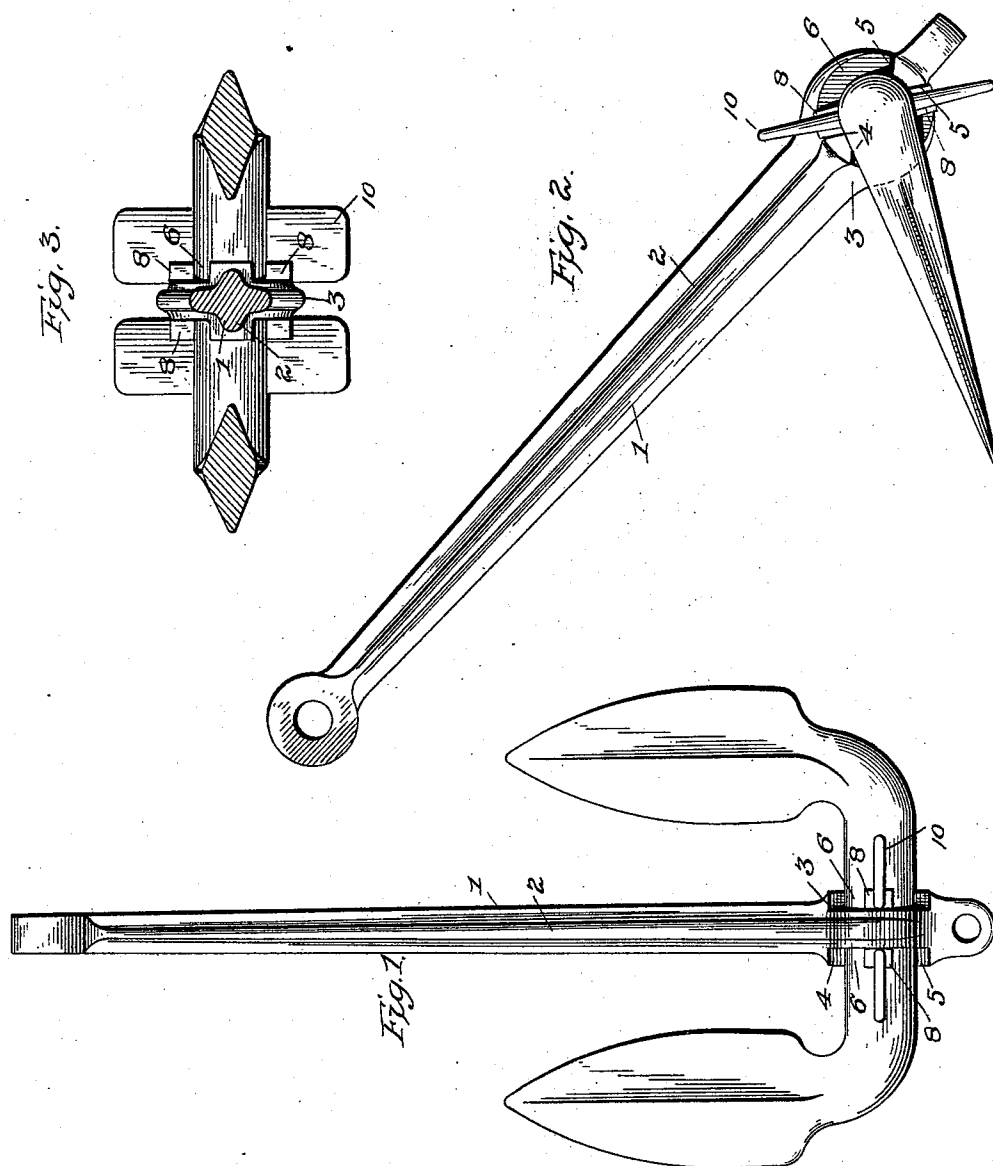


(No Model.)

H. A. HOUSE & H. A. HOUSE, Jr.
ANCHOR.

No. 527,061.

Patented Oct. 9, 1894.



Witnesses:
E. H. Sturtevant
E. A. Scott

Inventors:
Henry Alonzo House
Henry Alonzo House Jr.
by *Richard D.*
attys

UNITED STATES PATENT OFFICE.

HENRY ALONZO HOUSE AND HENRY ALONZO HOUSE, JR., OF EAST COWES,
ASSIGNORS OF ONE-HALF TO ROBERT RINTOUL SYMON, OF LONDON,
ENGLAND.

ANCHOR.

SPECIFICATION forming part of Letters Patent No. 527,061, dated October 9, 1894.

Application filed May 21, 1894. Serial No. 511,967. (No model.) Patented in England September 9, 1893, No. 17,010.

To all whom it may concern:

Be it known that we, HENRY ALONZO HOUSE, Sr., and HENRY ALONZO HOUSE, Jr., citizens of the United States, residing at East Cowes, Hampshire, England, have invented certain Improvements in Anchors, of which the following is a full, clear, and exact description.

The invention has been patented to us in Great Britain under date of September 9, 1893, No. 17,010.

It is the object of our invention to provide an anchor in which the shank and flukes will be cast in connection with each other, the flukes being arranged to turn within the eye of the shank as in a journal bearing in order that the necessary swiveling action will be secured when the anchor is gaining its hold at the sea bottom.

Our invention consists of an anchor having the shank and flukes cast together in swiveled engagement, the fluke arm having stop lugs cast thereon engaging the sides of the eye to retain the flukes laterally in place and adapted to engage stop shoulders on said eye to limit the swiveling movement of the flukes, and fins also cast on the fluke arm adjacent to the eye of the shank and forming extensions of the stop lugs, said fins being arranged to insure the swiveling action of the flukes and their engagement with the ground.

In the accompanying drawings, Figure 1, is a front view of the anchor. Fig. 2, is a side view, the flukes being in the position assumed by them when resting on the ground. Fig. 3, is a sectional view.

The shank 1, is of substantially ordinary construction, having side strengthening ribs 2, extending to the eye 3 where it ends in inclined shoulders 4, projecting laterally from the eye and arranged diametrically opposite other and similar shoulders 5 at the base of the eye. This leaves the free spaces 6, 6, be-

tween the shoulders, in which stops on the arm of the flukes work.

The flukes may be of ordinary construction as shown, and the arm of the flukes passes through the eye of the shanks as through a journal so that it may swivel therein, the said parts, shank and flukes being cast into connection with each other. In casting them together we prefer to cast the fluke arm within the eye of the shank rather than cast the eye about the fluke arm as by the process first mentioned, the eye can be utilized as a part of the mold and no refractory coating need be used between the parts to prevent them from sticking, as the shrinkage of the metal forming the arm will be sufficient to keep said arm free and loose from the eye and thus secure the swiveled relation of the parts. The usual thin coating may be applied, however, in order to get a smoothly finished product from the mold. In casting the flukes we cast at the same time on the arm thereof adjacent to the eye the lugs which bear on the sides of the eye and retain the parts in their lateral position relative to each other and these lugs are in line with the stop shoulders of the shank so that the swiveling action of the flukes will be limited. Cast with the arm also and extending from these stop lugs are the fins consisting of flat pieces extending out adjacent to the eye through the free spaces before mentioned. These fins engaging the ground insure the swiveling action of the flukes as the anchor is dragged and throws the points of the flukes into the ground.

We claim—

1. An anchor having the shank and flukes swiveled and cast together, said shank having stop shoulders adjacent to the eye and the fluke arm having stop lugs to contact with the shoulders and fins projecting from the arm to engage the ground, the said shoulders,

stops and fins being cast on their respective parts, substantially as described.

2. An anchor having the shank and flukes cast in swiveled connection with each other
5 and having cast thereon stops and fins, substantially as described.

3. An anchor having the shank and flukes cast in swiveled connection with each other, the eye of the shank having shoulders with
10 a free space between them, the stop lugs cast on the fluke arm extending through the free space to bear laterally against the eye and to abut against the shoulders and the fins cast
15 cast lugs, substantially as described.

In witness whereof we have hereunto set our hands in presence of two witnesses.

HENRY ALONZO HOUSE.
HENRY ALONZO HOUSE, JUNIOR.

Witnesses to the signature of Henry A. House:

E. K. STURTEVANT,
A. S. BÜSING.

Witnesses to the signature of Henry A. House, Jr.:

C. E. NAGGS,
ATHERSTONE DAMANT.