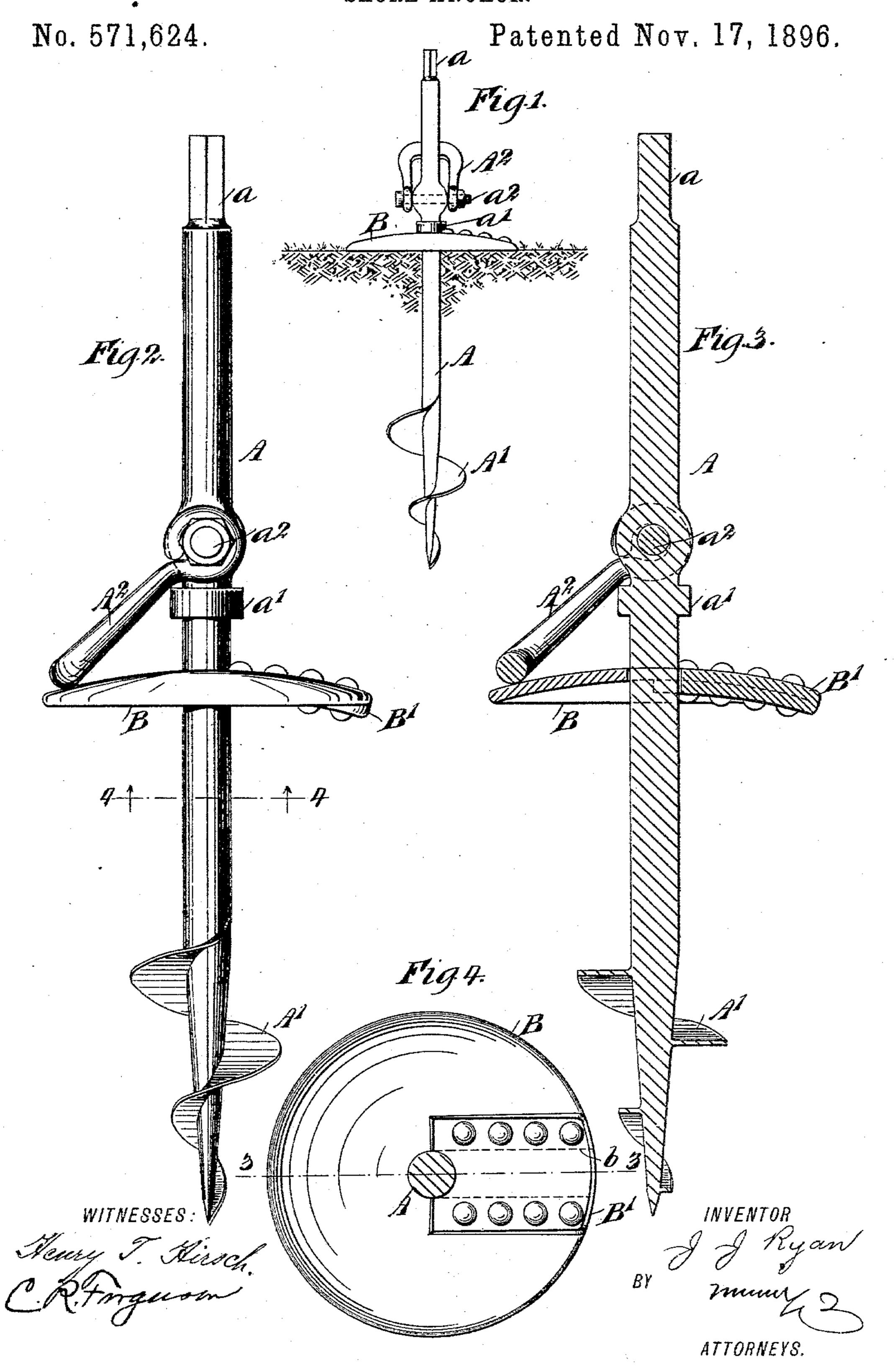
J. J. RYAN.
SHORE ANCHOR.



## United States Patent Office.

JOHN J. RYAN, OF MEMPHIS, TENNESSEE.

## SHORE-ANCHOR.

SPECIFICATION forming part of Letters Patent No. 571,624, dated November 17, 1896.

Application filed February 21, 1896. Serial No. 580,254. (No model.)

To all whom it may concern:

Be it known that I, John J. Ryan, of Memphis, in the county of Shelby and State of Tennessee, have invented certain new and useful Improvements in Shore-Anchors, of which the following is a full, clear, and exact description.

This invention relates to devices for anchoring vessels or other floating devices to the

10 shore of a stream.

In steamboating, rafting, and river and harbor improvements it is often necessary to provide a strong anchorage on short notice, and where no trees or other suitable objects are at hand resort must be had to a so-called "dead man," the laying of which always causes much loss of time, and to avert this is the object of my invention.

I will describe a shore-anchor embodying 20 my improvement, and then point out the novel

features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of a shore-anchor embodying my invention and showing the same as inserted in the ground. Fig. 2 is a side elevation on an enlarged scale. Fig. 3 is a vertical section on the line 3 3 in Fig. 4, and Fig. 4 is a section on the line 4 4 of Fig. 2.

Referring to the drawings, A designates an anchor-post having its lowest portion tapered to a point, and this tapered portion is provided with a screw-blade A'. The upper end of the anchor-post is squared, as at a, to receive a wrench for turning the post into the ground. Between its ends the post is provided with a stop collar or flange a', and above this collar or flange a hole is formed transversely through the post for the passage of a bolt a' for securing a line-shackle A' to the post. It may be here stated that my invention is not limited to the shackle, as it is obvious that the shackle may be omitted and the fastening-line tied directly to the post.

B is a metal anchor-disk movable vertically on the post between the screw-blade and collar or flange a. This disk is concaved on its under side, and for its easy attachment to or removal from the post I provide it with a

slot b, opening outward from the center opening in the disk. The slot b is slightly wider than the diameter of the post, so that the post may be moved through the slot to the center 55 of the disk. When in position on the post, a plate B' is placed in the slot and secured by bolts or rivets passing through holes in lateral extensions of the plate and through holes in the disk.

I have found by experience that the post without the sliding disk will not make a secure anchor in soft or sandy soil or in banks over which water used for grading is flowing, as the water will follow down the post and loosen the ground around it. When the disk is used, however, it will shed the water and press the earth around the post. It will also serve to stiffen the post when the strain or pull is sidewise, and it may also be stated that 70 the disk will serve as a guide to hold the post straight while screwing it into the ground.

To fasten the anchor in the ground, it is first jammed down until the screw-blade can get a good hold. Then by turning the post it 75 will be forced into the ground by means of the screw-blade until the disk engages with the collar or flange a' and is pressed tightly against the ground-surface or bodily buried several inches below the surface.

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

1. A shore-anchor adapted to have one of its ends forced into the ground, a collar or 85 flange on the post, and a disk movably mounted on the post below the collar, the said disk having a lateral opening whereby it may be moved laterally from the post, substantially as specified.

2. A shore-anchor, comprising an anchorpost having a screw portion and a collar or flange, a disk movable on the post, between the screw portion and the collar or flange, and having an outwardly-opening slot, and a closing-plate for said slot, substantially as speci-

JOHN J. RYAN.

Witnesses:

fied.

J. SHEPWAY, T. J. COLE.