(No Model.)

T. S. CALPIN.

ANCHOR.

No. 337,241. Patented Mar. 2, 1886.

FIG. 1.

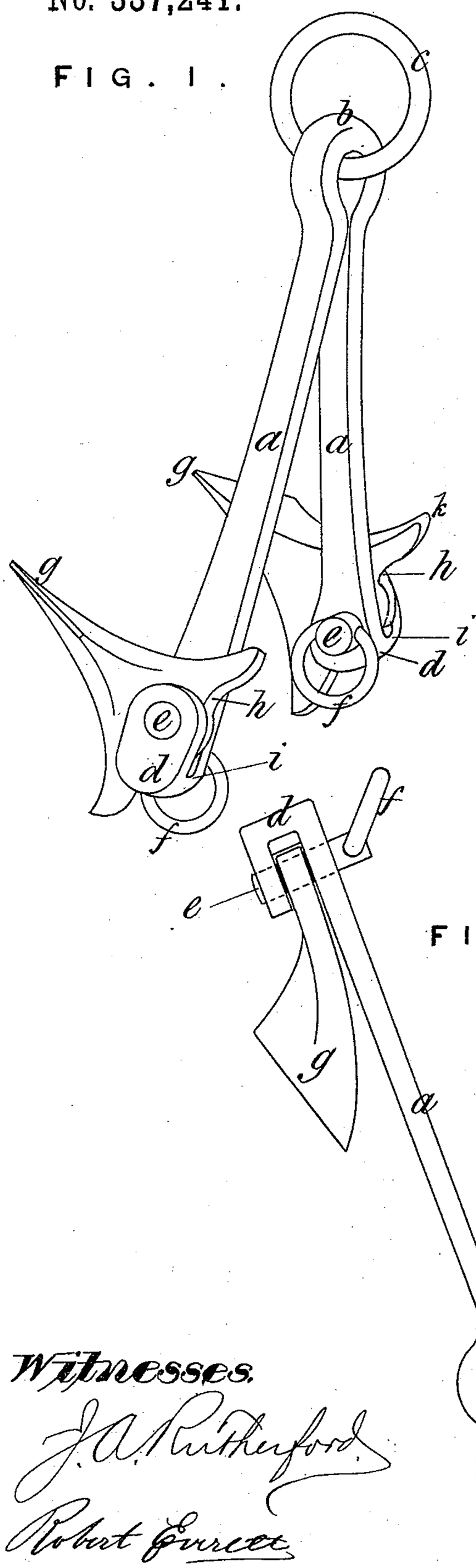


FIG. 3.

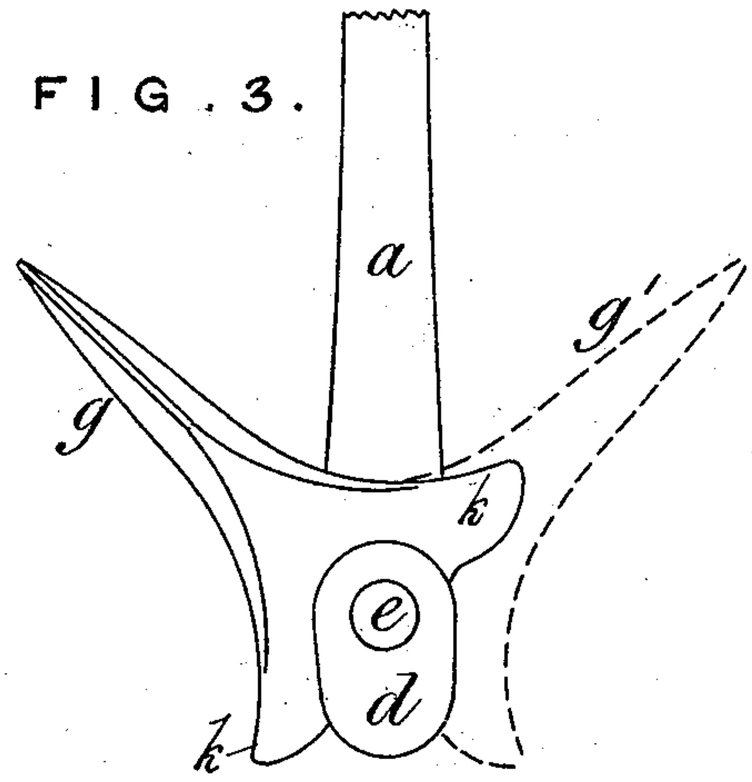
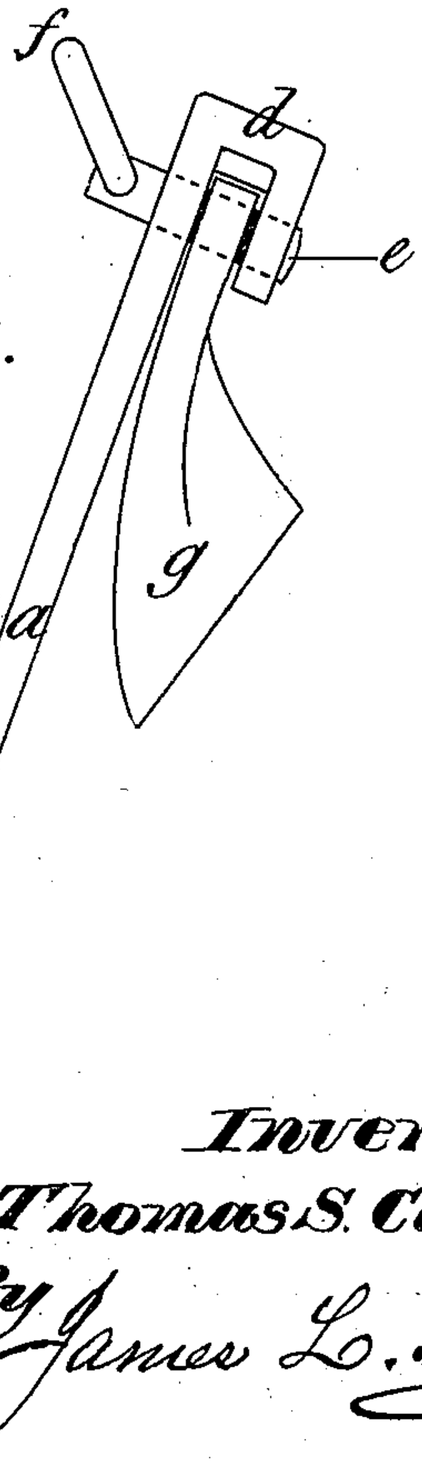


FIG. 2.



Witnesses.

J. A. Rutherford.

Robert Burnett.

Inventor:

Thomas S. Calpin.

By James L. Norris.

Atty.

UNITED STATES PATENT OFFICE.

THOMAS S. CALPIN, OF ST. JOHN'S, NEWFOUNDLAND.

ANCHOR.

SPECIFICATION forming part of Letters Patent No. 337,241, dated March 2, 1886.

Application filed October 13, 1884. Serial No. 145,388. (No model.) Patented in England August 18, 1884, No. 11,396; in Canada November 28, 1884, No. 20,645, and in Norway April 24, 1885.

To all whom it may concern:

Be it known that I, THOMAS S. CALPIN, a subject of the Queen of Great Britain, residing at St. John's, in the Island of Newfoundland, blacksmith, have invented a certain new and useful Improved Anchor, (for which I have obtained a patent in Great Britain, No. 11,396, dated August 18, 1884; in Norway, dated April 24, 1885; and in Canada, No. 20,645, dated November 28, 1884,) of which the following is a specification.

The object of my invention is to construct anchors in an improved manner, by which cheapness, efficiency, simplicity, and convenience are secured.

Instead of the ordinary shank in one piece, I construct the shank in two parts, meeting together at the shackle and extending outward and apart from each other at a considerable angle where the flukes are joined thereto. The two portions of the shank thus form two sides of a triangle, and are placed at such a distance apart as to dispense with the ordinary arms. The flukes are hinged to the ends of the two portions of the shank—one fluke on each—and they are so fitted as to have a range of about ninety degrees in their movements from one side to the other, equal to about forty-five degrees on each side. The inner ends of the flukes are fitted with spurs or projections, which act as stops to control the range of motion of the flukes, and also assist in causing the flukes to assume the necessary position for taking hold of and penetrating the ground.

Rings may be placed at the inner ends of the shanks to assist in fishing and stowing the anchor.

My improved anchor requires no stock, as it cannot fail to lay hold of the ground without such appliance.

When the anchor is stowed, the flukes can be placed in line with the shanks, and thus it occupies very little space and projects only a very small distance from the ship's side.

Anchors constructed according to my invention possess the maximum of strength with the minimum of material and labor required in and for their production.

In order that my invention may be clearly understood, reference is hereby made to the accompanying drawings, in which similar letters of reference indicate corresponding parts.

Figure 1 is a perspective view of the anchor complete. Fig. 2 is an elevation of the same in the position which it assumes when it is hanging to the davits at the ship's side, and Fig. 3 is a partial view to explain the action of the flukes.

a a are the two portions of the shank, of a V form, the junction of *a a* at *b* forming the shackle, to which the ring is attached, for receiving the end of the cable.

d d are two sockets or jaws, through which pins *e e* are riveted, having rings *f f* for convenience in fishing the anchor.

The flukes *g g* are pivoted on the pins *e*, upon which they are capable of revolving about a quarter of a circle in either direction, as shown in Fig. 3 at *g'*. When the anchor is fished, as shown in Fig. 2, the flukes *g g* hang perpendicularly. The extent of the travel of the flukes is governed by the formation of the curved shoulders at *h*, which come into contact with the lower part of *d* at *i*, and this may be varied to suit the service for which the anchor may be required.

The spurs *k k* cause the flukes *g g* to fall into their proper position when the anchor is dropped and before it begins to "bite."

Having thus described my invention, what I claim is—

1. An anchor having a V-shaped shank provided with an eye or shackle at its apex, and having at the extremity of each branch of the shank jaws for receiving the pivotally-mounted flukes, the latter being secured by pivot-bolts having fishing-rings on their inner ends, substantially as described.

2. An anchor having a V-shaped shank provided with an eye or shackle at its apex, and having jaws at the extremity of each branch of the shank, and flukes pivoted in

said jaws and provided with spurs made integral therewith and curved outward upon each side of the pivotal support of the flukes, substantially as described.

3. The combination, with the V-shaped shank *a*, having an eye or shackle, *b*, and jaws *d*, of flukes *g*, pivotally mounted in said jaws and having spurs *k*, and the pivot-pins *e*, having fishing-rings *f*, substantially as described.

In testimony whereof I have hereto set my hand this 1st day of October, A. D. 1884.

T. S. CALPIN.

Witnesses:
JOHN BASTON,
Of St. John's aforesaid, Yeoman.
ALEX. J. W. MCNEILY,
Of St. John's aforesaid, Notary Public.