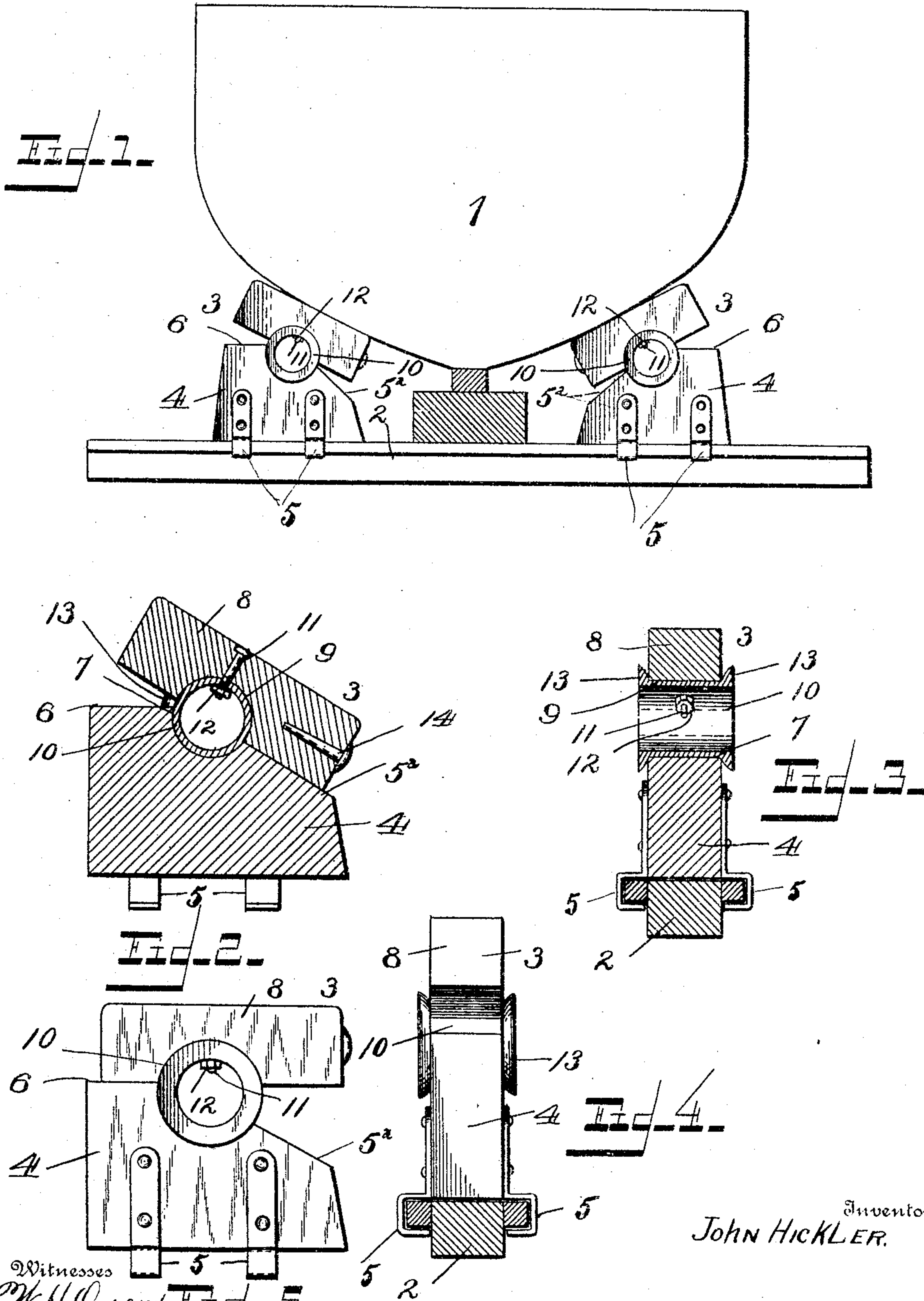


No. 779,600.

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J. HICKLER.  
BILGE BLOCK.

APPLICATION FILED AUG. 4, 1904.



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# UNITED STATES PATENT OFFICE.

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## BILGE-BLOCK.

SPECIFICATION forming part of Letters Patent No. 779,600, dated January 10, 1905.

Application filed August 4, 1904. Serial No. 219,576.

*To all whom it may concern:*

Be it known that I, JOHN HICKLER, a citizen of the United States, residing at Pasadena, in the county of Los Angeles and State of California, have invented certain new and useful Improvements in Bilge-Blocks; 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.

My invention relates to bilge-blocks; and one of the principal objects of the same is to provide a bilge-block which will be strong, durable, and capable of withstanding the great pressure or weight to which this class of devices is subjected.

Another object is to provide a bilge-block in which the tilting member is separate and detachable from the bearing block or support and is thus interchangeable for other blocks in the series or renewable in case of injury to any part of the structure of the block.

Still another object is to provide a device of this character which will be simple in construction, efficient in operation, and which will not be liable to injury or destruction in use.

These and other objects are attained by means of the construction illustrated in the accompanying drawings, in which—

Figure 1 is a transverse outline of the hull of a vessel supported upon bilge-blocks made in accordance with my invention. Fig. 2 is a longitudinal section of one of my bilge-blocks. Fig. 3 is a transverse section of the same. Fig. 4 is an end view, and Fig. 5 is a side view, of the bilge-block in the position which it may assume for supporting timbers in a horizontal plane.

Referring to the drawings for a more particular description of the invention, the numeral 1 designates in outline the hull of a vessel supported upon my bilge-blocks, and 2 denotes the dock-timbers or track upon which the bilge-blocks are mounted to be moved in under the hull of the vessel or out from under said hull when desired.

My bilge-block comprises two sections or members 3 4, the member 4 being the supporting-block and provided with suitable keepers 5, which form a guideway for moving bilge-

blocks upon the dock-timbers or track 2. The upper surface of the block 4 is inclined, as at 5<sup>a</sup>, has a plain flat surface 6 in the rear, and intermediate the surfaces 5 and 6 a concave bearing-surface 7 is provided. The tilting member 3 consists of a rectangular block 8, having a concave or semicircular transverse recess 9 therein. Secured within the recess 9 is a strong metal tube 10, said tube being secured in place by a bolt 11 passing through the upper portion of the block 8, through the tube 10, and having fitted upon its inner end within the tube a nut 12, which serves to hold the tube within the recess 9. The tube 10 may be formed of steel or other strong metal and provided with end flanges 13, said flanges being slightly curved or rounded upon their inner surfaces for a purpose which will be presently explained.

In order that the block 8 will normally tilt to the position shown in Fig. 2, any suitable weight 14, like a spike driven into the end of the block 8, may be utilized. Other means, however, of giving a slight excess of weight to this end of the block may be resorted to. It will be understood that the block 8 is removable from the supporting-block 4, the tube 10 merely resting within the recess 7 in the supporting-block. The flanges 13 are slightly curved in order that the block 8 may have a slight lateral motion to conform to any uneven surface upon the hull of the vessel to be supported.

From the foregoing it will be obvious that my bilge-block is exceedingly strong and durable and will withstand a tremendous weight without injury, since the tube 10 is supported upon nearly its entire periphery within the recess 7 in the supporting-block and the recess 9 in the tilting member. Moreover, by slight lubrication of the recess 7 the tube will freely move or rock in the bearing to assume the required position under the hull of the vessel.

Whenever it is desired to support horizontal timbers upon the bilge-blocks, the block 8 is tilted backward to the position shown in Fig. 5, of the drawings, the upper surface of block 8 then representing a true horizontal plane.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

1. A bilge-block comprising a base or supporting element, a tilting member counter-weighted at one end and having a bearing-tube secured thereto adapted to rock within the bearing-surface of the supporting-block, said tube having curved flanges upon its outer ends to permit a slight transverse rocking movement to compensate for irregular surfaces, substantially as described.

2. A bilge-block comprising a base or supporting member, a tilting member, said members having registering recesses, a tubular bearing secured within the recess in the tilt-

ing member by means of a bolt passing through the upper portion of said tilting member, through the upper wall of the tubular bearing and terminating within said tubular bearing, and said tubular bearing adapted to rock in the recess of the supporting member.

3. A bilge-block comprising oppositely-recessed members, one of said members forming a support and the other adapted to rock or tilt thereon, a tube secured in the recess in the rocking member and adapted to tilt in the recess in the supporting member, and means to prevent lateral movements of one member relatively to the other.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN HICKLER.

Witnesses:

W. K. PROVOOST,  
BEN. J. COWL.