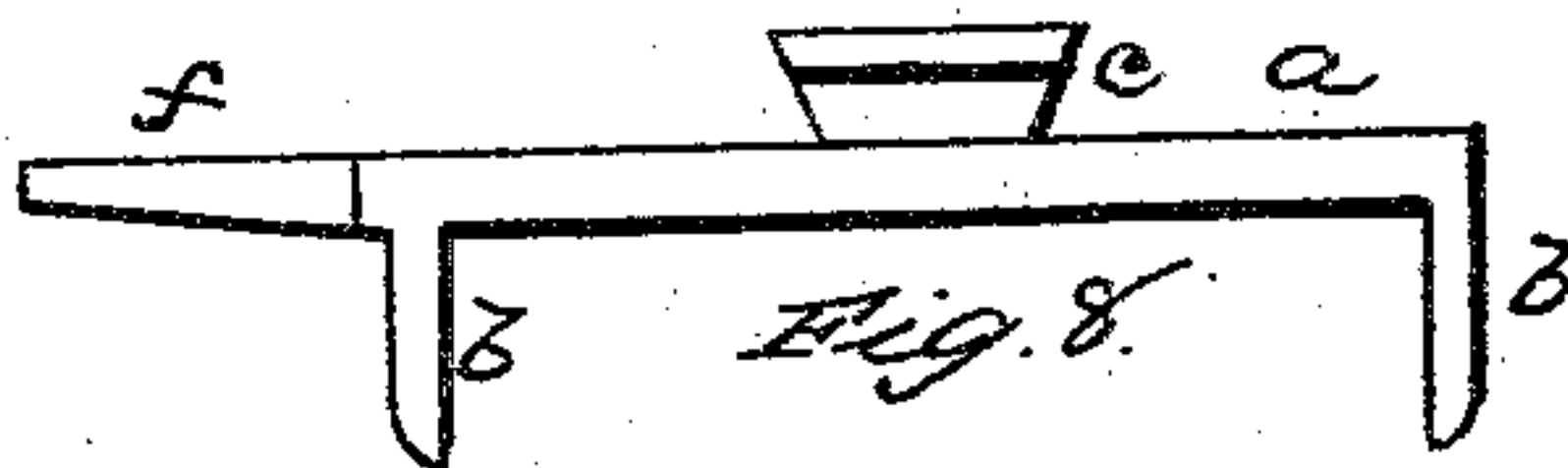
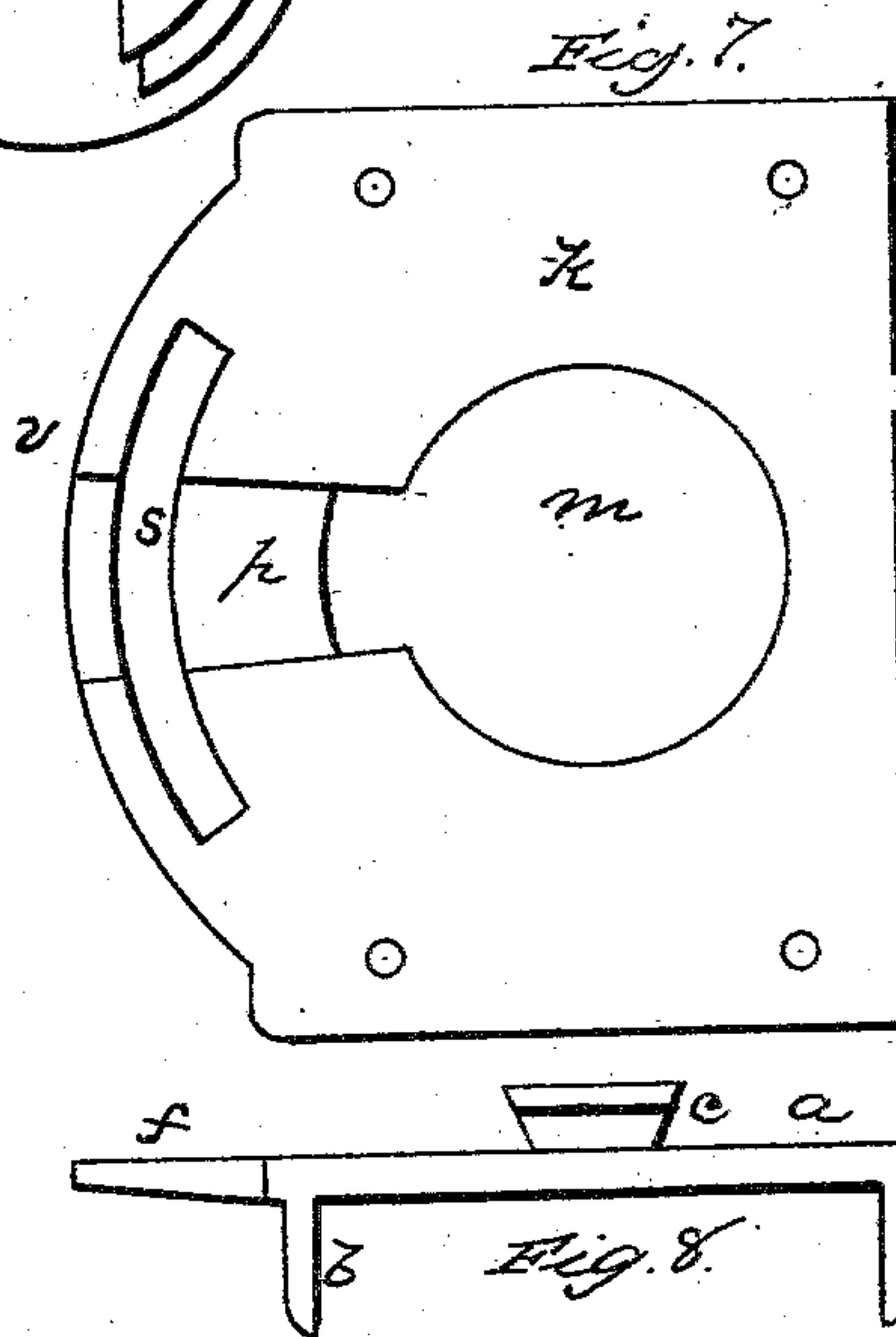
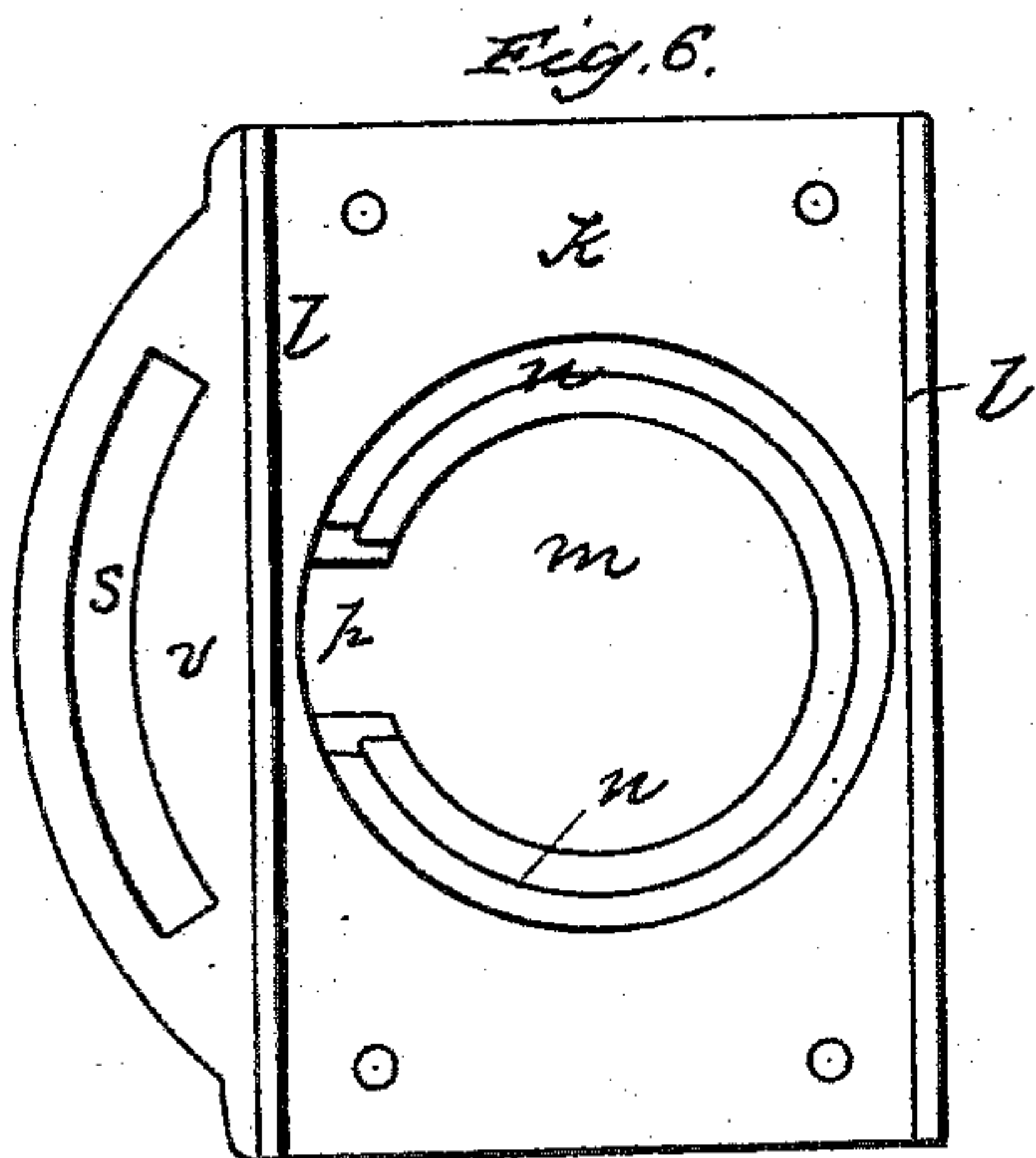
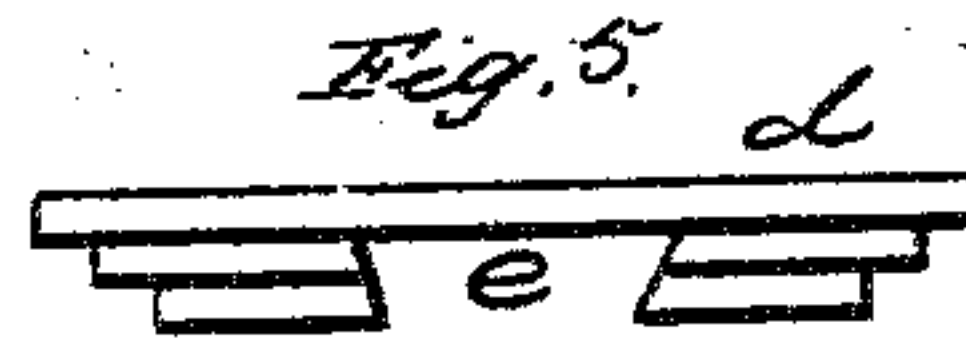
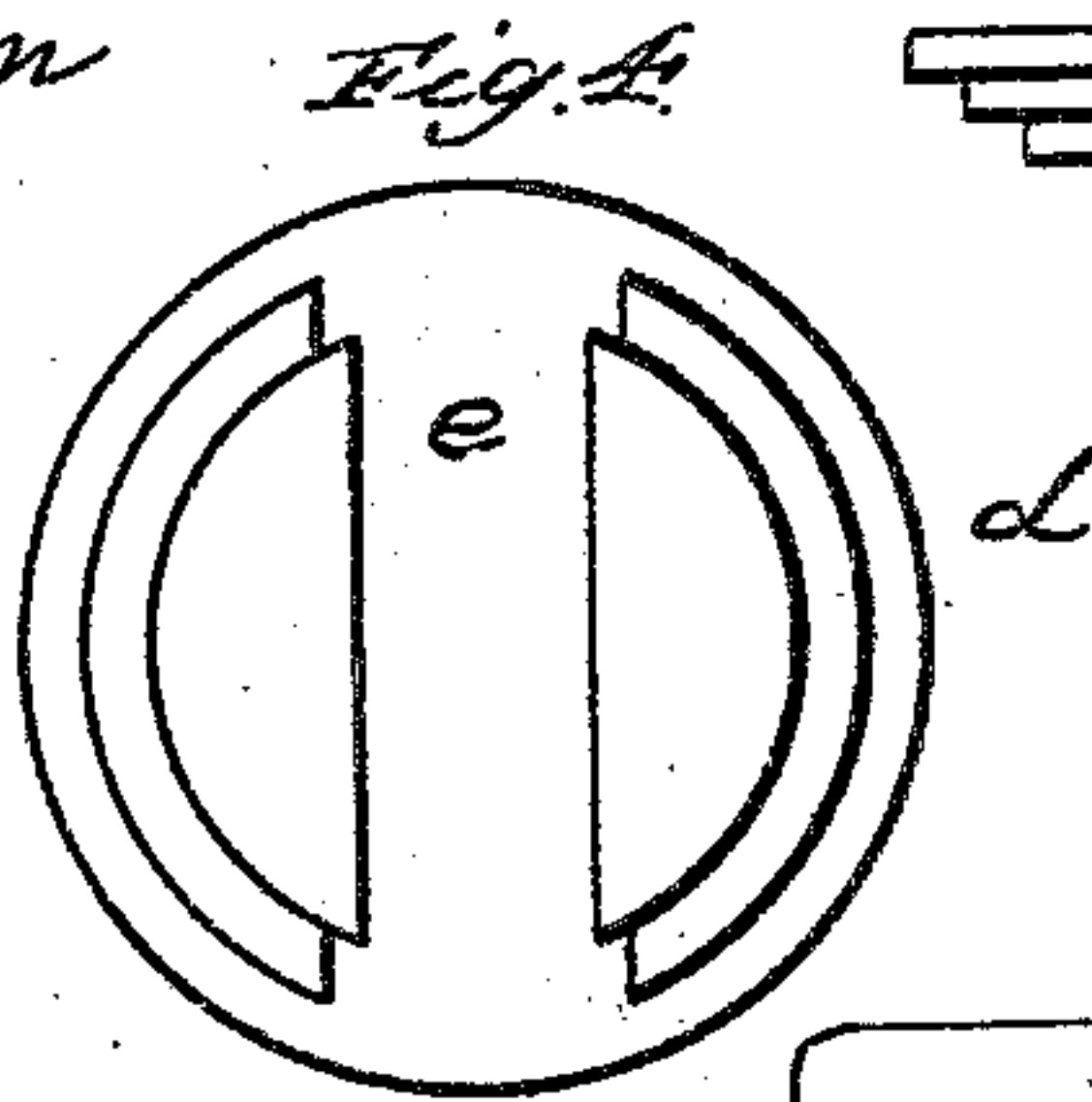
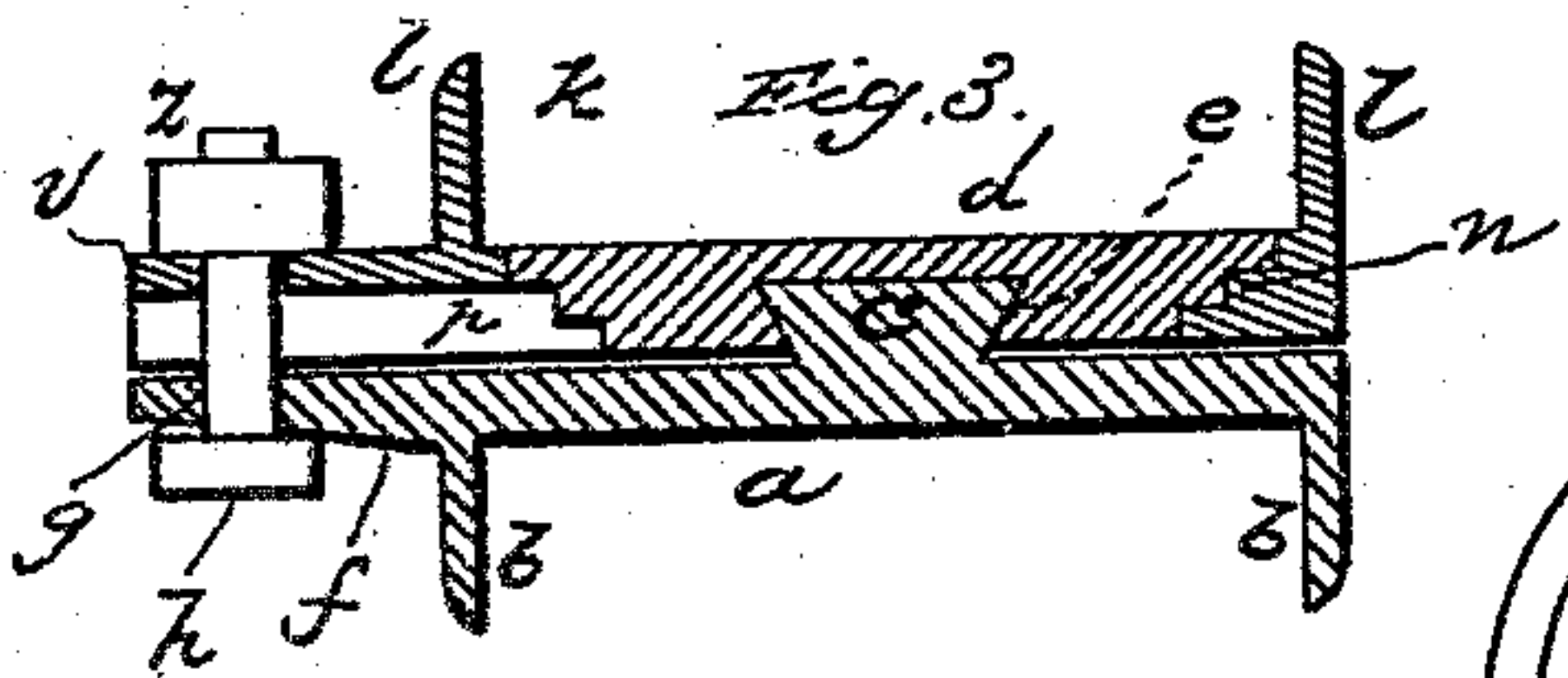
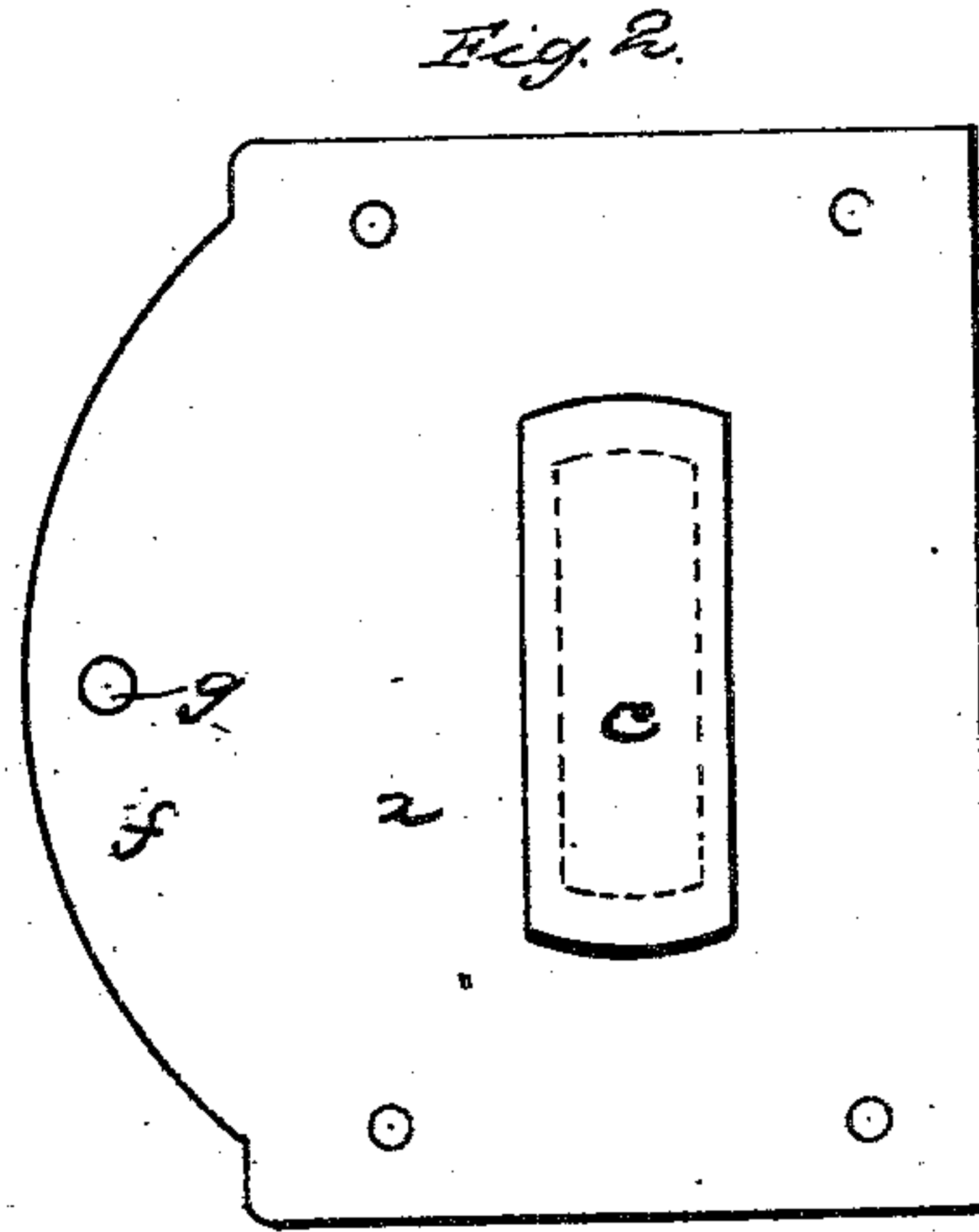
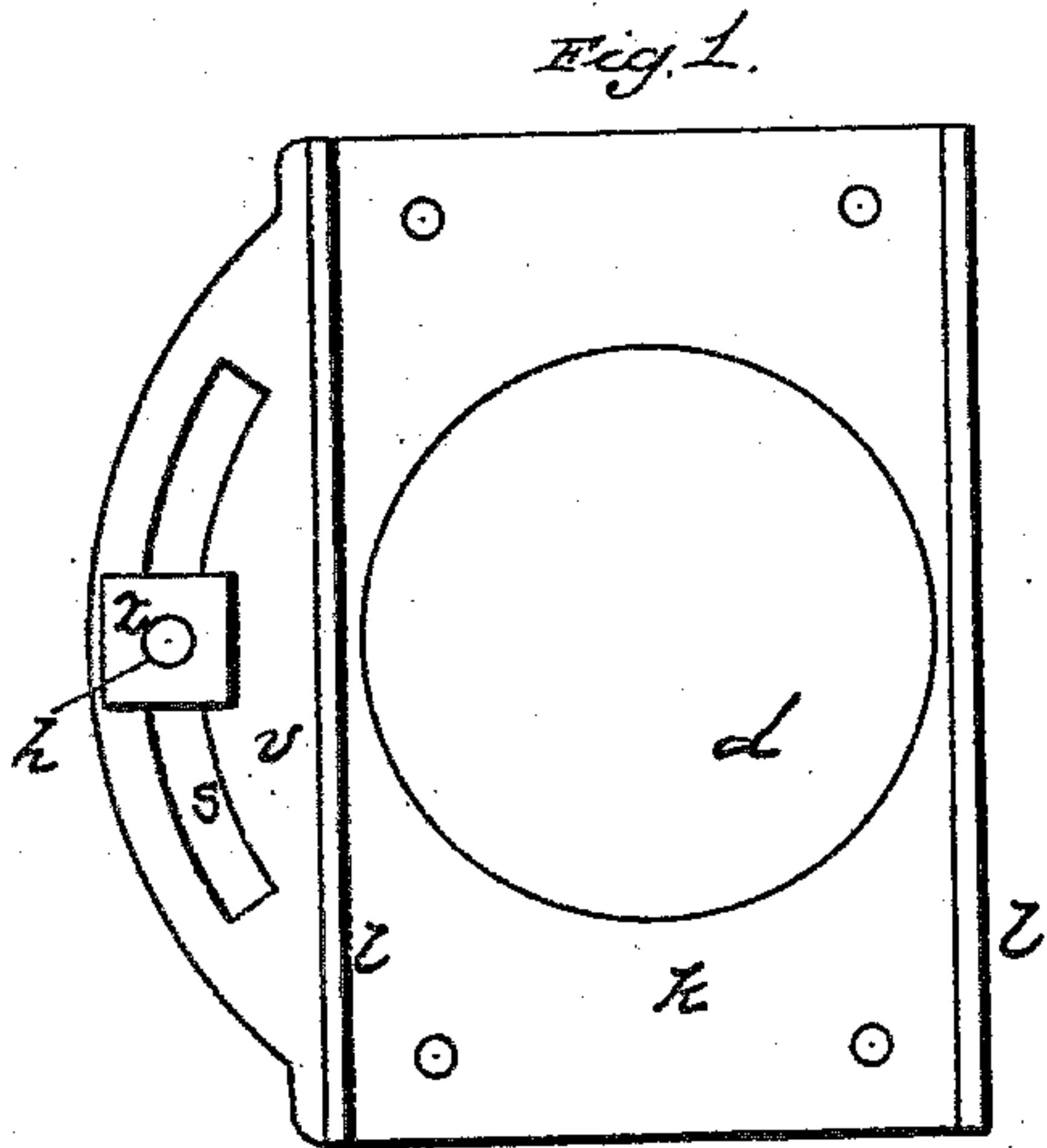


(No Model.)

C. H. KERNS.
WHIFFLETREE PLATE.

No. 283,615.

Patented Aug. 21, 1883.



WITNESSES
J. H. Bates
John T. Morrow

INVENTOR
Chas. H. Kerns.
By Audensmith
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UNITED STATES PATENT OFFICE.

CHARLES H. KERNS, OF PORT BYRON, NEW YORK.

WHIFFLETREE-PLATE.

SPECIFICATION forming part of Letters Patent No. 283,615, dated August 21, 1883.

Application filed June 23, 1883. (No model.)

To all whom it may concern:

Be it known that I, CHAS. H. KERNS, a citizen of the United States, residing at Port Bryon, in the county of Cayuga and State of New York, have invented certain new and useful Improvements in Devices for Locking Single-Trees to Double-Trees; and I do 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a top view. Fig. 2 is a top view of the under plate. Fig. 3 is a vertical sectional view. Figs. 4 and 5 are detail views. Fig. 6 is a top view of upper plate; Fig. 7, bottom view of the same; and Fig. 8 is a side view of the bottom plate.

This invention has relation to means for connecting whiffletrees to the cross-bars of shafts, or single-trees to the ends of double-trees; and it consists in the construction and novel arrangement of devices, as hereinafter set forth, and particularly pointed out in the appended claims.

In the accompanying drawings, the letter *a* designates the lower plate, which is formed with front and rear flanges, *b b*, to engage the cross-bar or the end of a double-tree. The top of this plate is provided with a longitudinal flanged lug, *c*, which is centrally arranged, and is designed to engage a flanged or dovetail slideway, *e*, in a broad circular locking-head, *d*. Outwardly beyond one of the flanges of the plate *a* extends a horizontal bearing lip or flange, *f*, which is perforated at *g* for the passage of the bolt *h*.

k represents the upper plate, which is formed with front and rear flanges, *l l*, to engage the single-tree. Between these flanges a central opening, *m*, is made in this plate, said opening having internal ledges or shoulders, *n*, to engage the marginal portion of the locking-head *d* and the end flanges of the lug *c*. From the opening *m* extends outwardly a passage, *p*, of sufficient width to admit the lug *c*, and providing a means whereby said lug can be introduced into position in engagement with the locking-head. The plate *k* is provided with a lip or flange, *v*, which extends

outwardly and horizontally over and in contact with the flange *f* of the lower plate, *a*. In the flange *v* is made an arc-shaped slot, *s*, the curvature of which is concentric with that of the locking-head *d*, and through which the bolt *h* is designed to pass, receiving a broad nut, *z*, which bears on the slotted flange *v*.

The plates *a* and *k* having been respectively secured to the cross-bar and whiffletree, the connection is made by turning the whiffletree at right angles to the length of the cross-bar, so that the transverse passage *p* can be passed over the lug *c* of the lower plate until said lug is in engagement with the locking-head. Then the single-tree is turned into position for use, and the bolt *h* is put in place, connecting the flanges *f* and *v*. The cross-bar and single-tree are in this manner securely connected, while sufficient freedom of motion is allowed to the single-tree by the arc-slot *s*. Should the plates become loose, so as to rattle, the nut *z* can be turned up on the bolt *h* sufficiently to prevent the noise without obstructing the free movement of the single-tree plate.

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

1. The combination, with the plate *a*, having the longitudinal end-flanged lug *c*, of the single-tree plate *k*, having the internally-shouldered opening *m*, and the locking-head *d*, having the slide-way *e*, substantially as specified.

2. The combination, with the plate *a*, having the longitudinal lug *c* and the perforated lip-flange *f*, of the single-tree plate *k*, having the internally-shouldered opening *m* and the slotted flange *v*, the locking-head *d*, bolt *h*, and nut *z*, substantially as specified.

3. The combination, with a lower plate having a longitudinal end-flanged lug centrally arranged, of a single-tree plate having an internally-shouldered central opening and a transverse passage leading therefrom, and a circular locking-head engaging the central opening and the end-flanged lug, substantially as specified.

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

CHARLES H. KERNS.

Witnesses:

LEWIS B. BURRITT,
OSCAR KENT.