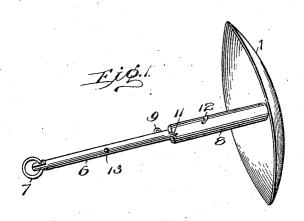
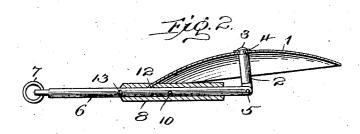
PATENTED MAR. 19, 1907.

No. 847,320.

C. E. CRANE.
FOLDING MUSHROOM ANCHOR.
APPLICATION FILED FEB. 12, 1906.





Inventor

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## UNITED STATES PATENT OFFICE.

CHARLES E. CRANE, OF LAKE CITY, MINNESOTA.

## FOLDING MUSHROOM-ANCHOR.

No. 847,320.

Specification of Letters Patent.

Patented March 19, 1907.

Application filed February 12, 1906. Serial No. 300,776.

To all whom it may concern:

Be it known that I, Charles E. Crane, a citizen of the United States, residing at the city of Lake City, in the county of Wabasha 5 and State of Minnesota, have invented certain new and useful Improvements in Folding Mushroom-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 anchors, and has for an object to provide an anchor providing new and improved features of reliability, 15 strength, convenience, and efficiency.

It is well known that mushroom-anchors present the best type of anchors at present in use for reliability of securing a vessel and convenience in operation while in the water.

It is the object of this invention to provide a mushroom-anchor arranged with a jointed shank, so that the bowl of the anchor may be folded in juxtaposition with the shank, so that the anchor may be conveniently stored
 upon the deck of the vessel or slung alongside in the usual manner of slinging anchors.

A further object of the invention is to provide a mushroom-anchor foldable in such manner that it may be laid upon the deck of the vessel and will not move upon the periphery of the bowl to damage the vessel and articles upon the deck.

With these and other objects in view the invention comprises certain novel construc35 tions, combinations, and arrangements of parts, as will be hereinafter fully described and claimed.

In the drawings, Figure 1 is a perspective view of the improved folding mushroom-anchor. Fig. 2 is a longitudinal sectional view through the bowl and sliding sleeve of the improved anchor, showing the jointed shank in elevation.

Like characters of reference designate cor-45 responding parts throughout the several views.

In its preferred embodiment the improved anchor forming the subject-matter of this application comprises a bowl 1 of substantially 50 the ordinary and usual construction formed with a circular periphery and concaved or dished, as shown. At the center of the bowl is secured the stud 2, extending from without the concaved side and made rigid in any approved manner, as by being extended through the structure of the bowl and upset upon the

convexed side, as at 3, with or without interposition of the washer 4.

At its end opposite the bowl the stud 2 is pivoted, as at  $\hat{5}$ , to the main shank portion 6, 60 which, together with the stud 2, forms the shank of the anchor of approximately the usual and ordinary length and size and capable of being folded at the pivot 5 angularly to bring the peripheral edge of the bowl 1 in 65 contact with the shank. The shank is provided at its extremity opposite the bowl with any ordinary and convenient means for attaching a hawser, as the ring 7, and upon the said shank is mounted a sleeve 8, capable of 70 longitudinally sliding upon the said shank. The sleeve 8 is positioned and proportioned to slide over the joint at the pivot 5 and to simultaneously embrace the stud 2 and the main shank member 6 and to hold the said 75 stud 2 in rigid alinement with the shank and to be retained in such position by any approved means, as by the cotter-pin 9, inserted through a hole 10 diametric of the shank 6 and engaged within alined notches 11 in the 80 end of the sleeve opposite the bowl.

Upon one side the sleeve 8 is provided with an inclined slot 12, proportioned and positioned to engage and retain the peripheral edge of the bowl when folded in contact with 85 the shank 6, and the sleeve 6 is held in such engagement and the bowl in said contacting position by any approved means, as by inserting the cotter-pin 9 through the diametrically-projected hole 13.

From the foregoing description it will be obvious that with the parts assembled as in Fig. 1 and the cotter-pin 9 engaging and retaining the sleeve 8 upon the stud 2 and shank 6 and extending across the pivot-point 95 5 the said shank becomes thereby rigid with the bowl 1 and the anchor is adapted for use in every way similar to the use of the ordinary mushroom-anchor. When, however, the anchor is to be slung alongside or to be 100 stored or positioned upon the deck of the vessel, the cotter-pin 9 is withdrawn from the notches 11 and hole 10 and the sleeve 8 slidably moved upon the shank 6 toward the ring 7 until the joint at the pivot-point 5 is 105 released, and whereupon the bowl 1 and the stud 2 are angularly moved about the pivot 5 to the position shown in Fig. 2 and the edge of the bowl engaged by the inclined slot 12. The sleeve-retaining means is then applied, 110 as inserting the cotter-pin 9 through the hole 13, which positions the bowl approximately

in parallelism with the shank, as shown, which permits its being properly slung to the side of the vessel or positioned upon the deck.

What I claim is—

1. In an anchor, a circular bowl, a jointed shank carried by the bowl, whereby the bowl may be folded into juxtaposition with the shank, and means movably mounted upon said shank for holding said bowl in its folded

10 position.

2. In an anchor, an engaging member, a jointed shank carried by the engaging member and arranged to permit the engaging member to be folded into contact with the shank, and an apertured sleeve carried by the shank, said aperture being adapted to retain the engaging member in said contacting position.

3. In an anchor, a concavo-convex bowl, a

stud extending axially from the concave side 20 of the bowl, a shank pivoted to the extremity of the stud and arranged to permit the bowl to be folded into contact with the shank, a sleeve slidably mounted upon the shank and proportioned to be moved to span the joint 25 and embrace the stud and provided with means to engage the peripheral edge of the bowl when in contact with the shank, and means to lock the sleeve against longitudinal movement to hold the bowl selectively in op- 30 erative and folded positions.

In testimony whereof I affix my signature

in presence of two witnesses.

CHARLES E. CRANE.

Witnesses:

E. J. Manning, George H. Hammond.