesses.

TOM FIELDS.

Witnesses:

R. M. FIELDS,
W. H. NOLAND.