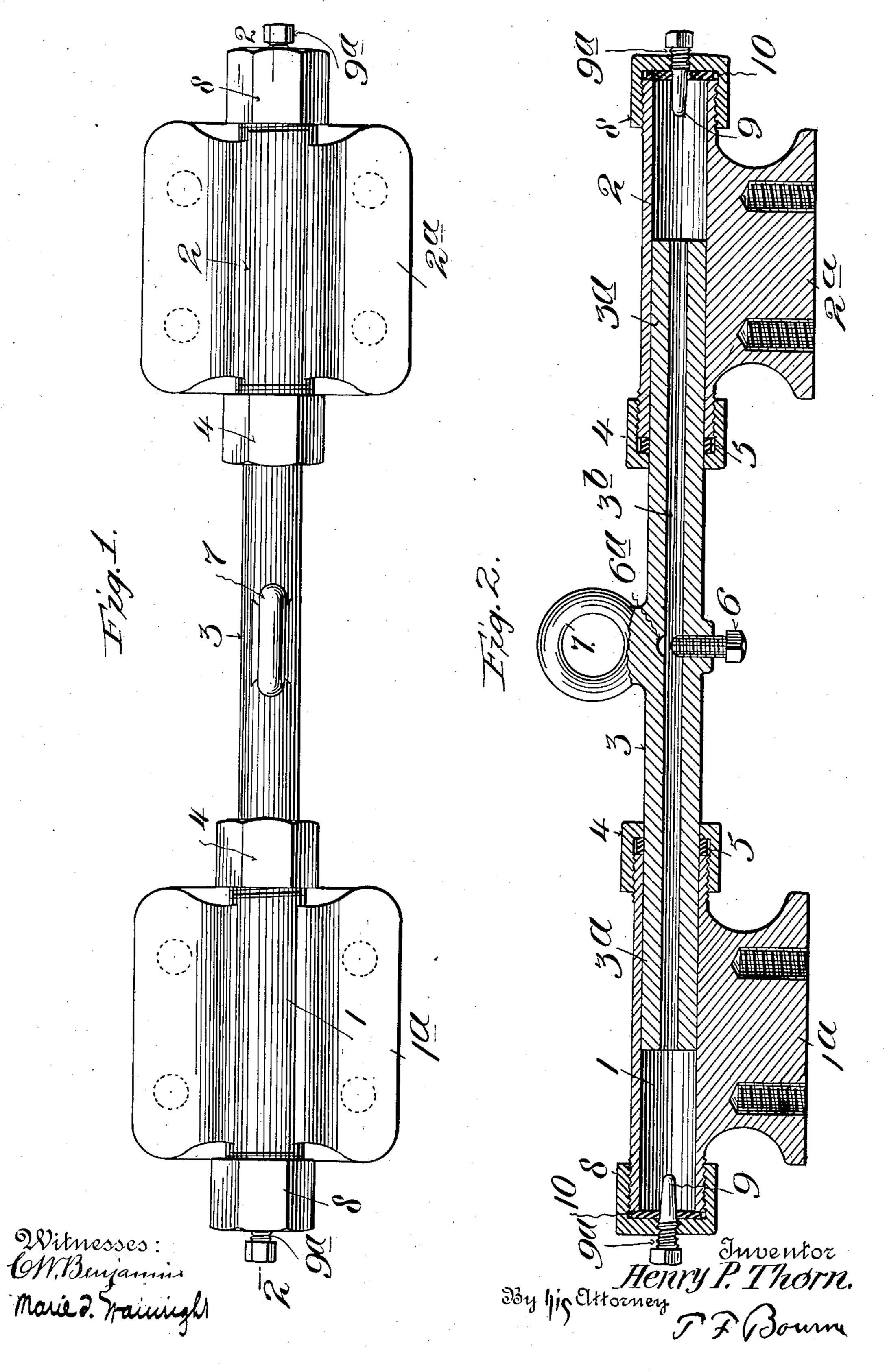
H. P. THORN.

DECK TRAVELER.

APPLICATION FILED SEPT. 17, 1907.



## UNITED STATES PATENT OFFICE.

HENRY P. THORN, OF NEW YORK, N. Y.

## DECK-TRAVELER.

No. 894,243.

Specification of Letters Patent.

Patented July 28, 1908.

Application filed September 17, 1907. Serial No. 393,346.

To all whom it may concern:

Be it known that I, HENRY P. THORN, a subject of the King of England, and resident of New York city, borough of Manhattan, in 5 the county of New York and State of New York, have invented certain new and useful Improvements in Deck-Travelers, of which

the following is a specification.

On yachts and other sailing vessels it is 10 customary to fasten to the deck or other support a bar upon which the eye or ring of the block of the main sheet or rope may slide back and forth as the vessel tacks or comes about, but with that construction when the 15 main sail jibes and the block is thereby carried quickly and forcibly across the rod or traveler there is danger of springing or breaking the boom or main sheet and otherwise endangering the vessel, because of the sudden 20 stoppage of the block at the end of the bar.

The object of my invention is to provide a traveler that will permit the block of the main sheet or other rope to slide or travel 25 shock incident to the swinging of the boom during jibing, to reduce the strain on the parts and aid in preventing the breaking or bending of the boom or the breaking of the

main sheet or rope.

In carrying out my invention I provide a pair of cylinders located in line or opposed and secured upon the vessel deck or other suitable support, and I locate pistons or plungers within said cylinders with a passage 35 or bore within said pistons communicating with said cylinders, and to said pistons I attach a block of the main sheet or rope, and within said cylinders and the passage of said pistons I place a suitable fluid, such as glyc-40 erin, which will resist the movement of the pistons in either direction and yet permit the pistons to move gradually the required distance to the limit of their outward movement in the respective cylinders.

My invention also comprises novel details of improvement that will be more fully hereinafter set forth and then pointed out in the

claims.

Reference is to be had to the accompany-50 ing drawings forming part hereof; wherein,

Figure 1 is a plan view of a deck traveler embodying my invention, and Fig. 2 is a central section thereof.

In the accompanying drawings the nu-55 merals 1, 2, indicate suitable cylinders shown

tached to a vessel deck or other support, and at 3 is a piston the opposite ends 3ª of which enter the opposed cylinders, and are adapted to slide back and forth therein, all so arranged 60 that when one piston end is at the outer end of one cylinder the other piston end will be near the inner end of the opposite cylinder, and vice versa. The bore 3<sup>b</sup> of said piston communicates with both cylinders. Suit- 65 able nuts 4 and packing 5 close the inner ends of the cylinders to keep tight joints as the pistons slide. At 6 is a screw fitted to tube 3 and adapted to pass across bore 3b to regulate the freedom of flow of fluid through 70 said bore, and said screw may enter a socket 6a, or fit firmly against the wall of the bore, to prevent the flow of any fluid therethrough. To the piston 3 is to be attached a block of the main sheet or other rope of a vessel, and 75 for this purpose I have shown said piston provided with an eye 7 to receive the eye or ring of the block. At the outer ends of the cylinders I have shown caps 8 screwed thereacross the deck with resistance to obviate the | on and provided with tapering plugs 9 shown 80 extended into the cylinders and having threads or screws 9a, which plugs are adapted to enter the ends of bore 3b to control the flow of fluid through such bore, and by adjusting such plugs lengthwise of the cylinders the 85 flow of fluid into bore 3b may be regulated as desired.

With my improvements fastened upon the deck or other part of a vessel, and the cylinders and bore 3<sup>b</sup> of piston 3 filled with a suit- 90 able fluid, such as glycerin, and a block of a main sheet or rope attached to eye 7, the pressure from the sail attached to said block will cause the pistons to move toward the adjacent or corresponding cylinder, where- 95 upon fluid will be pressed out of such cylinder through bore 3<sup>b</sup> into the opposite cylinder, and each time that the block is shifted from one side of the deck to the other the pistons will slide in their cylinders and be re- 100 sisted by the fluid in the cylinder toward which the pistons slide until such fluid has passed through bore 3b into the opposite cylinder. If the boom should swing suddenly from one side of the vessel to the other, as 105 when the sail jibes, the sudden strain on the block caused by the jibing will be cushioned or resisted by the pressure of the corresponding piston against the fluid in its cylinder which will thereby be forced through 3b 110 into the other cylinder and ease the shock provided with bases 1<sup>a</sup>, 2<sup>a</sup>, adapted to be at-1 from the jibing. As the piston reaches the

plug 9 the freedom of flow of fluid from the cylinder will be decreased gradually and thereby check the shock of the piston coming forcibly against the cap 8, or its interposed packing 10.

Changes may be made in the details of arrangement shown and described without departing from the scope of the appended

claims.

Having now described my invention what I claim is:

1. A deck traveler comprising a plurality of opposed cylinders, a piston the opposite ends of which are located in said cylinders and provided with a passage communicating with said cylinders, and means for connecting the piston with a rope.

2. A deck traveler comprising a pair of opposed cylinders, a piston the opposite ends of which are located in said cylinders, and spaced apart a distance less than the distance between the outer ends of said cylinders, and provided with a passage communicating with said cylinders, and means to con-

25 nect said piston with a rope.

3. A deck traveler comprising a pair of opposed cylinders, a piston having opposite ends entering said cylinders, and having a bore communicating with said cylinders,

means to connect said piston with a rope, and means to control the flow of fluid through said bore.

4. A deck traveler comprising a pair of opposed cylinders, a piston having opposite ends entering said cylinders and having a bore communicating with said cylinders, and means to connect said piston with a rope, means to control the flow of fluid through said bore, and a screw carried by said piston

adapted to be adjusted across said bore to 40 regulate the flow of fluid therethrough.

5. A deck traveler comprising a pair of opposed cylinders, a piston the opposite ends of which are located in said cylinders, and provided with a passage communicating with said cylinders, and means at the outer ends of said cylinders to reduce the flow of fluid through said passage as the corresponding piston end approaches the outer end of its cylinder.

6. A deck traveler comprising a pair of opposed cylinders, a piston the opposite ends of which are located in said cylinders and provided with a passage communicating with said cylinders, and plugs at the outer ends of the cylinders adapted to enter said passage to reduce the flow of fluid therethrough as the corresponding piston end approaches the

outer end of its cylinder.

7. A deck traveler comprising a pair of op- 60 posed cylinders, a piston the outer ends of which are located in said cylinders and provided with a passage communicating with said cylinders, taper plugs at the outer ends of the cylinders adapted to enter said passage to reduce the flow of fluid therethrough as the corresponding piston end approaches the outer end of its cylinder, and means for adjusting said plugs in the direction of the axes of the cylinders.

Signed at New York city, in the county of New York, and State of New York, this 13th

day of September, A. D. 1907.

HENRY P. THORN.

Witnesses:
T. F. Bourne,
MARIE F. WAINRIGHT.