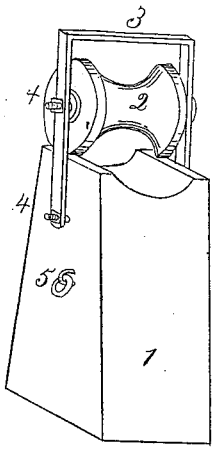
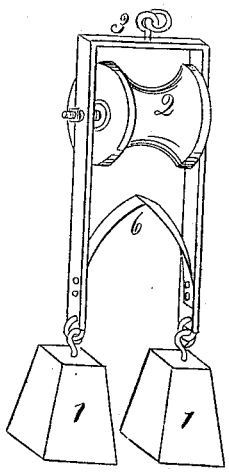
R. Evarts,

Anchor.

No. 1418. Patented. Nov. 27. 1839.





Witnesses,
Jno. K. Wilcox
W. W. Wilcox

Russell Evarts

UNITED STATES PATENT OFFICE.

RUSSELL EVARTS, OF MADISON, CONNECTICUT.

IMPROVED MODE OF PREVENTING SHIPS AND OTHER VESSELS FROM DRAGGING THEIR ANCHORS AND PARTING THEIR CABLES.

Specification forming part of Letters Patent No. **1,418**, dated November 25, 1839.

To all whom it may concern:

Be it known that I, RUSSELL EVARTS, of Madison, in the county of New Haven and State of Connecticut, have invented a machine to prevent ships and other vessels from dragging from their moorings in a gale of wind, and to make them ride safely at their moorings; and I do hereby declare that the following is a full and exact description.

My machine consists of a weight of iron or other metal, called a "sinker," the base being square and the height about twice as great as the breadth of the base. In its top is a semicircle to receive the chain or cable. Near the top is a hole to receive a bolt, which is to fasten a clasp to the sinker. There are also two rings below the bolt-hole and above the center of the sinker; a clasp which is of iron and made to fit on two sides of the sinker, consisting of a top with two arms extending down the sides of the sinker below the bolt-hole above described, with corresponding bolt-holes in both arms of the clasp to receive the bolt which passes through the sinker, thus connecting it with the clasp; also, a roller which is secured to the clasp by a bolt of iron passing through both sides or arms of the clasp, and also through the center of said roller, being secured by a head, key, or otherwise. This roller occupies the space in the upper part of the clasp, and revolves immediately above the sinker, having also a semicircular groove corresponding with the semicircle or groove in the sinker, which circle or hole thus formed receives the chain or cable. The revolutions of the roller caused by the weight of the sinker force them forward on the chain.

To use my machine the sinker is to be taken out of the clasp and a piece of rigging passed through the rings in its sides, in order to put it over the bow of the vessel, which being done bring the groove in its top directly under the chain and close to it. The roller and clasp attached are then to be placed directly over the chain to meet the sinker. They are then fastened together by the bolt made for that purpose. The whole machine is thus securely attached to the chain, which passes through the circle or hole between the roller and sinker. Cast off the rigging from the sinker and it will roll down to the anchor, thus preventing it from dragging, and in case there is danger of parting the chain, attach another sinker, as before stated, of the same construction, securing it by rigging made fast to the rings, also to the bow of the vessel. Then let it run down the chain about half-way to the anchor, where its weight will bear upon the chain, and as the vessel yields to the anchor the sinker thus suspended takes up the slack cable, prevents the sudden heaving of the vessel, and consequently lessens the danger of parting the chain.

To avoid the difficulty and danger of adjusting the machine on the chain in consequence of ice or a very heavy sea, one of the following constructions may be used: A similar clasp, bolt, and roller are used as above described. At the extremities of the arms of the clasp two springs are secured—one to each arm—extending upward toward the roller, being elliptical in shape, and meeting each other at the top, forming a Gothic arch in the center of the clasp. Said springs, though they press each other at the top, are not united. Instead of one large sinker, two smaller ones are attached—one to each extremity of the arms of the clasp. The clasp has a ring in the center of the top to receive the rigging by which it is lowered over the bow and attached to the bow of the vessel. When used one sinker must be dropped on each side of the chain, the weight of which will cause the springs to open and let the chain through them up to the roller, then to be used in all respects and for the same purposes as the one described having only one sinker.

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

The method of preventing vessels from dragging their anchors or parting their cables and to make them ride safely and easily at their moorings by the employment of the combined roller and weight or weights on the cable in the manner described.

RUSSELL EVARTS.

Witnesses:

JESSE CRAMPTON,
J. R. CRAMPTON.