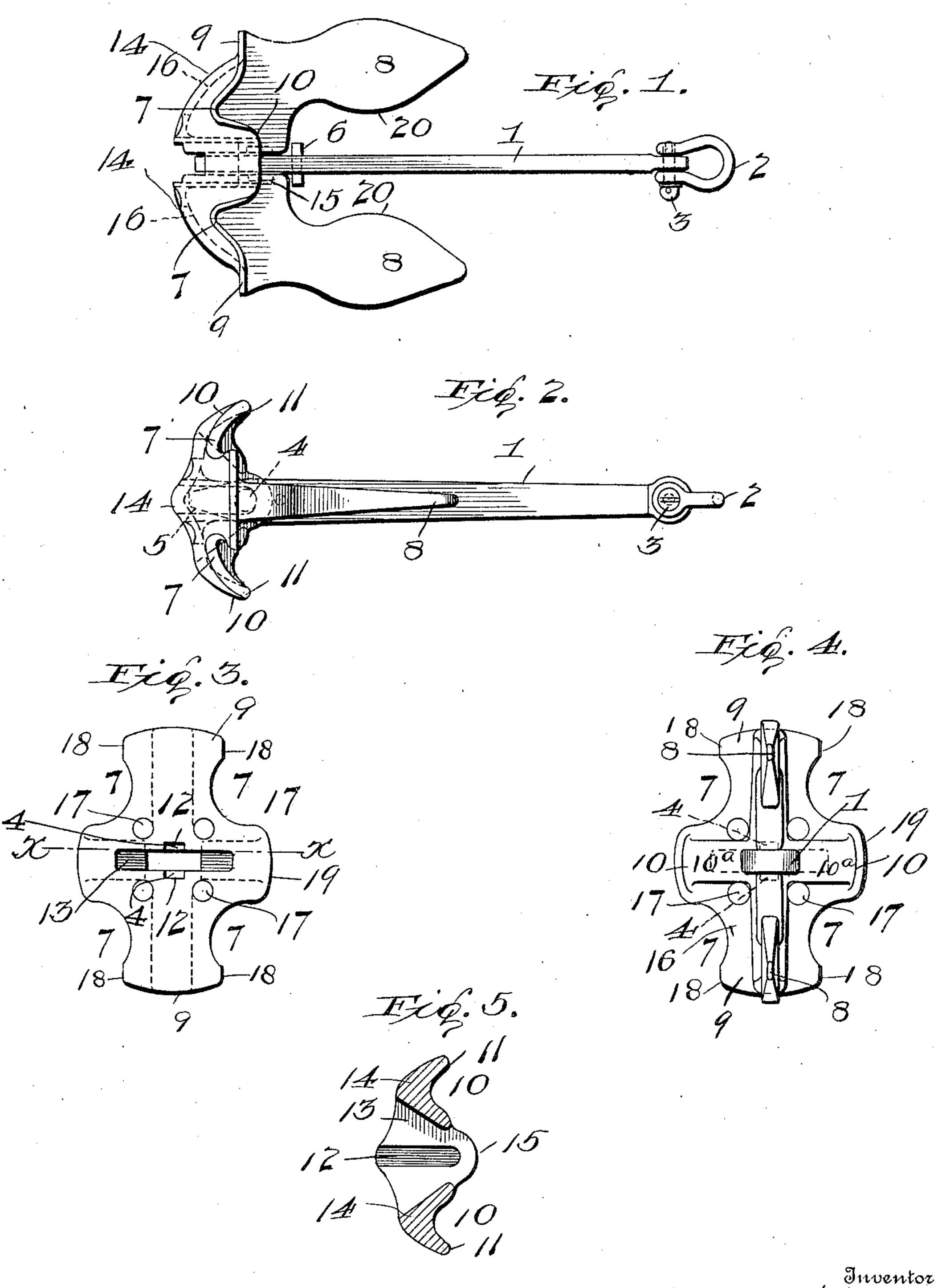
F. S. MANTON.

ANCHOR.

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UNITED STATES PATENT OFFICE.

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ANCHOR.

No. 828,757.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Frank S. Manton, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in 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.

My invention relates to improvements in anchors.

It has for its object to provide an anchor of simple construction, durable, and comparatively cheap of manufacture, the construction of which insures its firm engagement with the bottom no matter how it falls, renders it self-cleaning, and provides for its lying more closely to the hull when stowed than the present Babbitt anchor.

The invention consists in the details of construction and combinations of parts hereinafter described, and more particularly pointed out in the claims concluding this specification.

In the accompanying drawings, illustrating the preferred embodiment of my invention, Figure 1 is a plan view of an anchor made in accordance with my invention, the concealed parts being shown in dotted lines. Fig. 2 is an edge view thereof, part of the shank being broken away. Fig. 3 is a bottom end view. Fig. 4 is a view looking down at the upper side of the mushroom or head, with the shackle 2 and pin 6 removed to show the lugs 4 in dotted lines; and Fig. 5 is a broken sectional view on the line x x of Fig. 3.

While the preferred embodiment of my invention is illustrated in the accompanying drawings and its construction and operation are described in this specification, the right is reserved to make such changes from the construction shown and described herein as the scope of the claims hereunto annexed will permit

permit.

In carrying out my invention I form the entire mushroom or head and flukes inte50 gral. The bottom of the head or crown is rounded to cause the anchor to turn over on one side when it falls on said bottom. Said head is formed somewhat after the fashion of a

mushroom anchor; but it is scalloped around its edges, with preferably four projecting por- 55 tions or shoulders, the two which extend at right angles to the flukes being curved to form sort of hooked edges adapted to engage with the bottom as well as said flukes. The flukes extend from the center of the other 60 two shoulder portions in the usual manner. The middle portions of the first-mentioned projecting portions are reinforced near the center of the head and are provided with slots or recesses for pivoting the shank there- 65 to. The portions of the head from the scallops to the angles between the flukes and the reinforced portions of the other projecting shoulders are dished out, forming pockets provided with perforations at their lowest 70 points, through which any mud which may have accumulated in said pockets is washed as said anchor is hauled. The shank is inserted through the bearing-slot from the bottom of the head and is provided with oppo- 75 sitely-projecting lugs adapted to engage the base of said bearing-recess, forming the pivotal connection between the shank and the head, said shank extending through a restricted opening through the upper surface 80 of said head. The edges at the lower end of the shank from the pivot-lugs to the end are preferably beveled off and are adapted to engage the oppositely-inclined extremities of the slot in which it works in the head, said 85 oblique or inclined surface being so formed as to permit of the flukes of the head turning to an angle of fifty degrees with the shank. The shank is retained in engagement with the head by a pin inserted through the former 90 just above the upper surface of the head.

Referring more particularly to the drawings, 1 is the shank provided with the usual shackle and pin 2 and 3, respectively. The oppositely-projecting lugs 4 may be forged 95 or cast as a part of the shank or they may be formed by forcing a pin through the shank. The lateral edges of said shank are beveled off at 5, and the pin 6, preferably made of steel, is inserted through the shank after it has been passed through the head. Said head has four scallops 7, each arranged between two of the projecting portions or shoulders. The flukes 8 extend from two of said projecting portions 9, and the other two shoulder portions 10 are 105 hooked, as at 11. The reinforced portion 10^a

of said shoulder 10 is provided with the slots or recesses 12 for the lugs 4 of the shank and recess 13 for the movement of the end of the shank. The bottom of the head is rounded, 5 as at 14, and the upper surface 15, between the flukes at each side of the shank, is also rounded to permit of the free movement of the pin 6 as the head turns upon said shank. The pockets extending from the scallops to the anro gles between the flukes and the reinforced portions 10^a of the shoulders 10 are designated at 16 and the perforation therein at 17. The edges of the fluke-carrying portions 9 are flattened, as at 18, to prevent the anchor 15 from indenting the hull in stowing. All edges, such as 19, of the other shoulders 10 are well rounded in order to prevent any

chance of the chain becoming fouled.

It will be noted that as the spread of the flukes—that is, the space between their adjacent edges 20, Fig. 1—is greater than the width of the shoulders 10 said flukes will not interfere with said shoulders catching upon a hard resisting-surface when the anchor is being dragged. When either of said shoulders

do strike, the tendency is to throw the flukes downward, so as to bring them also into engagement with the bottom. Attention is also called to the provision whereby the flukes are adapted to assume an angle of fifty degrees with the shank. This angle conforms more nearly to that of the old-fashioned stock-anchor and is believed to be

a great advantage over the present stockless anchor. This angle of movement may be secured by beveling the end of the shank, as well as the extremity of the recess, as shown and described, or by arranging the end of the recess at a greater angle than shown, when the edges of the shank need not be beveled. The flukes and head being all cast in one

piece in this anchor does away with the objectionable feature of the present Babbitt anchor, in which the flukes are cast separate and when assembled are riveted together, which is much more costly than my improved type. The scallops are adapted to receive the hawse-pipe flange or head as the anchor

is stowed in position, allowing the anchor to lie more closely to the hull than in the present Babbitt anchor.

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

1. In an anchor, the combination with a

scalloped head-piece having two oppositely-extending shoulders carrying flukes and two other hook-shaped shoulders extending in opposite directions at right angles to the plane of said flukes, of a shank having piv-60 otal connection with said head-piece, the outer edges of all of said shoulders being rounded, the lateral edges of the hooked shoulders also being rounded but the lateral edges of the fluke-carrying shoulder being 65 flattened for the purpose specified.

2. In an anchor, the combination with a scalloped head-piece having two oppositely-extending shoulders carrying flukes and two hook-shaped shoulders extending in opposite 70 directions at right angles to the plane of said flukes, said head-piece having a series of perforated pockets one arranged opposite each scallop and between adjacent shoulders, of a shank having pivotal connection with said 75

head-piece.

3. In an anchor, the combination with a head-piece having flukes and provided with a recess extending from its under surface and a slot from said recess through to the upper surface thereof, of a shank extending through said slot and having oppositely-projecting lugs engaging said recess and a pin in said shank above the upper surface of said head-piece whereby said shank is retained in con- 85

nection with said head-piece. 4. In an anchor, the combination with a head-piece having flukes and provided with a recess extending from its under surface, an arcurate slot extending from said recess 90 through to the upper surface of the headpiece, and an arcuate passage or way extending laterally from the innermost extremity of said recess to the under surface of the headpiece, of a shank extending through said ar- 95 cuate slot and having oppositely-projecting lugs pivotally engaging said recess, an extended end adapted to work in said arcuate passage or way in the lower portion of said head, and a pin in said shank above the up- 100 per surface of said head-piece and extending across said arcuate slot whereby said shank is retained in pivotal connection with said head-piece.

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

FRANK S. MANTON.

Witnesses:

Waldo Stewart, George L. Graham.