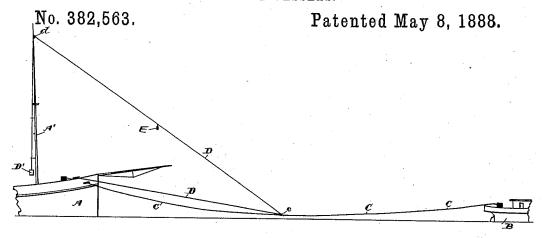
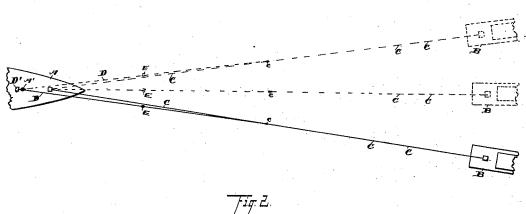
(No Model.)

T. SKINNER.

STEERING VESSELS.





Thos Skumer. INVENTOR.
Siggett Liggett Attorneys.

UNITED STATES PATENT OFFICE.

THOMAS SKINNER, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO ALBERT R. RUMSEY, OF CLEVELAND, OHIO.

STEERING VESSELS.

SPECIFICATION forming part of Letters Patent No. 382,563, dated May 8, 1888.

Application filed January 30, 1888. Serial No. 262,322. (No model.)

To all whom it may concern:

Be it known that I, THOMAS SKINNER, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Steering Vessels; and I do hereby 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 pertains to make and use the same

it pertains to make and use the same. My invention relates to a signal light and means for supporting the same for steering vessels, more especially in foggy weather, in which a lantern or other signal-light is suspended in front of the vessel and in position 15 to be seen by the steersman, by means of a cord connected with the tow-line some distance forward of the vessel, and leading from thence to the forward mast of the vessel at such elevation that the cord will clear the bow-20 sprit and other rigging of the vessel, to the end that the signal light will move laterally whenever the tow-boat changes its course, thereby indicating approximately the lead of the towline, and consequently the direction that the 25 vessel should be steered. In foggy weather, when the tow-boat or the lights thereof cannot be seen, it is difficult to properly steer the vessel being towed, and unless the latter follow approximately the lead of the tow-line the 30 line itself will be broken. This frequently occurs in foggy weather, and as there may be a

trifling matter to hunt up a lost vessel in a fog and return her to her place in the tow. I have therefore devised and reduced to practice the mechanism illustrated in the accompanying drawings.

number of vessels in the tow the danger and de-

tention in such case are very great, for it is no

Figure 1 is a side elevation. Fig. 2 is a plan.
A represents a vessel being towed; B, the tow-boat; C, the tow-line, and A' the forward mast of the vessel.

D is a cord connected, for instance at c, with the tow-line and leading from thence preferably to the forward mast-head, or so far up the mast that the cord will not come in contact with the bowsprit or other rigging of the vessel. A sheave or snatch-block, d, is fastened to the mast, through which the cord D passes and leading from thence downward, and the free and of the cord is provided with

a weight, D', for holding the cord taut. To the cord is fastened a lantern or other suitable signal-light, E, in position to be seen by the steersman of the vessel. With such arrangement of parts it is evident that if the tow-boat turns to the right or to the left the tow-rope will have a corresponding lead, thereby turning the signal-light accordingly, so that the position of the signal-light will approximately 6c indicate the lead of the tow-line. (See solid and dotted lines, Fig. 2.). The steersman has therefore only to keep the vessel directed toward the signal-light to follow the direction taken by the tow-boat.

In practice I prefer to fasten a snatch-block to the tow-line, for instance at c, through which snatch-block cord D leads, the lower end of the cord returning to the vessel, where it is secured, by which arrangement this end 70 of the cord can be slacked off at any time, if need be. In place of snatch-blocks connected with the mast and tow-line for cord D to pass through, dead-eyes, loop, or other similar device would answer the purpose, although small 75 snatch-blocks are preferable.

A post or standard would answer in place of a mast for supporting line D, and may be used to advantage on crafts that have no masts. As aforesaid, I have reduced my invention 8c

As aforesaid, I have reduced my invention to practice, and find no difficulty in steering a vessel in foggy weather by means of such signal-light.

What I claim is—

1. The combination, with vessel and connected tow-line, of cord stretched from a support located above the deck of the vessel forward to a point on the tow-line, such cord bearing the signal-light, substantially as indicated, whereby such signal-light follows approximately the lead of the tow-line, and thereby indicates the direction for steering the vessel, substantially as set forth.

2. The combination, with vessel, mast, and tow-line, of cord connected, respectively, with 95 the mast and tow-line in position to follow approximately the lead of the tow-line, and a signal-light supported by such cord between the extremes of the latter, substantially as set

passes and leading from thence downward, and the free end of the cord is provided with tow-line, of cord connected, respectively, with

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mast and tow-line, a weight connected with the free end of the cord, and a signal-light connected with the cord between the mast and tow-line in position to move laterally with the lateral lead of the tow-line, substantially as set forth.

4. The combination, with vessel, mast, and

4. The combination, with vessel, mast, and tow-line, of cord connected with the vessel and extending from thence forward to a snatchblock on the tow-line, and leading from thence to a snatch-block located at or near the masthead, and leading from thence downward, a weight connected with the depending end of

the cord, and a signal-light connected with the cord between the mast and tow-line in position to move laterally with lateral lead of the tow- 15 line, substantially as set forth.

In testimony whereof I sign this specification, in the presence of two witnesses, this 15th day

of December, 1887.

THOMAS SKINNER.

Witnesses:
ALBERT E. LYNCH,
CHAS. H. DORER.