R. T. OSGOOD.

CLUTCHES FOR JIB-SHEET TRAVELERS.

No. 188,256. Patented March 13, 1877.

Fig. 1.

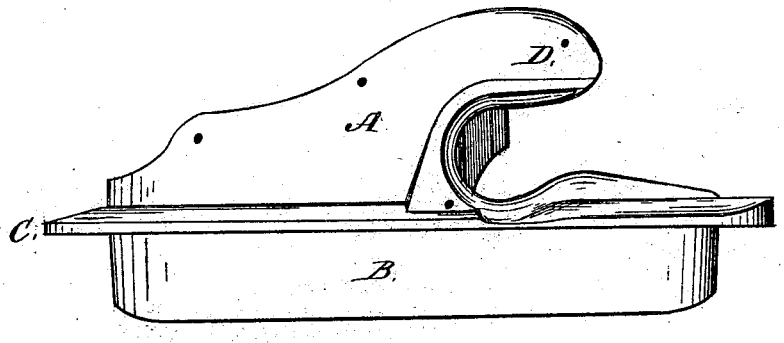
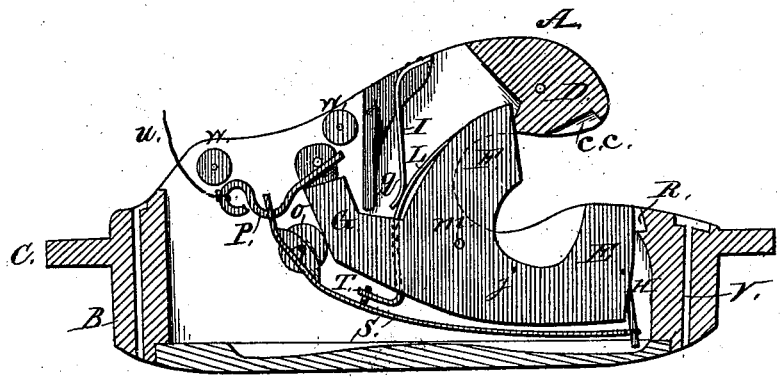


Fig. 2.



Witnesses:

O. B. Foott
F. W. Osgood

Inventor.

Robert T. Osgood.

UNITED STATES PATENT OFFICE.

ROBERT T. OSGOOD, OF ORLAND, MAINE.

IMPROVEMENT IN CLUTCHES FOR JIB-SHEET TRAVELERS.

Specification forming part of Letters Patent No. **188,256**, dated March 13, 1877; application filed April 24, 1876.

To all whom it may concern:

Be it known that I, ROBERT T. OSGOOD, of Orland, in the county of Hancock, in the State of Maine, have invented a Clutch for a Vessel's Jib-Sheet Traveler, and for any other desirable purpose; and I do declare the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters marked thereon.

This traveler is an iron rod or wooden spar, as the case may be, with a clutch near either end, secured athwart the deck of a vessel, forward of the foremast, to keep the jib taut in working the vessel, and the clutch is to hold the jib to the wind until the vessel is so far turned as to require the jib to draw on the opposite side; then the clutch is let off by a pull upon the lanyard *u*. The ring which encircles the traveler-rod, being secured to the jib-sheet, then slides over to the opposite end clutch, and is locked therein by its own action, remaining there till let go, as aforesaid.

To enable others to make and use my invention, I will proceed to describe its construction and use.

First, I have a cast-iron case, A, to contain the tumbler of the clutch, with its attachments, which is made of an irregular shape, and of any size desired. The lower portion of the case B is to be mortised into the traveler-spar up to the flange C, if used with wood; if used with an iron rod, then the flange C is removed, and they are cast so that they can be inserted into an eye or strap, not very unlike a sheave-block strap, by welding one piece of iron upon the side of another, so as to form an eye for that purpose. The outside or upper portion of this case A extends toward one end, and forms a blunt hook, D, making a C-shaped mouth for the traveler-ring to enter when it slips over from one end to the other. The other end and sides of this case are made high, and wide enough to cover the tumbler-levers, and the friction-pulleys for the lanyard, if desirable to use such pulleys W W. The tumbler *j* consists of an irregular-shaped flat piece of iron about one inch thick, with three extensions, viz: E is the pin; F is the upright, and G is the inclined lever-arm, turning upward for the roller *o* in the long lever S to act upon when let off. This tumber is made to fit into the case-chamber, as represented in the drawings, which is a half-section view; and when the pin E is thrown up into the notch *c c*, made in the under side of the blunt hook D, it forms a close and nearly round hole of the C-shaped mouth. The tumbler is secured in position by a pin, *m*, through it and the walls of the case near the center, so that it will vibrate backward and forward at pleasure, and when the upright F is thrown forward it fills about one-third of the C-mouth, so that the traveler-ring cannot get into said mouth without pressing it back and throwing the pin E up behind it, and locking itself therein. I have a latch or pawl, H, hinged into the outside of the pin E, which has a groove for that purpose. The inward end of this pawl is also secured to the end of the long lever S, and falls into the notch R, made in the body of the case for that purpose, to hold the pin firmly braced up to the blunt hook D until let go by a pull upon the lanyard *u*, which then draws the pawl out of the notch or catch R, and vibrates the tumbler-upright forward, throwing the pin down into the case, and the inclined lever-arm G upward against the solid stop *q* in the case, thus opening and relieving the mouth. The long lever extends from said pawl along the lower edge of the tumbler to the end of the inclined arm G, and it has a roller in the end to act upon this arm, so that by pulling it down upon the incline it rolls toward the end and draws the pawl out of the notch, as stated. There is also a spring, L, firmly secured to the back of the upright F, passing through the inclined arm, and bent toward the roller *o* in said long lever, and is secured to it by a flat pin passing through a slot, T, made in said spring near its end, and firmly fixed to said lever, throwing said lever endwise when pulled upon, as aforesaid, withdrawing the pawl, and returning it into the notch or catch in the case when relieved of said force.

I have also another short lever, P, which passes through the inclined end of lever S, and is secured to the inclined lever-arm G, it being made into a ring just outside of lever S to tie the lanyard *u* in. This lever is to aid in bringing the roller down upon the incline more readily, for the purposes specified, and to admit the lanyard to be pulled in any di-

rection. The chamber in the case A, at the top *w w*, is made long enough for friction-pulleys for the lanyard, if desirable; if not, they are left out. I have also another spring, I, passing through the back of the blunt hook D, acting upon the back of the upright F of the tumbler *j*, so bent as to keep the clutch-mouth always open when not in use. Near said spring I have a hole made through the case to let any water escape from the chamber when used upon the under side of the traveler-rod or spar. I have also a cover fitted into the lower part of the case, rounded off, so as to form a close case to protect the tumbler and its attachments from accident.

The outside of said case A I make as smooth as possible, leaving only a thicker portion around its mouth for the tumbler-pin *m* to pass through, and to keep the mouth from wearing or breaking away.

The flange C extends all around the outside of the case A when cast for wood; but when used for iron travelers it is all removed, leaving only the rough surface of the lower portion B made for that purpose.

A half-section bolt-hole is represented at V to secure the clutch to the spar.

I claim—

1. The vibrating tumbler *j*, consisting of the pin E, upright F, and inclined arm G, in combination with the case A, provided with the notch E E, substantially as described.

2. The pawl H, so hinged into the pin E as to form a secure brace when in the catch R of the chamber, substantially as described.

3. The long lever S, with its roller *o*, the inclined arm G, the short lever P, together with the springs L and I, for the purposes substantially as described.

4. The case A, made with or without flanges, the tumbler *j*, and its attachments, in combination, substantially as set forth and described.

ROBERT T. OSGOOD.

Witnesses:

O. B. TROTT,

F. W. GROSS.