Perley & Terry,
Anchor Tripper.

No. 6,509. Patented June 5, 1849.

Fig. 3.

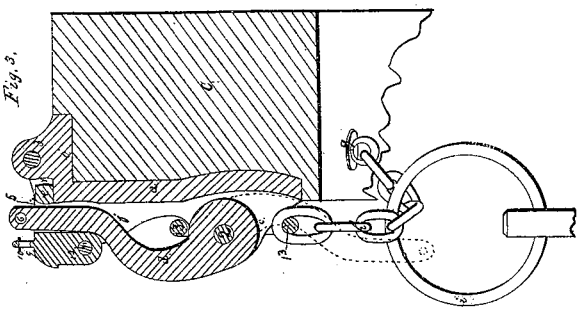


Fig. 2.

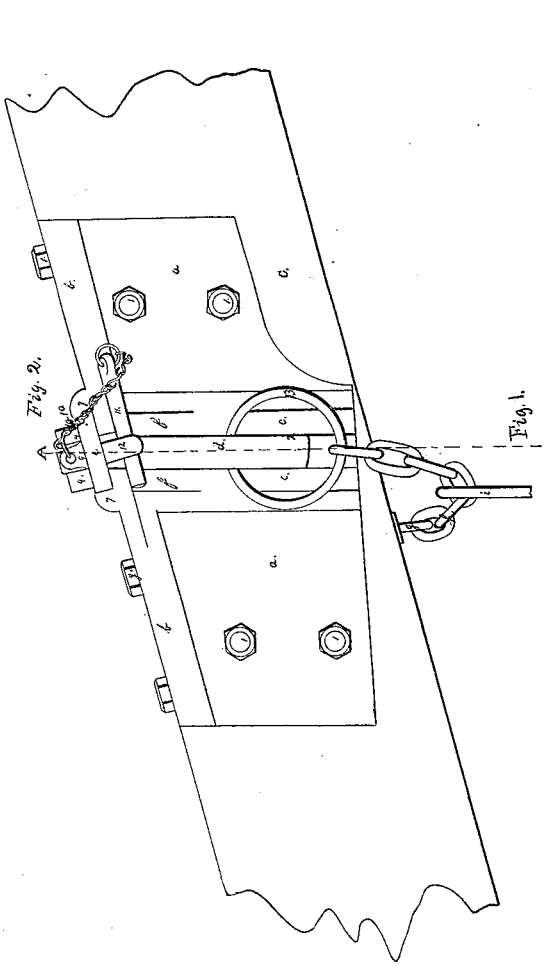
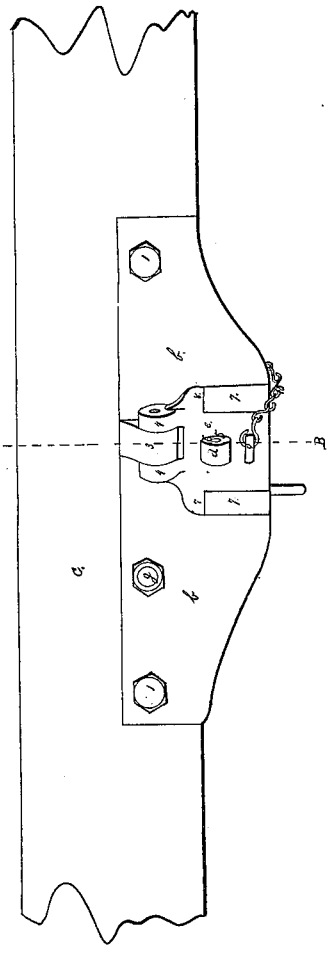


Fig. 1.



Witnesses.
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UNITED STATES PATENT OFFICE.

CHARLES PERLEY AND JOSHUA TERRY, OF NEW YORK, N. Y.

IMPROVED SHANK-PAINTER STOPPER.

Specification forming part of Letters Patent No. **6,509**, dated June 5, 1849.

To all whom it may concern:

Be it known that we, CHARLES PERLEY, machinist, and JOSHUA TERRY, blacksmith, both of the city of New York, have invented and made and applied to use certain new and useful improvements in the construction of what are nautically and technically known as "cat-head" or "shank-painter stoppers," which improvements are calculated to afford greater security to a ship's anchor when either stowed at the bows or when cast off from the shank-painter and hanging by the cat-head for use, as our improvements are equally available to both these positions of the anchor, and in both these cases combining greater safety to the ship's crew with increased facility for detaching or what is nautically termed "letting go the anchor" at a proper time, for which improvements we seek Letters Patent of the United States; and we do hereby declare that the said improvements are fully and substantially set forth and shown in the following description and in the drawings annexed to and making part of this specification wherein—

Figure 1 is a plan. Fig. 2 is an elevation, and Fig. 3 a section, as through the line A B of Figs. 1 and 2, showing collectively a cat-head stopper as in place and in use, constructed with our improvements. The application of the same as a shank-painter stopper, being only to the side of the bows instead of on the cat-head, need not be shown, as it is well understood.

The same letters and numbers, as marks of reference, apply to the same parts in each of the several figures.

In the drawings, C is the cat-head fitted with a side plate *a*, having a flange *b* partly overlying the cat-head and partly projecting in front of and above the plate *a*.

1 1 are bolts going through the cat-head to secure the plate *a*.

c c are projecting lugs or ears to carry the pin 2, forming the center for the dog *d* between the lugs *c c*. On the flange *b* is a lug 3 to form a joint 4 with the lock-piece *e*, which is made with a mortise 5 to receive the point of the dog *d*, which passing up through the mortise 5 has a hole 6 to receive a padlock. (Not shown in the drawings, but for a use hereinafter noted.) On the flange *b* are two fillets 7 7, the back ends of which are in contact with shoulders or ears 8 8 on each side the lock-piece *e* to take all strain from the joint 4. On the lock-piece *e* is a lug 9, taking a chain 10, carrying a pin 11, which goes through a tongue 12, descending from the lock-piece *e*. The ends of the pin 11 take into hollows in the upper part of the bracket-lugs *f f*, under the flange *b*.

g is a bolt going through the flange *b* and the cat-head, with an eye beneath to take the fixed end of the stopper-chain *h*, which goes through the ring *i* of the anchor and finishes with a ring 13, to lie between the dog *d* and the plate *a*, but so as that the weight of the anchor, when catted, is borne principally by the lugs *c c*, the dog *d* merely preventing the ring 13 from slipping off the lugs. When thus made and in place, on removing the pin 11 from the tongue 12 and using the chain 10 and lug 9 to lift the lock-piece *e*, the dog *d* will fall outward and downward, the anchor being hoisted by the cat-tackles, as usual, until the chain *h* can be passed through the ring *i* for the stopper-ring 13 to pass the dog *d* through it, which at this time will be in the position shown by dotted lines in Fig. 3. When the ring *i* is so in place and passed up onto the lugs *c c*, the dog *d* is to be turned up and the lock-piece *e* turned over it for the point of the dog to pass through the mortise 5 in the locking-piece *e*. In this situation the dog and locking-piece will hold the anchor under nearly all or ordinary circumstances; but to guard against accident the pin 11 is put through the tongue 12, and to guard against willful mischief, particularly when a ship is laid by at a wharf, a padlock may be put through the hole 6 in the point of the dog, which will render the "let go" of the anchor impossible, except by a violence that shall fracture the parts. The contrary of this takes place when the anchor is to be let go shipshape, as a seaman or boy can detach the pin 11 from the tongue 12, and standing ready with the pin 11 and chain 10 in his hand can snatch up the lock-piece *e* at the moment the order is given, and the anchor is instantly gone to its proper duty, and all these operations are performed with less personal risk or bodily labor than by any other means we are acquainted with that are now in use for such purposes.

The chain *h* may be either lengthened or

changed in the working end in any manner that will serve as a substitute for the ring 13; but we do not advise any such change, because we do not know of any other means than the ring to secure an equal operation on and round the parts that sustain the weight of the anchor when catted.

The same operations take place and the same effects are produced when this apparatus is applied to the ship's bows to take the crown end of the anchor and serve as a shank-painter and stopper.

We are aware that many contrivances for these purposes are publicly known, such as the one known as "Burton's cat-head stopper," in which the eye of the stopper is suspended on one end of a pin that moves on a center, with the other end held by a clamp or species of trigger held by a pin. In that apparatus the pull of the stopper on the bolt throws the strain of the weight back on the pin holding the clamp or trigger, so that a handspike is needed, by which one man takes off the strain by nipping the clamp, while the pin is withdrawn to let go the anchor, making two operations, probably requiring two men to effect them, and in any case risking the permanence of the parts by their exposure to accident from a blow by the foresheet block or any other weight in motion, which would instantly free the anchor, probably with injurious consequences. In a shank-painter apparatus, known as "Spence's," we consider the same inconveniences to be manifest, as the end of the shank-painter is taken by a pin and joint that is held by a hooked lever, which is kept in place by a pin, and the strain of the weight on the lever causes the need for a bar or handspike to be entered in a hollow end of the lever to cant that before the holding-pin can be detached and the anchor let go. This, again, apparently requires two men, and is liable to all the same risk and inconvenience with Burton's, before referred to, and particulaly so to the men holding the lever. We do not know that either of these inventions is now in use; but we use a public description of them to show wherein we consider our apparatus as essentially differing with both of these, and, in fact, with all other apparatus for the same purposes that we know of—first, in the fact that the places, shapes, and substances of the parts, as we believe, completely protect them from accidental injury, so that the anchor cannot be let go by such causes; secondly, that if by any motion of the ship or by the flukes of the anchor fouling another vessel or object the strain is thrown from the lugs *c c* to the dog *d*, this cannot "cant" the lock-piece *e* upward and release the anchor, even if the pin 12 is not in place; thirdly, through the construction and by the facility of locking the dog *e* by the hole 6, no interference short of breaking the parts can release the anchor improperly; fourthly, in all cases, whether of intended use or positive accident, the ultimate strains are not borne by movable and easily-detached parts, as all such strains fall on the fixed fillets 7 7, through the lugs or ears 8 8, independently of any wear or looseness in the joints formed by the parts 3 and 4, and, finally, the fact that either as a cat-head stopper or shank-painter stopper the action of the apparatus can in almost all cases be fully controlled by one man, does, as we believe, distinguish and separate this our invention from all others that have either preceded it or are now in use.

We do not claim to have invented any of the foregoing parts irrespective of the manner in which we have arranged and applied them for these purposes; but

We do claim as new and of our own invention, and desire to secure by Letters Patent of the United States—

The application, arrangement, and combination of the parts described and shown, by which the lock-piece *e*, with ears or shoulders 8 8, places any ultimate strain upon the fixed fillets 7 7 and through the lug 12 and pin 11 secures all the operative parts from moving by accidental causes, at the same time providing means, through the attached chain 10, by which one man can release or let go the anchor without other manual help and without other mechanical aid than that furnished by the parts attached and employed, when constructed and combined substantially in the manner described and shown.

In witness whereof we have hereunto set our signatures this 3d day of April, 1848.

CHARLES PERLEY.
JOSHUA TERRY.

Witnesses:
W. SERRELL,
LEMUEL W. SERRELL.