

No. 762,842.

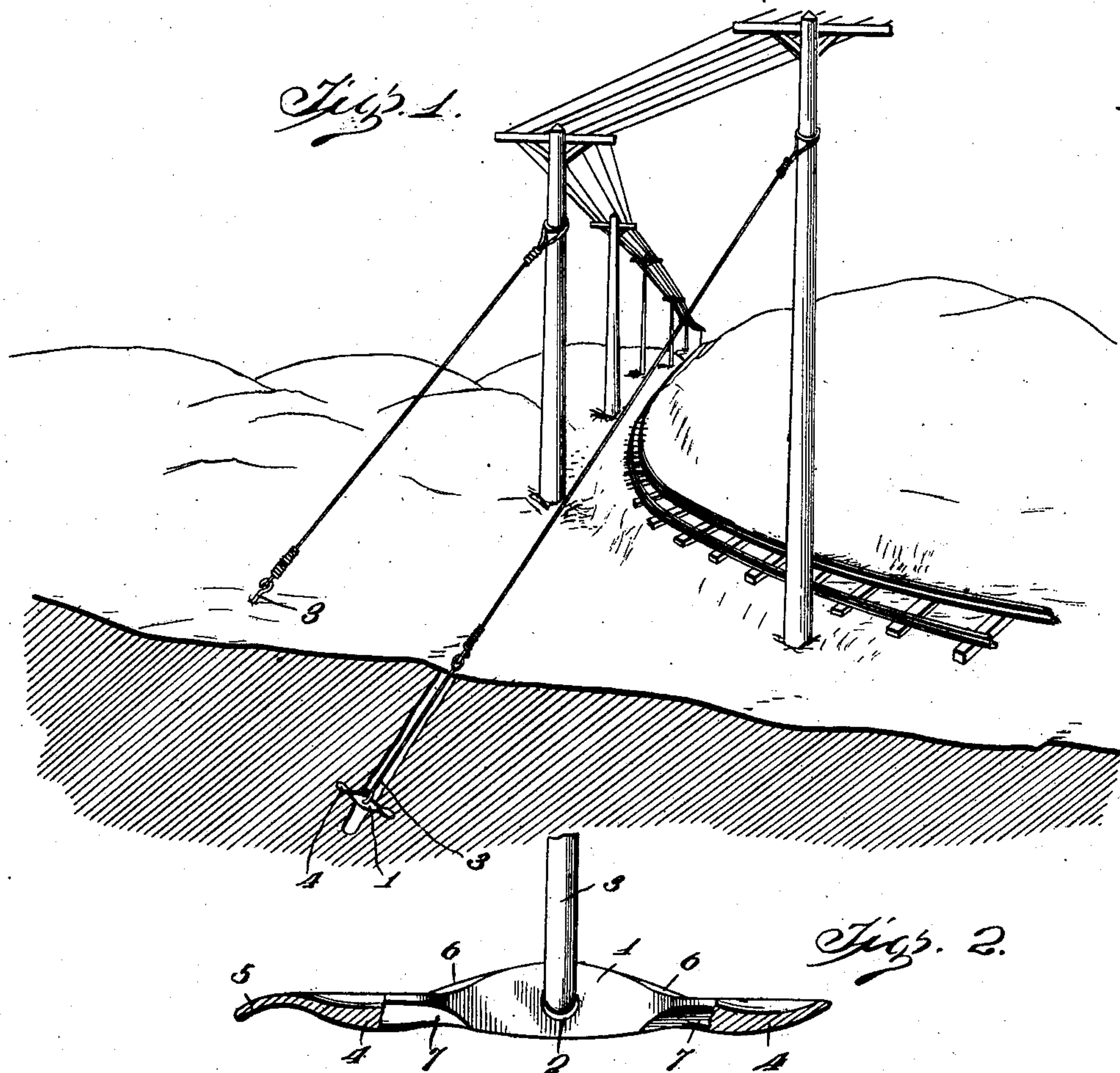
PATENTED JUNE 14, 1904.

R. H. POLK.
GROUND ANCHOR.

APPLICATION FILED DEC. 10, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses

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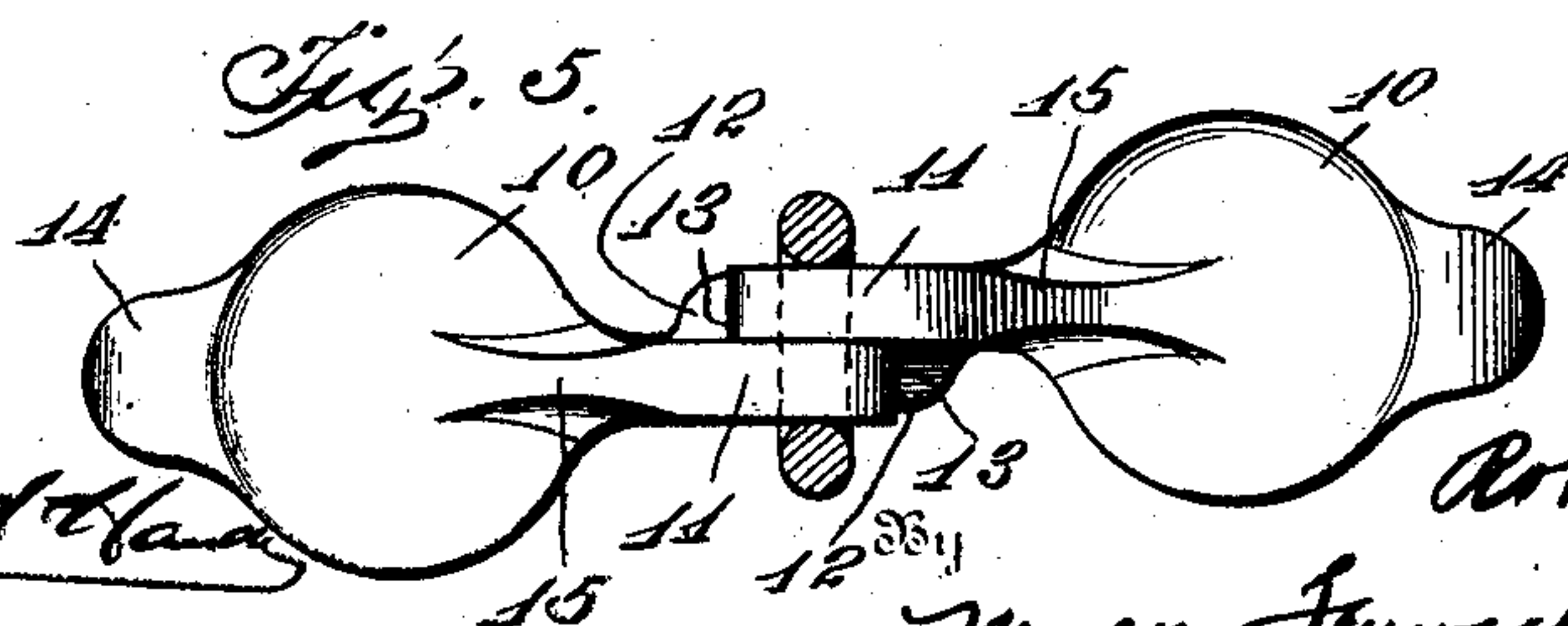
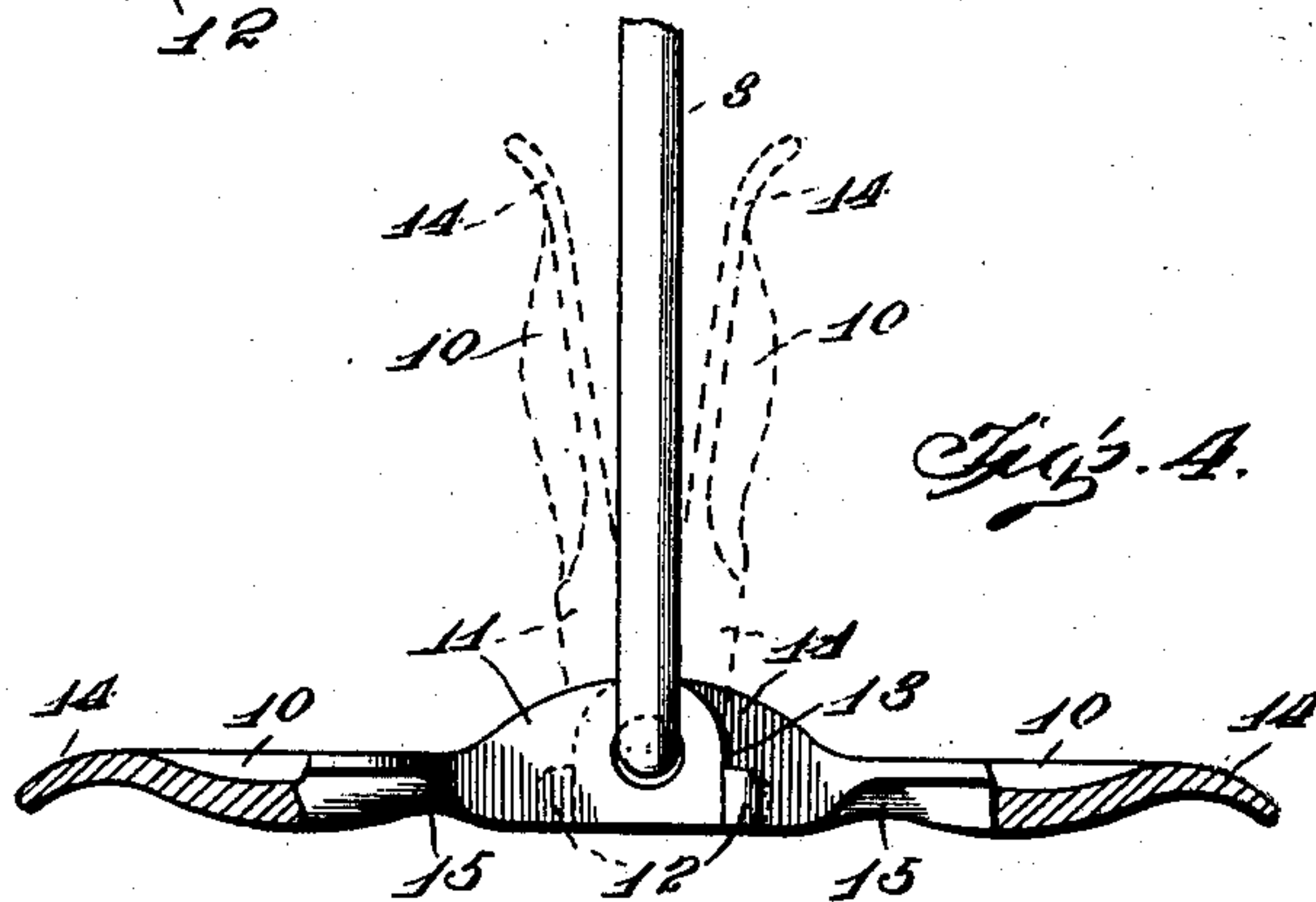
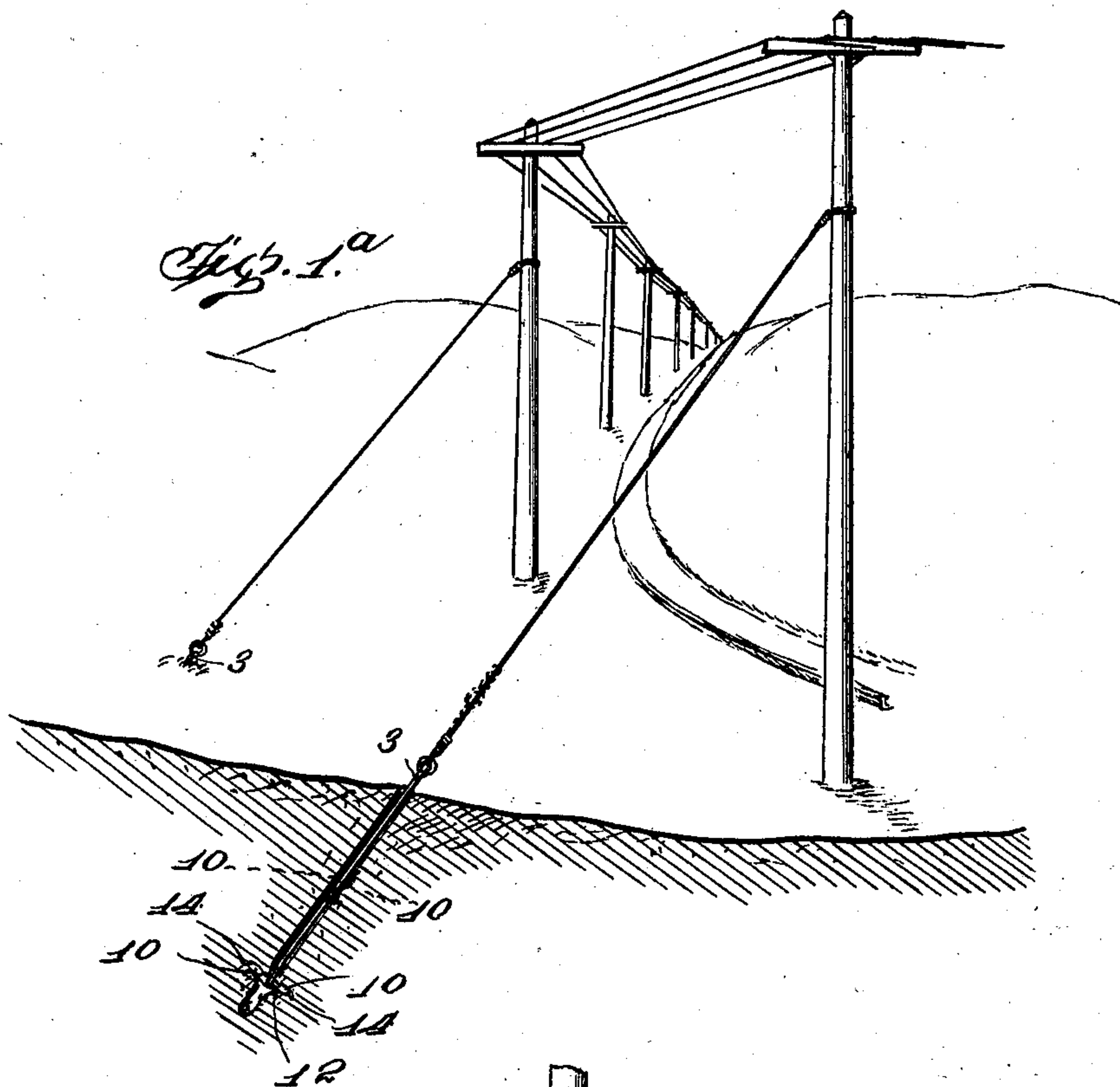
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Witnesses

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UNITED STATES PATENT OFFICE.

ROBERT H. POLK, OF BIRMINGHAM, ALABAMA.

GROUND-ANCHOR.

SPECIFICATION forming part of Letters Patent No. 762,842, dated June 14, 1904.

Application filed December 10, 1903. Serial No. 184,685. (No model.)

To all whom it may concern:

Be it known that I, ROBERT H. POLK, a citizen of the United States, residing at Birmingham, in the county of Jefferson and State of Alabama, have invented certain new and useful Improvements in Ground-Anchors; 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.

This invention relates to improvements in ground-anchors.

The object in view is to construct an anchor which can be easily inserted into a hole in the ground and which will extend at right angles thereto when in a fixed position within said hole.

Another object of the invention is to provide a ground-anchor with means whereby the same can be easily inserted into the ground and which will be retained in a fixed position when moved to a right-angle position to the means connected with said anchor and projecting beyond the outer surface of the ground.

Another object of the invention is to provide a ground-anchor with an apertured body portion and means extending at right angles thereto, which are adapted to be retained within the ground when the said anchor is in its normal position for forming a stay for telegraph-poles, fence-posts, and the like.

With these and other objects in view the invention consists in certain novel constructions, combinations, and arrangements of parts, as will be hereinafter fully described and claimed.

In the accompanying drawings, Figures 1 and 1^a are perspective views of the device shown in practical operation. Fig. 2 is a view in side elevation of a ground-anchor shown partly in vertical section. Fig. 3 is another embodiment of the ground-anchor shown partly in section. Fig. 4 is a side elevation of my preferred embodiment shown partly in section. Fig. 5 is an inverted plan view of the embodiment shown in Fig. 4.

Referring to the drawings by numerals, 1 indicates the hub or body portion of a ground-anchor, which is provided with a suitable aperture 2, adapted to receive a stay-rod 3 or the

like for the purpose of providing means for connecting the ground-anchor to a telegraph-pole or the like. Formed integral with and extending from the hub or body portion 1, at right angles thereto, are a plurality of scooped or concavo-convex disk blades 4, which extend in the same horizontal plane, and one of said blades is provided with an outward extension or lip 5, formed integral therewith. Formed integral with the hub portion 1 and extending into the scooped blades 4 are reinforcing-ribs 6. These reinforcing-ribs terminate near the center of the concave disk blades 4. Extending from the body portion or hub 1 are flanges or ribs 7, which are formed on comparatively the same horizontal plane as the lowest portion of the blades 4 and the hub 1.

In Fig. 3 the structure of a ground-anchor is practically the same as that shown in Fig. 2, except the scooped blades, which are formed integral with the hub portion, are more radical in depth, and neither of the said blades is provided with a lip or an extension 5, as is shown in Fig. 2. In the embodiment shown in Fig. 3 the guy or stay rod 3 is connected centrally above the plane of the edge of the anchor.

The embodiment shown in Figs. 4 and 5 is my preferred construction, and the said anchor comprises a pair of duplicate disk blades 10, which are provided with apertured extensions 11, which form the body portion of a completed anchor. The said body portions 11 are each provided with an extension 12, which is adapted to engage and abut against the body portion 13 of the adjacent section. Each of the blades 10 extends at approximately right angles to the body portion and in the same horizontal plane therefrom when the device is in its normal position. Outwardly-extending lips 14 are formed integral with each of the blades 10 for facilitating the insertion of the anchor into the ground. The stay or guy rod 3 is adapted to be passed through the coacting apertures formed in the body portions of the blades and bent so as to form a loop for the purpose of retaining the said sectional blades in an assembled position for forming the anchor. It will be seen upon considering the

drawings that the duplicate sections comprising the anchor are adapted to be folded against the guy-rod when the said anchor is inserted into a hole for the purpose of fixing the same therein. It will be apparent that when the ground-anchor is inserted into a suitable hole in the ground and outward pressure is brought to bear against the guy-rod or the like the lips 14 upon each section of said anchor will impinge against the walls of the hole, and, as the pressure is continued upon the central body portions the blades will be forced into the earth and will be caused to extend laterally from the said guy-rod or connecting means. By means of the extensions 12, formed upon the body portion of this embodiment, the blades will be locked in a position at right angles to the body portion when the same is in a horizontal plane and will not be pivoted entirely upon the axes, so as to close together in the opposite direction from that shown in the drawings in dotted lines in Fig. 2. The blades or sections forming the shoe are provided with reinforcing means 15, which extend from the body portion of each section toward the outer ends of the scooped portions of the blades provided with the lips 14.

The body portion in all of the modifications is of less diameter than the extended scooped blades.

It will be apparent that certain other modifications and alterations may be made in constructing my ground-anchor, and I therefore reserve the right to make such changes, modifications, and alterations as shall fairly fall within the scope of the present invention.

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

1. A ground-anchor, comprising a body portion and a disk blade extending from said body portion in the same horizontal plane.

2. A ground-anchor, comprising a body portion, and a plurality of concave disk blades extending from said body portion.

3. A ground-anchor, comprising a body portion, and a plurality of concavo-convex disk blades formed integral therewith and extending at right angles therefrom in the same horizontal plane.

4. A ground-anchor, comprising a body por-

tion, and a plurality of reinforced concaved disk blades extending therefrom in the same horizontal plane in diametrically opposite positions.

5. A ground-anchor, comprising an apertured body portion, a plurality of concavo-convex disk blades secured thereto, reinforcing means formed upon said blades and body portion, and an integral lip projecting from one of said disk blades.

6. A ground-anchor, comprising a divided body portion, a plurality of concaved disk blades extending from said body portion, an integral lip formed upon each of said blades, and reinforcing means formed upon said body portion and blades.

7. A ground-anchor, comprising a body portion, a plurality of concaved disk blades secured integrally thereto, a lip extending from one of said blades, and reinforcing means formed upon the upper and lower surface of each of said blades and said body portion.

8. A ground-anchor, comprising a body portion formed of a plurality of sections, each section provided with an integral concavo-convex disk blade extending at right angles therefrom, an integral lip extending at an angle from each blade, and said sections provided with projections extending therefrom and forming means for limiting the sections in their movement, when the same are in an assembled position.

9. A ground-anchor, comprising a body portion, and a plurality of disk blades extending in opposite directions therefrom.

10. A device of the character described, comprising a divided interlocking body portion, and a plurality of reinforced disk blades extending in the same horizontal plane from said body portion.

11. A ground-anchor, comprising a divided body portion, a plurality of disk blades extending therefrom, and reinforcing-ribs formed upon the upper and lower surface of said body portion and each of said plates.

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

ROBERT H. POLK.

Witnesses:

W. B. HARPER,

M. WILLOWS.