No. 672,356. Patented Apr. 16, 1901.

A. G. DANISY MARTIN.

MOVABLE RING FOR MOORING SHIPS.

(Application filed Nov. 9, 1900.)

(No Model.)

Fig. 1

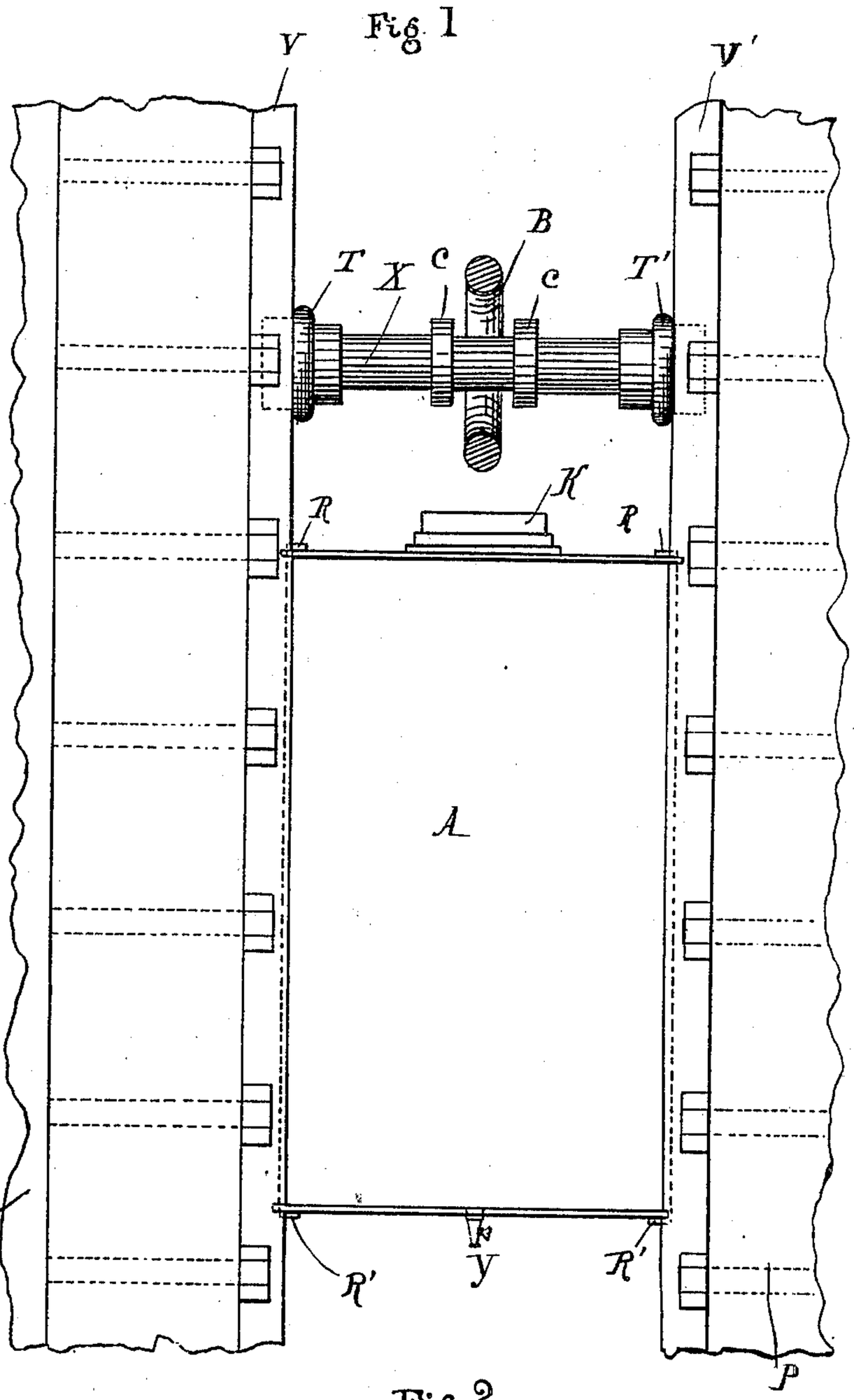


Fig. 3

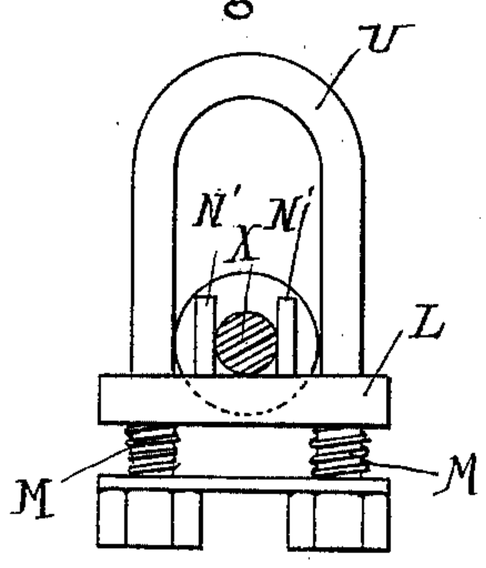


Fig. 4

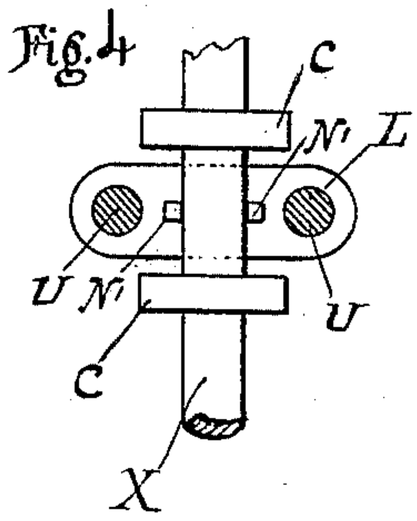
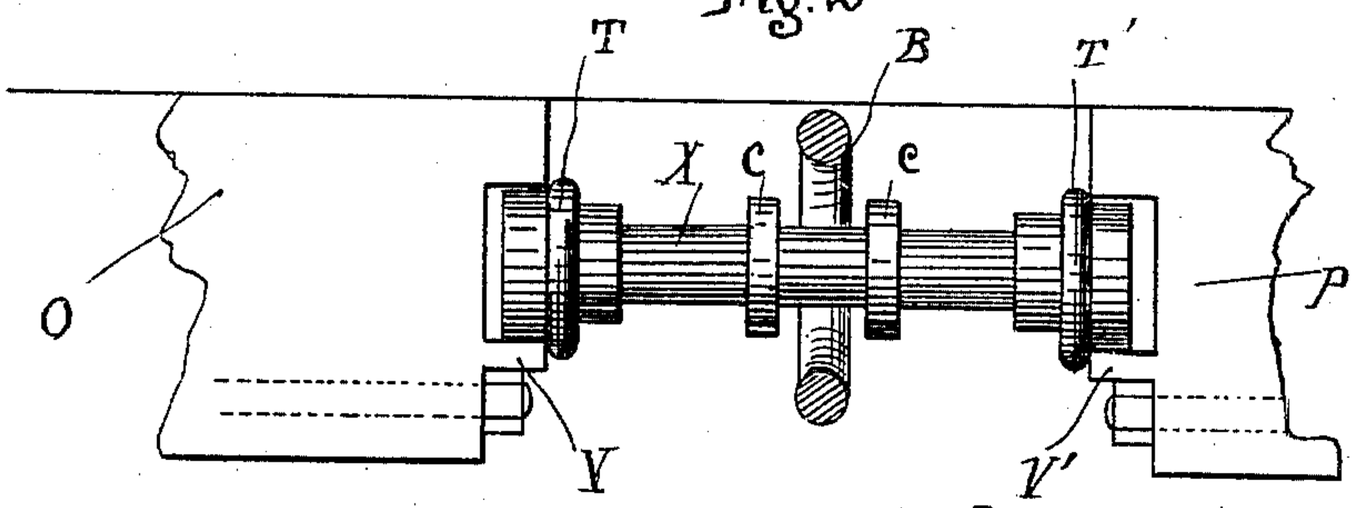


Fig. 2



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ADRIEN GEORGES DANISY MARTIN, OF HERBLAY, FRANCE.

MOVABLE RING FOR MOORING SHIPS.

SPECIFICATION forming part of Letters Patent No. 672,356, dated April 16, 1901.

Application filed November 9, 1900. Serial No. 35,939. (No model.)

To all whom it may concern:

Be it known that I, ADRIEN GEORGES DANISY MARTIN, a citizen of the Republic of France, and a resident of Herblay, France, have invented certain Improvements in Movable Rings for Mooring Ships in Tidal or other Ports, (for which I have obtained Belgian Letters Patent No. 150,908, dated July 15, 1900,) of which the following is a specification.

The object of this invention relates to movable rings for mooring ships in tidal or other ports.

The annexed drawings show the general principles of the device.

It must be fully understood that details of construction may be modified to any convenient form or material or in accordance with the numerous cases, depending on the ports themselves, in which the rings are to be utilized.

In order that my invention may be more clearly understood, reference is made to the annexed drawings, in which—

Figure 1 is a front elevation of a mooring embodying this invention. Fig. 2 is a plan view of Fig. 1. Fig. 3 is a side elevation of a modification. Fig. 4 is a plan view, partly in section, of Fig. 3.

In the drawings is shown a sea-wall or wharf, in or at which a trench or recess is formed by projecting or outbuilt portions or by beams O and P. In the space thus formed is guided a float A, having forks or projections R R′, straddling or running along the guides or rails V V′ on the sides or beams O P. The float is shown with a cock Y, which is useful at times—as, for example, for emptying any leakage from the float when the latter is raised for repairs.

The float A carries a pad or disk K, of soft or cushion-like material, such as leather or rubber, for a purpose presently explained. This pad may be large enough, if desired, to cover the top or nearly the entire top of the float.

A ring B is adapted for the mooring of a vessel, and when not in use this ring rests on the float or on cushion K. Said ring, however, is not attached nor fastened to the float, these two parts being independent of one another. This ring is shown surrounding or mounted on a shaft X and held in approximately central or readily-accessible position by shoulders *c*. The shaft X has rollers or wheels T T′ running along the guide-beams O. P. Say the ring B is not in use, then such ring, with its shaft, rests on the float A, which latter, rising and falling with the tide, keeps the ring B accessible or within reach, so that a boat-line can be secured or passed through said ring when required. When a boat or vessel is secured to the ring, the strain on the hitching-rope may keep the ring raised off the float; but if the line is slipped or the float and ring come into contact by the action of waves or otherwise the pad K will deaden the shock or contact to prevent injury or damage to the float.

In the modification shown in Figs. 3 and 4 the ring B can be omitted and the boat line or rope hitched to the eye or bail U, or the ring B could be connected to this bail U. The shank of this bail or yoke U carries springs M, coiled about such shanks and supporting a plate or cross-piece L, on which are mounted the risers N′, between which rests shaft X. Any blow or shock of the shaft X on plate L will be deadened by springs M, which springs, as seen, are supported underneath by a lower cross-piece connected to the free ends of the shanks of bail U. The springs M also yield under the influence of shocks produced by bail U or its footpiece falling on or striking the float.

What I claim is—

1. A mooring device comprising guide rails or beams, a shaft having rollers made to run along the guides, a ring or attaching device carried by the shaft, and a float made to support the ring, said ring and float being detached or separate from one another, substantially as described.

2. A mooring device comprising guide rails or beams, a shaft having rollers made to run along the guides, a ring or attaching device carried by the shaft, and a float made to support the ring, said float having forks or projections R R′ made to engage or extend to the guides and said ring and float being detached or separate from one another, substantially as described.

3. A mooring device comprising guide rails or beams, a shaft having rollers made to run along the guides, a ring or attaching device

carried by the shaft, and a float made to support the ring, said ring and float being detached or separate from one another, and said float having a pad or cushion to support the ring and to deaden the contact as said ring is lifted or separated from and returns to the float, substantially as described.

4. A mooring device consisting of guides or beams, a float between the guides, a shaft separate from and supportable by the float and made to engage or run along the guides, a bail extended about the shaft, and a cross-piece for supporting the shaft, said bail having springs for yieldingly supporting the cross-piece, substantially as described.

5. A mooring device consisting of guides or beams, a float between the guides, a shaft separate from and supportable by the float and made to engage or run along the guides, a bail extended about the shaft, and a cross-piece for supporting the shaft, said bail having springs for yieldingly supporting the cross-piece, and said cross-piece having risers N′ for holding the shaft therebetween, substantially as described.

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

ADRIEN GEORGES DANISY MARTIN.

Witnesses:

G. LOMBARD BONNEVILLE,

RENÉ DEFONTENAY.