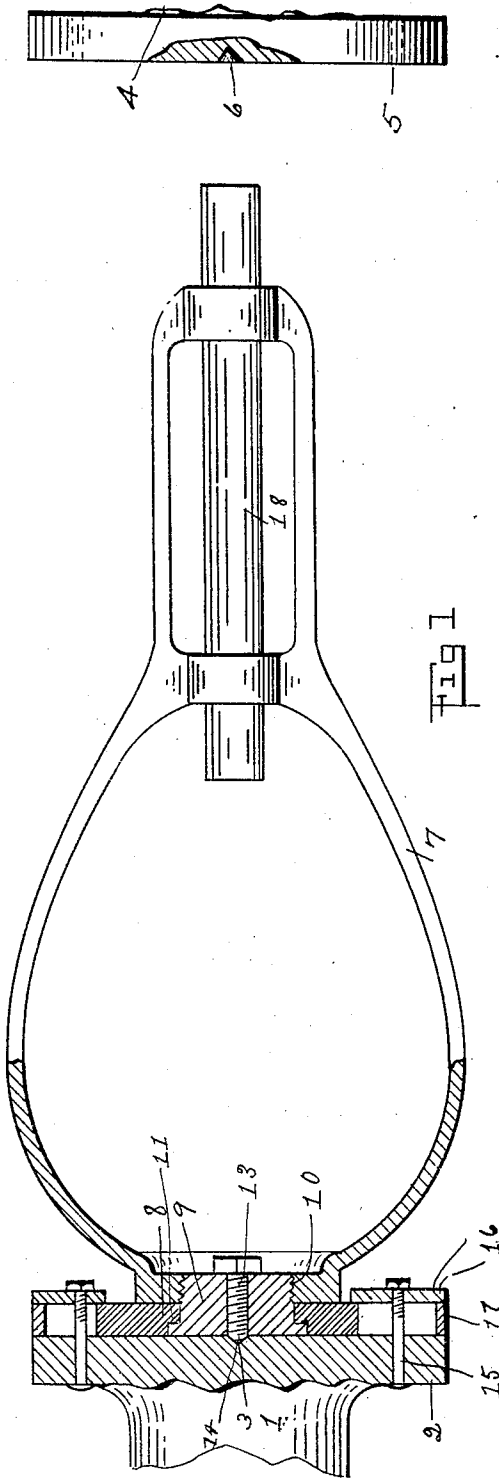
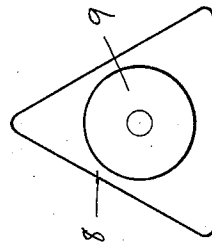


L. B. COBB.
 SHAFT ALINING DEVICE.
 APPLICATION FILED NOV. 14, 1919.

1,339,919.

Patented May 11, 1920.



UNITED STATES PATENT OFFICE.

LEANDER B. COBB, OF PORTLAND, MAINE; JULIA L. COBB, EXECUTRIX OF THE ESTATE OF SAID LEANDER B. COBB, DECEASED, ASSIGNOR OF ONE-HALF TO WILLIAM B. COBB, OF CLEVELAND, OHIO.

SHAFT-ALINING DEVICE.

1,339,919.

Specification of Letters Patent.

Patented May 11, 1920.

Application filed November 14, 1919. Serial No. 338,100.

To all whom it may concern:

Be it known that I, LEANDER B. COBB, a citizen of the United States, residing at Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Shaft-Alining Devices, of which the following is a specification.

This invention relates to improvements in mechanism for determining the position for a shaft which is to be coupled to a fixed shaft. It is especially designed to be used in connection with the alining of an engine shaft to be coupled to the propeller shaft of a ship which is set before the same is launched and coupled to the engine shaft afterward. It may, however, be used wherever it is necessary to aline one shaft to another shaft that is already set.

In the drawings herewith accompanying and making a part of this application, Figure 1 is a plan view partly in horizontal section of my device attached to the end of a propeller shaft of a vessel showing also the end of the engine shaft to which the propeller shaft is to be coupled; Fig. 2 is a plan view of the coupling which attaches the alining bracket to the propeller shaft; Fig. 3 is an end view of the peep hole and Fig. 4 is an end view of the cross wire of the peep and sight tube.

The same reference characters indicate like parts in the several figures.

In said drawings, 1 represents a propeller shaft; 2 the coupling end thereof; 3 the lathe center in the coupling end and 4 represents the shaft to be alined; 5 the coupling end thereof and 6 the lathe center in the coupling end.

My improvement consists, among other things, in a bracket 7 adapted to be secured to the end of shaft 1 by means of a coupling which consists of a base 8 having a threaded projection 9 adapted to take into a threaded opening 10 in the end of the bracket. The base 8 and projection 9 have an offset engagement, as seen at 11. This offset is not threaded for a reason hereafter set out. The part 9 carries a centering screw 13 having a tapering point 14 to center in the lathe center in the end of the shaft, thereby positively centering the tube in the bracket upon the propeller shaft with

the lathe center. The coupling part 8 is fastened to the end of the propeller shaft by bolts 15 passing through the flanged end of the shaft and through bonding plates 16, one end of which engages the part 8 and the other a stud 17 between the plate and the end of the shaft. There may be a series of these bonding plates. Mounted in the bracket concentric with the point of the screw 13 and the lathe center of the shaft is a peep and sight tube 18, the end of the tube toward the stationary shaft having a peep hole 19 and the other end having cross wire 20.

In operation, after the bracket is secured to the end of the stationary shaft, as shown in Fig. 1, the eye is applied to the peep end of the peep and sight tube and the point which corresponds to the point of crossing of the wire will indicate the position for the lathe center in the shaft to be alined to be placed. This may be done by any well-known means of handling and positioning shafting.

It is noted that the bracket, by reason of the non-threaded offset joint between 8 and 9, as seen at 11, may be rotated so that the opening 20 in the bracket may be vertical, horizontal or in any intermediate position to convenience the application of the eye to the peep hole. The point indicated through the peep and sight tube may be fixed by looking through the tube, by a shadow cast by a light or by a mark made by a projectile shot therethrough.

I claim:—

1. In a shaft alining device, a bracket carrying a sighting tube having means for establishing a sight line therein and means for mounting said bracket on the end of a set shaft so that the lathe center of the set shaft will lie in the sight line when produced toward said means, whereby the point indicated by looking through the tube and along said sight line will fix the point for the lathe center on the shaft to be set.

2. In a shaft alining device, a bracket carrying a sighting tube having means for establishing a sight line therein, and means for rotatably mounting said bracket on the end of a set shaft so that the lathe center of the set shaft will lie in the sight line when produced toward said means, said tube be-

ing spaced apart from the attached end to permit a person to look through the tube and along said sight line.

3. In a shaft alining device, a bracket
5 carrying a sighting tube having means for establishing a sight line therein at one end and at the other end means for attaching it to the end of a set shaft and means for cen-

tering the bracket so that the tube will lie in the sight line when produced toward said 10 means, whereby a point in a line passing through the center of the tube and along said sight line will indicate the point for the lathe center of the shaft to be set.

In testimony whereof I affix my signature. 15
LEANDER B. COBB.