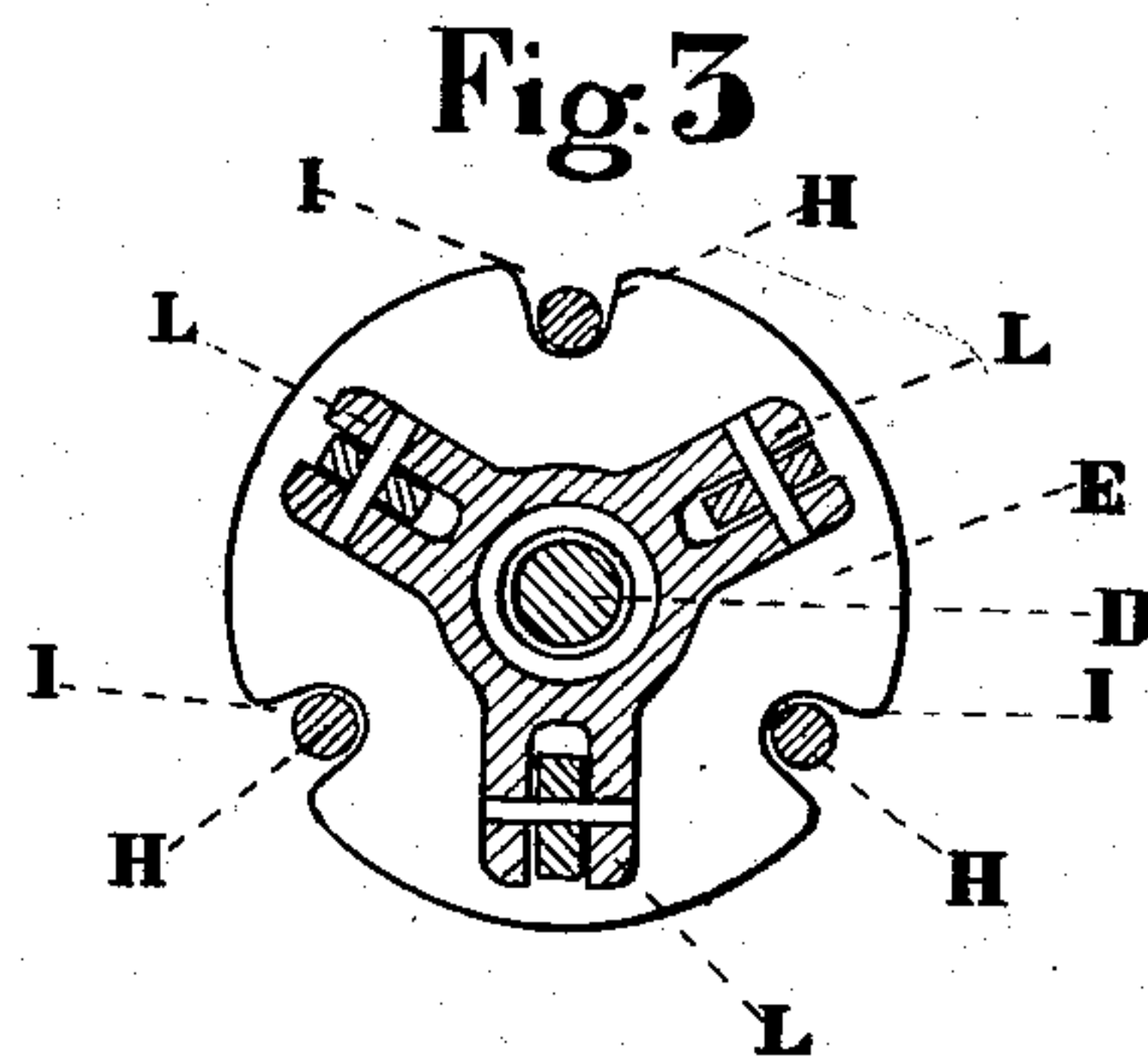
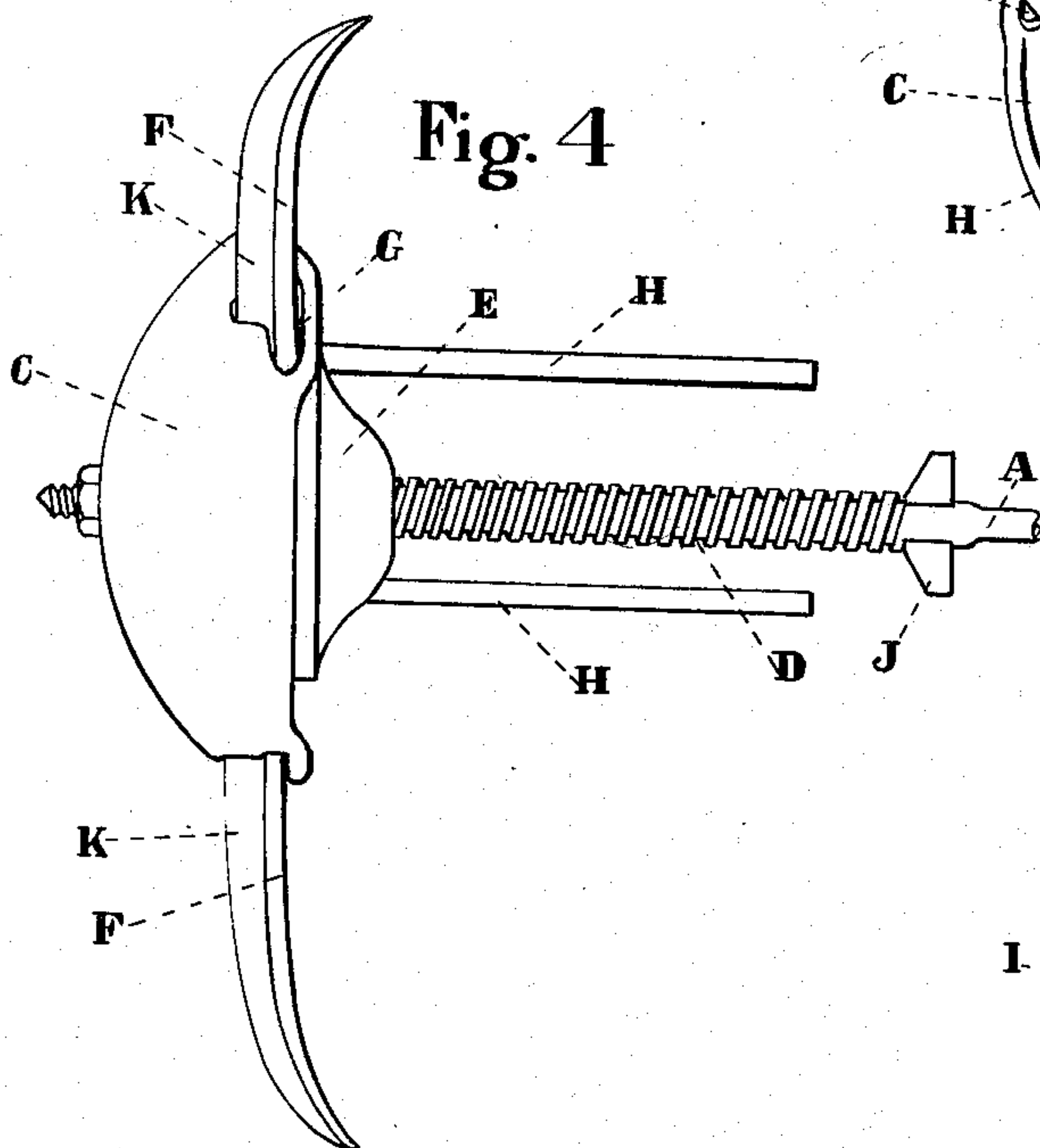
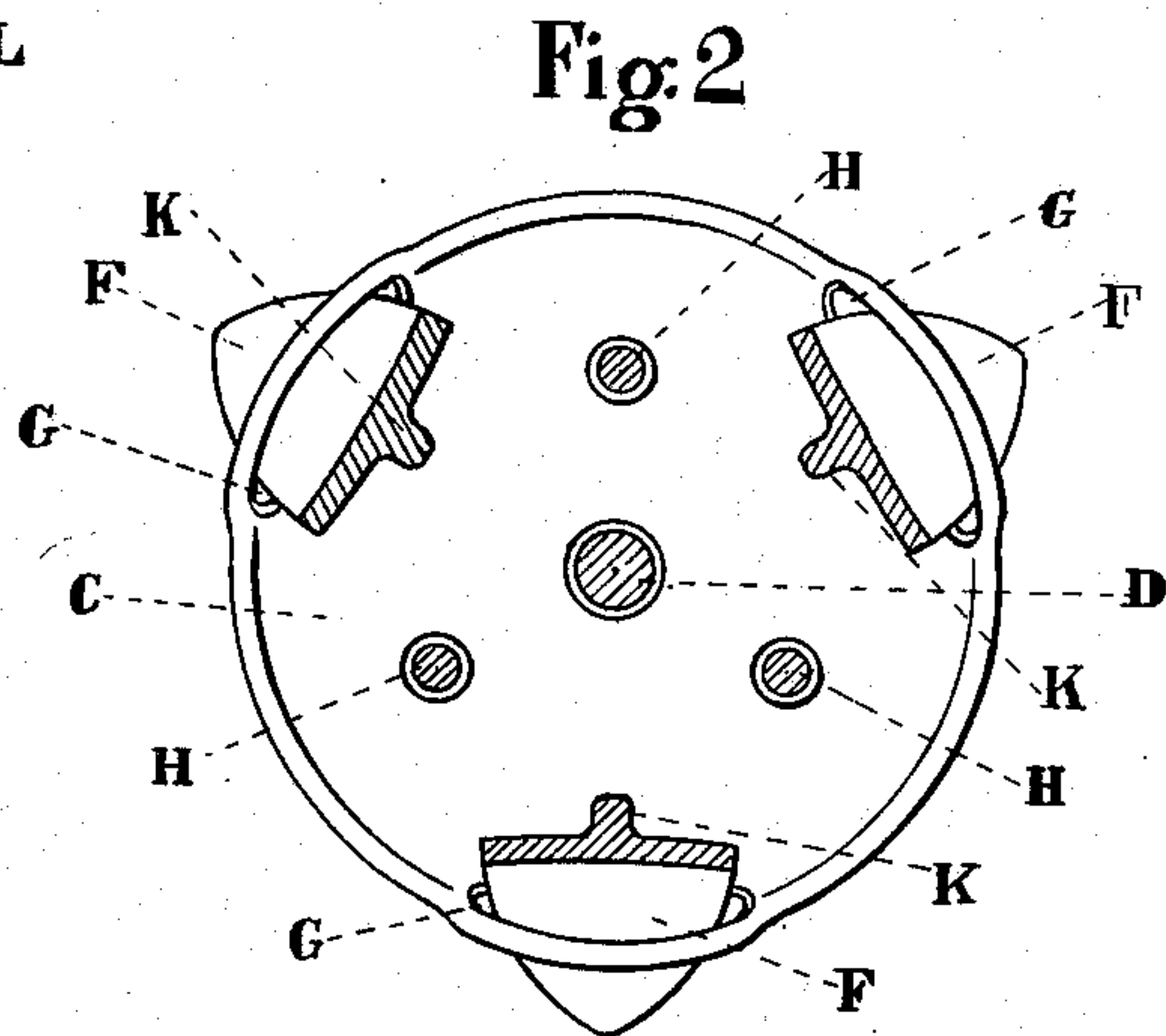
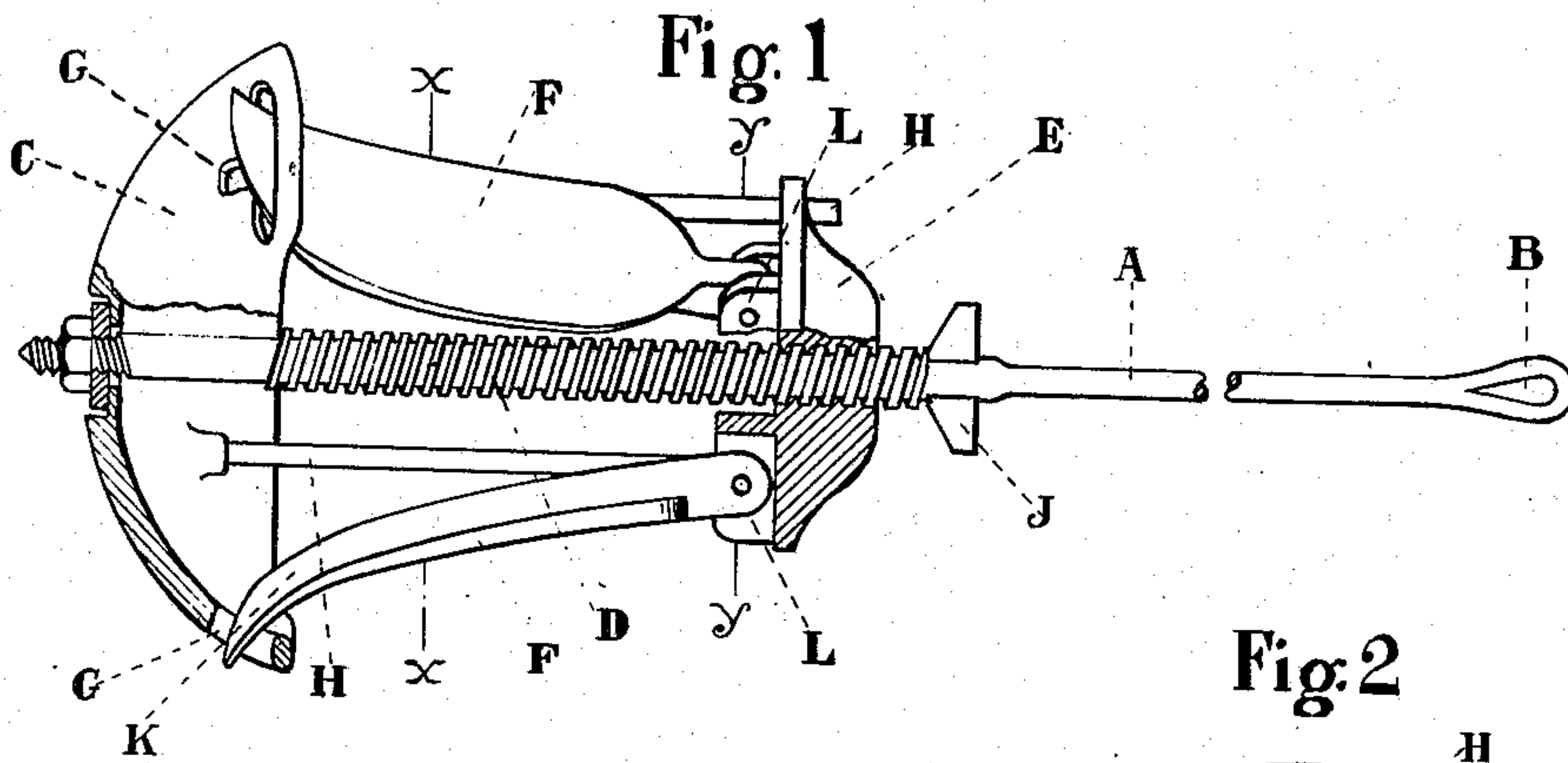


GUY ANCHOR.

930,486.

Patented Aug. 10, 1909.



**WITNESSES:**

WITNESSES:  
C. M. Shannon.

A. M. Burr.

***INVENTOR***

**ORR HENDERSON LEWIS**

**BY**

**ATTORNEYS**



# UNITED STATES PATENT OFFICE.

ORR HENDERSON LEWIS, OF DETROIT, MICHIGAN.

## GUY-ANCHOR.

No. 930,486.

Specification of Letters Patent.

Patented Aug. 10, 1909.

Application filed January 28, 1909. Serial No. 474,740.

*To all whom it may concern:*

Be it known that I, ORR HENDERSON LEWIS, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Guy-Anchors, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to that type of anchor designed for anchoring guy wires, such as the guy wires of telephone and telegraph poles, etc., and the invention consists in the novel construction, arrangement and operation of an anchor having expanding flukes all as more fully hereinafter described and shown in the accompanying drawings, in which:—

Figure 1 is an elevation of my improved anchor, one-half being shown in section. Fig. 2 is a cross-section thereof on line  $x-x$  of Fig. 1; Fig. 3 is a cross-section thereof on line  $y-y$  Fig. 1 and Fig. 4 is a side elevation showing the flukes expanded.

Referring to the drawing, A represents the shank of the anchor which is provided at one end with a suitable shackle or eye B for the attachment of the guy wire.

C is a mushroom shaped crown to which the stock is connected at one end by a swivel so that it is adapted to be rotated independently of the crown.

D is a screw-thread formed upon the adjacent end of the stock.

E is a head screw-threaded upon the stock and F are flukes hinged to the head.

G are slots formed near the rim of the crown for guiding the flukes.

H are guide rods secured to the crown and extending parallel with the stock.

I are notches in the head for the guide rods to slide in, and J is a stop or stops on the stock formed in any suitable manner to constitute a wrench hold for turning the stock.

The flukes are large blades pointed at the ends and curving outwardly toward the point. Upon the inner face they are reinforced with a rib K, the outer face being smooth. At the base, each fluke is formed with a strong knuckle which is pivotally secured between ears L cast on the head.

In practice, the parts being constructed as shown and described, they are intended to operate as follows:—First, a hole has to be dug in the ground wide enough to admit the crown of the anchor and into this hole the

anchor is then introduced with the parts in position as in Fig. 1. After the crown is firmly seated against the bottom and the anchor adjusted to the desired incline, the stock is then rotated in the proper direction for actuating the head D toward the crown which will expand the flukes laterally and drive them into the ground. The head D, it will be seen, is held from rotating by the guide rods H and by making the flukes of proper curvature near the points they will enter the ground readily in expanding and compact it in front of the flukes while the crown is firmly seated against the bottom of the hole. By providing the wrench hold J near the base of the stock the power for rotating it may be applied at this point to better advantage and with less danger of twisting or breaking the stock than if it were applied at the eye B.

What I claim as my invention is:—

1. An expanding guy anchor comprising a stock provided at one end with means for securing a guy wire, a crown sleeved upon the other end of the stock and adapted to form a seat for the anchor at the bottom of a hole, a head upon the stock in screw-threaded engagement therewith, the stock being screw-threaded for a portion of its length adjacent to the crown, guide rods secured to the crown and slidably engaging with the head to prevent the head from rotating and a plurality of flukes hinged at their base to the head and in sliding engagement with the crown, there being guide bearings formed in the edge of the crown for the flukes to slide through.

2. An expanding guy anchor comprising a stock provided at one end with means for securing a guy wire, a mushroom shaped crown centrally sleeved upon the other end of the stock, a disk shaped head upon the stock adjacent to the crown and in screw-threaded engagement therewith, the stock being screw-threaded for a portion of its length, guide rods secured to the crown and slidably engaging with the head, a plurality of flukes hinged at their base to the head and held in sliding engagement with the crown.

3. An expanding guy anchor, comprising a stock provided at one end with means for attaching a guy wire, a mushroom shaped crown fastened on the other end, the stock being free to be rotated independently of the crown, a head upon the stock in screw-threaded engagement therewith, a portion of the stock adjacent to the crown being screw-



threaded, a plurality of flukes hinged at their base to the head and held in sliding engagement with the crown at the edge thereof, guide rods fastened to the crown and slidingly engaging the head and a stop upon the stock limiting the movement of the head in one direction, said stop adapted to form a wrench hold for rotating the stock.

4. An expanding guy anchor comprising a stock provided at one end with means for attaching a guy wire, a mushroom shaped crown attached to its other end, the stock being free to be rotated independently thereof, a disk-shaped head of lesser diameter than the crown screw-threaded upon the stock,

the stock being provided with a screw-threaded portion upon which said head is adapted to travel from and toward the crown, means carried by the crown to prevent the head from rotating independently thereof and a plurality of flukes hinged to the head in folding relation to the stock and in sliding relation to the crown, the crown being provided with means for guiding the flukes.

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

ORR HENDERSON LEWIS.

Witnesses:

C. R. STICKNEY,  
T. E. BARTHEL.