

No. 675,552

Patented June 4, 1901.

W. S. BICKLEY.  
ANCHOR.

(Application filed Nov. 3, 1900.)

(No Model.)

Fig. 1

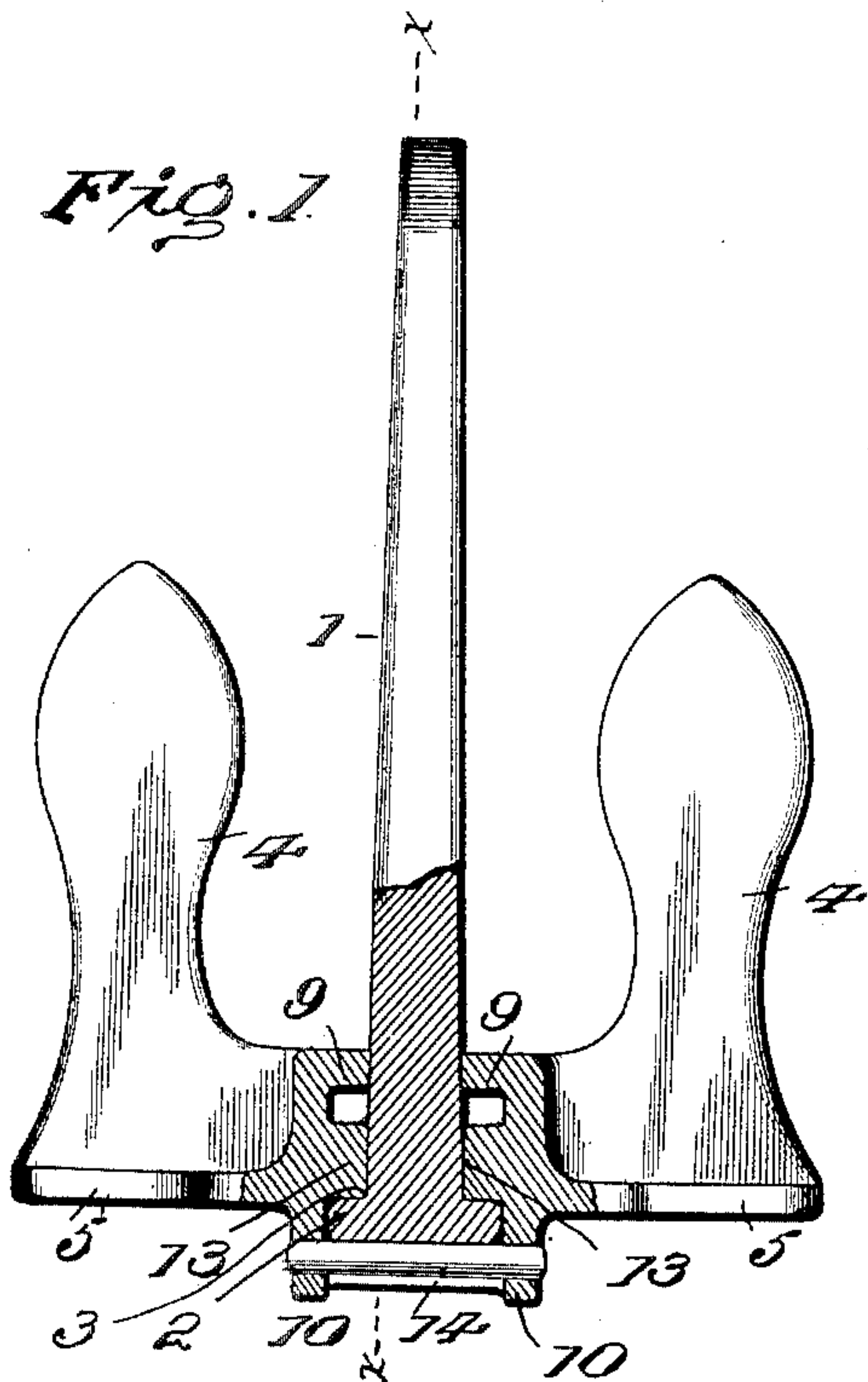


Fig. 2

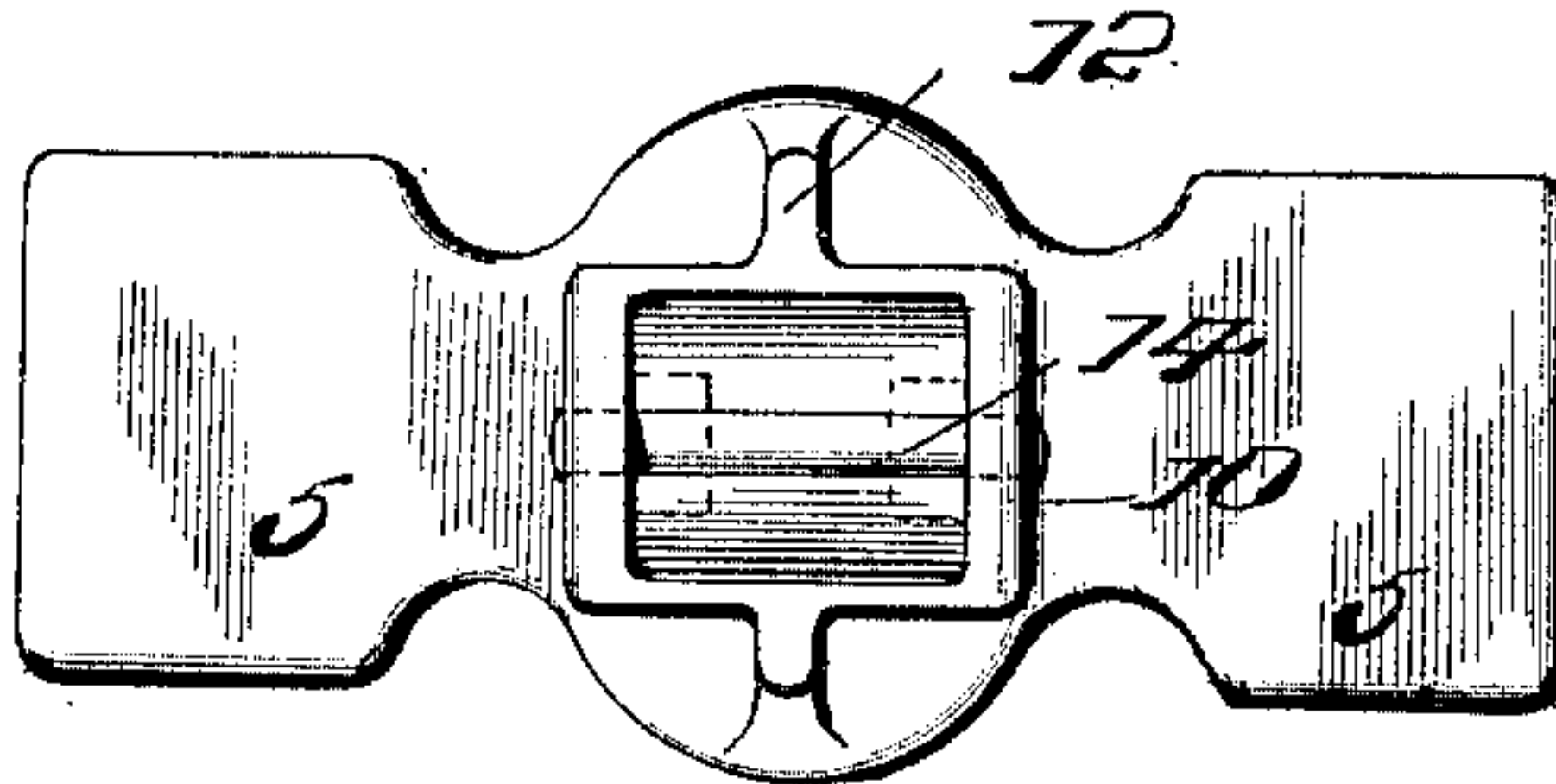


Fig. 5

Fig. 3

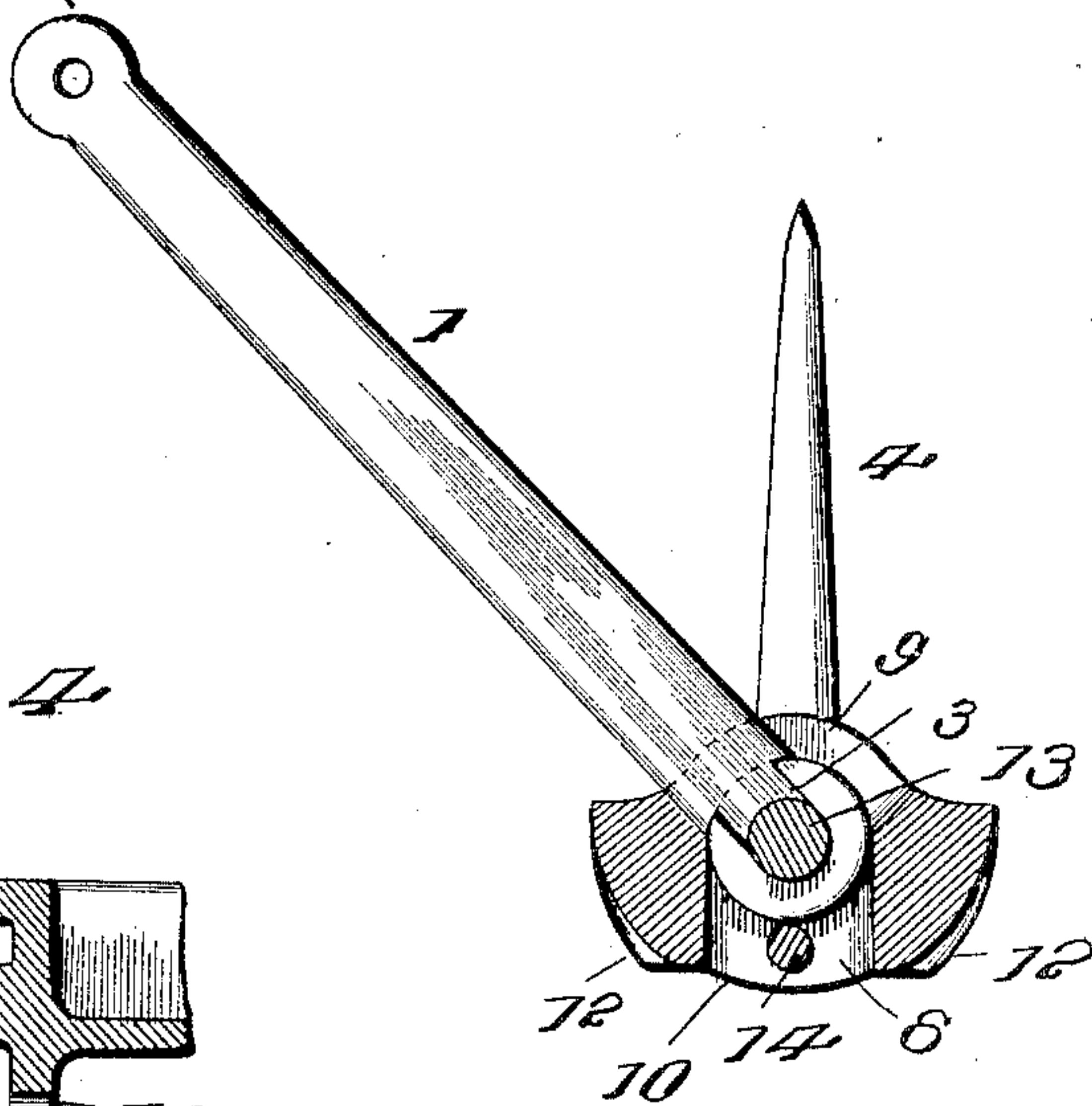


Fig. 4

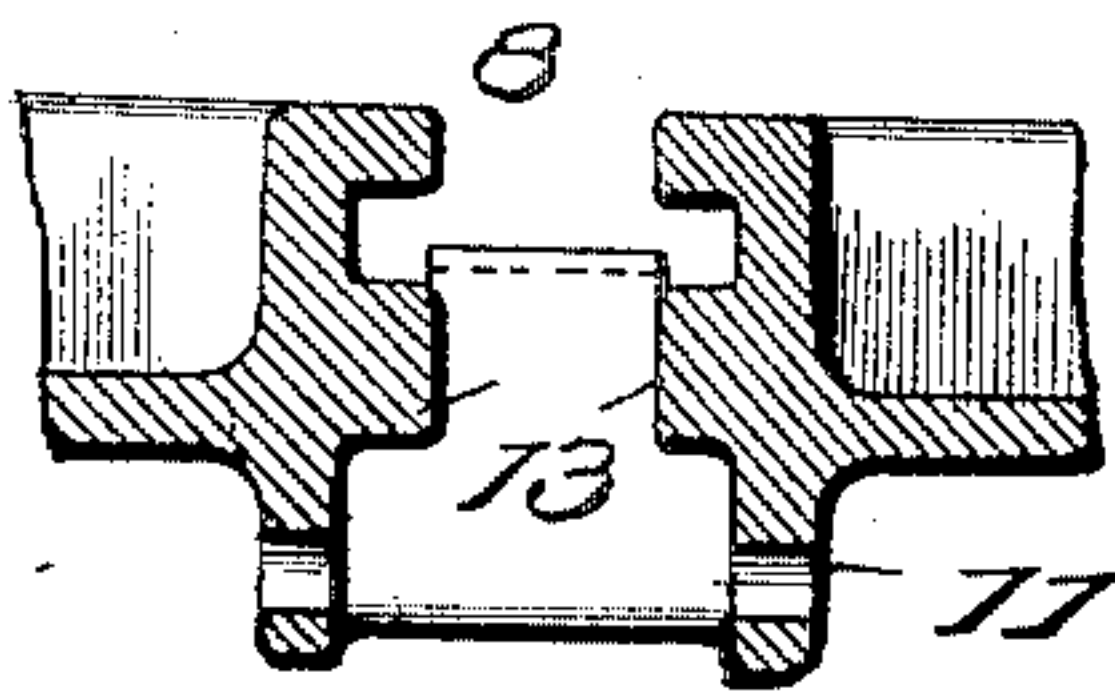


Fig. 6

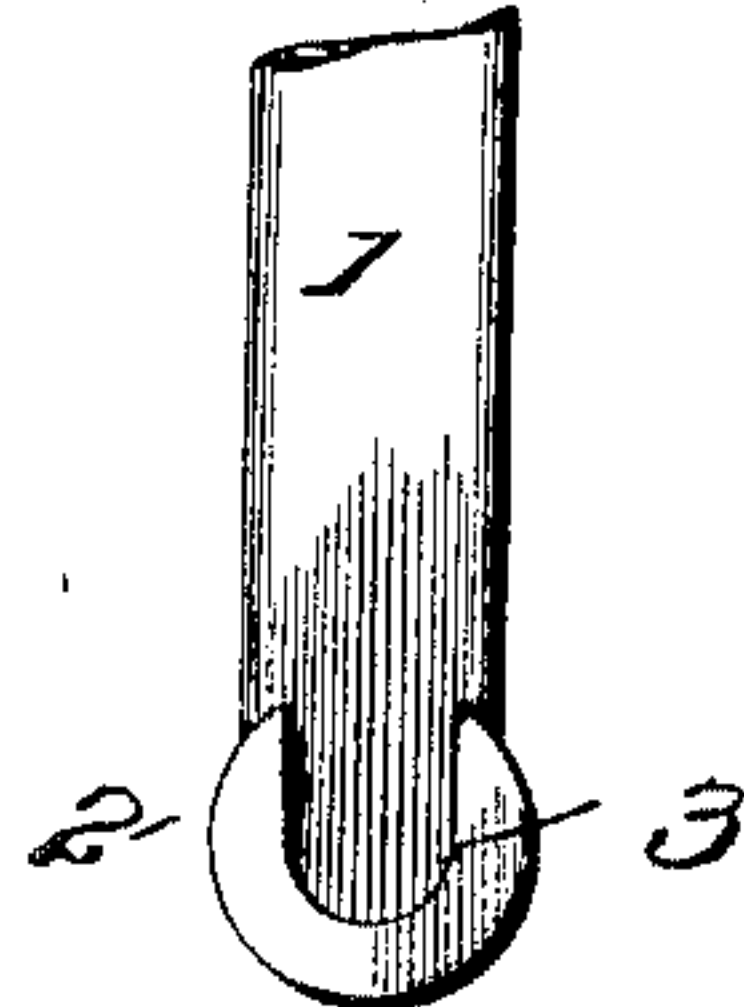
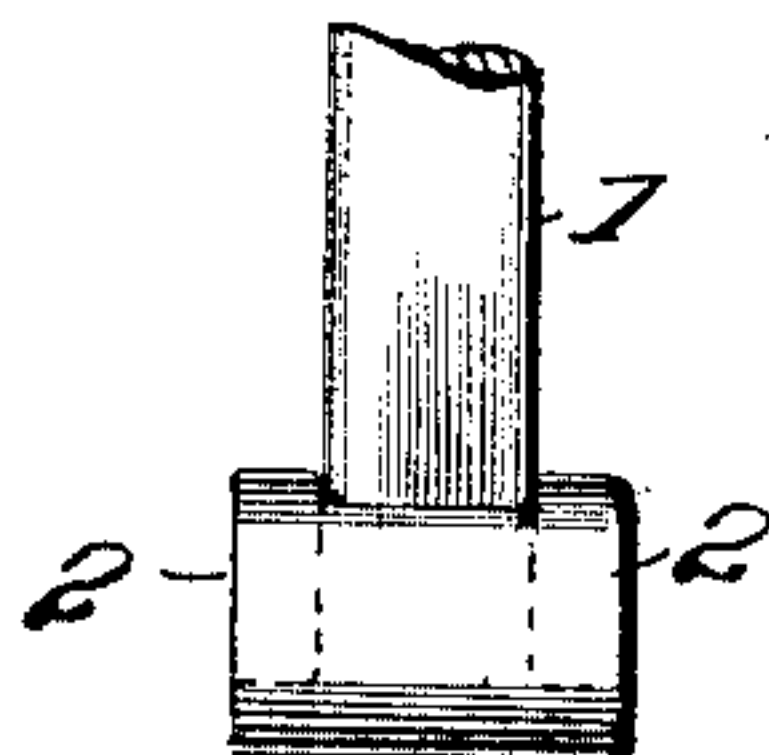
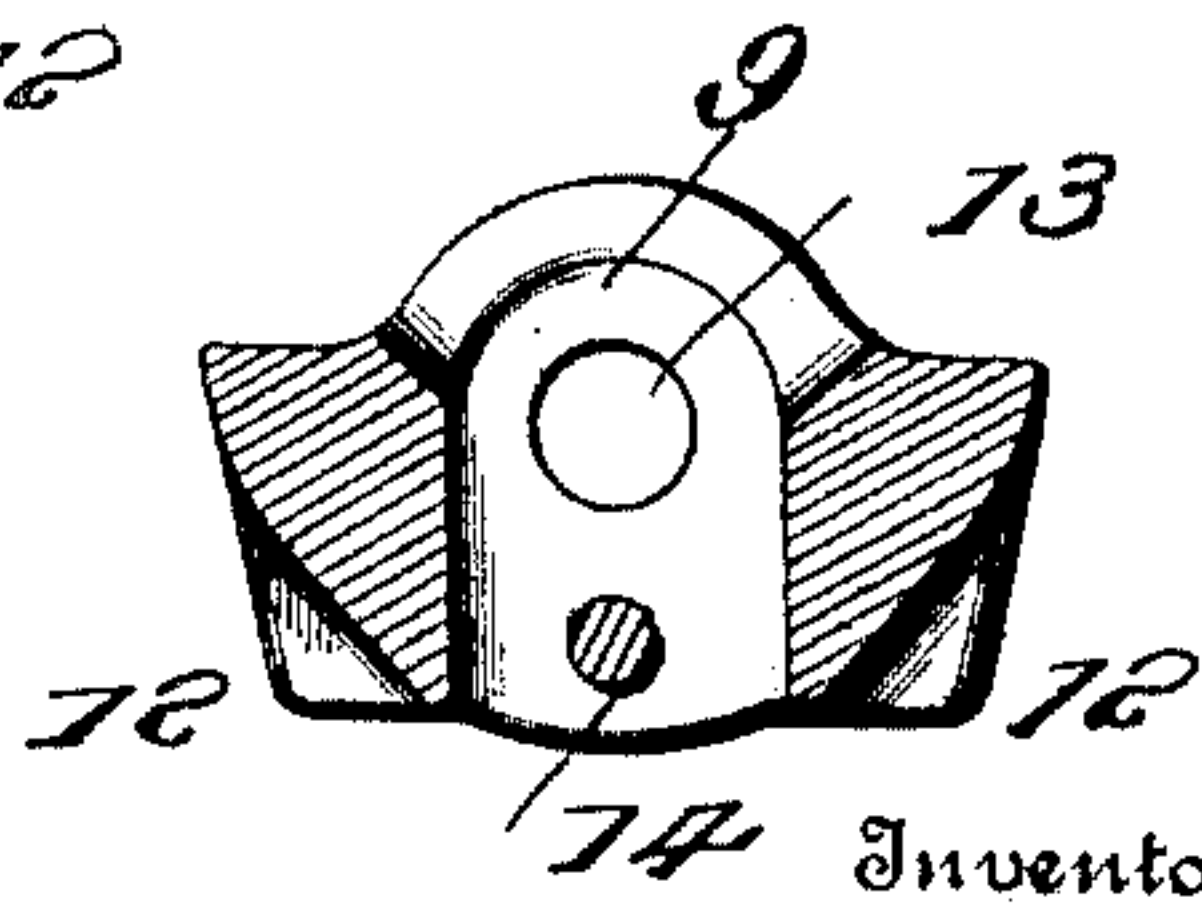


Fig. 7



Witnesses

Geo. M. M. M.  
Wm. Jacob

Inventor  
Walter S. Bickley

By Edwin S. Clarkson Attorney



# UNITED STATES PATENT OFFICE.

WALTER S. BICKLEY, OF CHESTER, PENNSYLVANIA.

## ANCHOR.

SPECIFICATION forming part of Letters Patent No. 675,552, dated June 4, 1901.

Application filed November 3, 1900. Serial No. 35,402. (No model.)

*To all whom it may concern:*

Be it known that I, WALTER S. BICKLEY, a citizen of the United States, residing at Chester, in the county of Delaware and State of Pennsylvania, have invented certain new and useful Improvements in Anchors; and I do 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to anchors, the object of which is to provide a simple, cheap, yet effective anchor which consists of a body cast separate from the shank, said body having integral lugs on which the shank is adapted to rotate; and my invention consists, further, of the parts and the combination of parts, as will be hereinafter more fully set out.

In the drawings, Figure 1 is a front elevation of an anchor embodying my invention, parts being in section. Fig. 2 is a bottom plan view of the same. Fig. 3 is a central vertical section to the body of the anchor on the line  $x\ x$ , Fig. 1. Fig. 4 is a detail sectional view of the bottom of the anchor. Fig. 5 is a side elevation in detail of the shank. Fig. 6 is a front elevation of the same. Fig. 7 is a central vertical detail section of the body of the anchor.

1 indicates the shank of the anchor, the lower end of which is provided with collars 2 on each side thereof, said collars being substantially U-shaped, thereby forming a recess or seat 3 on each side of the shank.

4 indicates the flukes of the anchor, and 5 is the base of the anchor, said base being of greater width than said fluke.

The base of the anchor is cast with an opening 8 entirely through the same. 9 indicates grooves cut in the side walls of said opening.

10 indicates depending lugs integral with the base of the anchor, which form a recess or seat 11, said recess being of greater diameter than the opening 8 in the body of the anchor.

12 is a lug or projection on each side of the base of the anchor, there being two of said

lugs diametrically opposite each other in the center of the base.

To assemble the parts, it is only necessary to slip the upper end of the shank 1 through the opening 8 in the base of the anchor until the U-shaped recess or seat 3 slips around the trunnions 13. These trunnions are formed by means of the grooves 9 in the walls of the opening 8 and are cast integral with the body of the anchor. As soon as the trunnions are firmly seated in the U-shaped recesses 3 on the lower end of the shank 1 a pin 14 is secured in suitable apertures in the depending lugs 10, the end of the shank having a slight bearing on said pin, although said pin does not sustain any weight or strain that may be placed upon the anchor, as all of the strain and work of the anchor is borne by the trunnions 13 and U-shaped collars 2, cooperating therewith.

Referring to the projections or lugs 12, I would state that they are used to throw the flukes of the anchor tight against the side of a ship when the head of the anchor enters the hawse-pipe. As stated, the only office or function of the pin 14 is to prevent the shank 1 from slipping through the base of the anchor.

I do not herein claim the lug 12, as the same forms the subject-matter of another application for Letters Patent.

What I claim, and desire to secure by Letters Patent, is—

1. In a stockless anchor, the combination with a base, an opening in said base and a cylindrical trunnion formed on each side wall of the opening, of a shank journaled on the trunnions in said opening.

2. The combination with the flukes of an anchor, a base connecting the flukes, an opening in said base, trunnions formed in said opening with a space intervening between the top of the opening and said trunnion, and a shank, bearings on said shank adapted to engage said trunnions and work in said space and means to hold said bearings on said trunnions.

3. In an anchor, the combination with the base, an opening in the same, and cylindrical trunnions formed in said opening on each side wall thereof, of a shank, an enlarged head formed on the lower end of said shank and U-

shaped recesses or bearings formed in said head on each side of the body of the shank, said U-shaped recesses or bearings adapted to engage and work upon the trunnions in the  
5 base of the anchor.

4. In an anchor, the combination with the base, an opening through the same, grooves formed in the side walls of the said opening, trunnions integral with the sides of said open-  
10 ings, below said grooves and depending lugs forming an extension of the side walls of said opening, of a shank having an enlarged head, U-shaped recesses or bearings formed in said head on each side of the body of the shank

adapted to engage and revolve upon said trun- 15  
nions and a pin extending across said open-  
ings and secured in said lugs; lugs or pro-  
jections diametrically opposite each other in  
the center of said base adapted to throw the  
flukes tight against the side of a ship when 20  
the head of the anchor enters a hawse-pipe.

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

WALTER S. BICKLEY.

Witnesses:

CHAS. R. HANSEL,  
JNO. T. ROSS.