

(No Model.)

S. T. RICHARDSON.
OYSTER TONGS.

No. 579,082.

Patented Mar. 16, 1897.

Fig. 1.

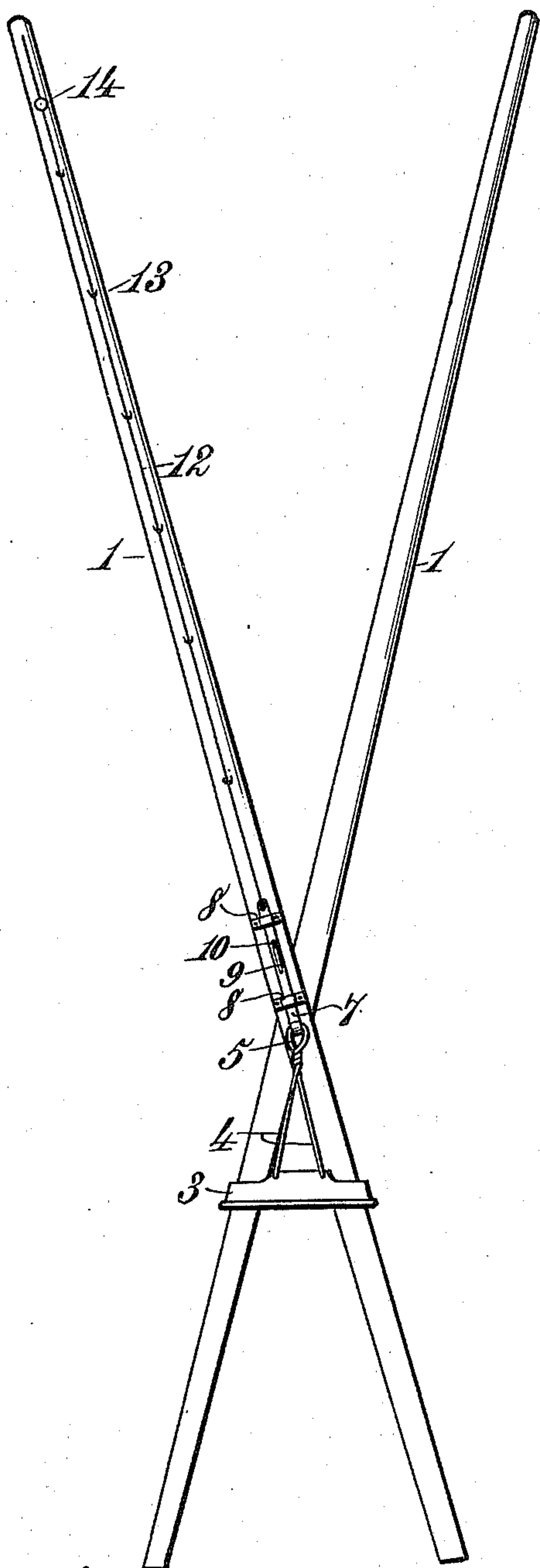


Fig. 2.

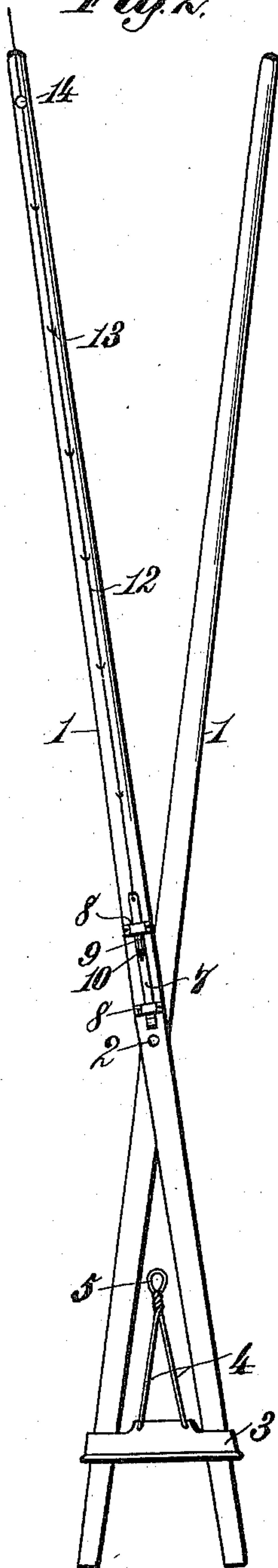
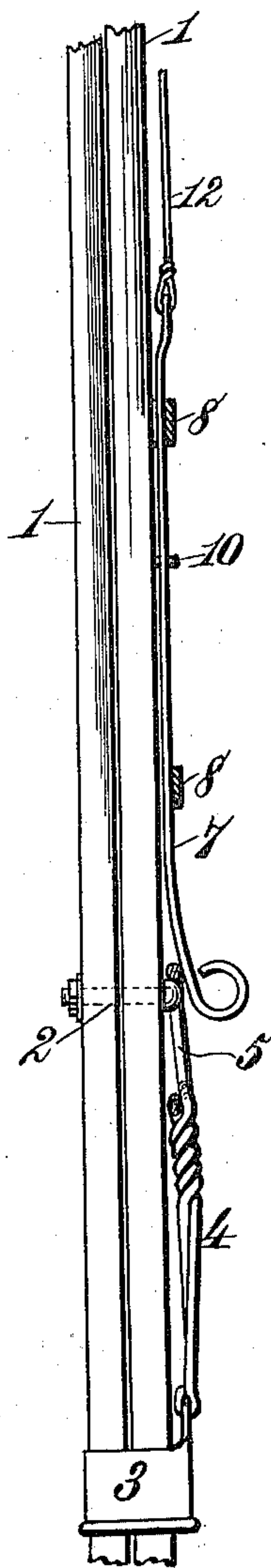


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

SAMUEL T. RICHARDSON, OF BALTIMORE, MARYLAND, ASSIGNOR OF ONE-HALF TO ALBERT H. LARDUSKEY, OF SAME PLACE.

OYSTER-TONGS.

SPECIFICATION forming part of Letters Patent No. 579,082, dated March 16, 1897.

Application filed July 7, 1896. Serial No. 598,297. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL T. RICHARDSON, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented new and useful Improvements in Oyster-Tongs, of which the following is a specification.

It is the purpose of my invention to provide certain improvements in oyster-tongs, whereby the oystermen who use tongs in gathering oysters shall be relieved of a great part of their labor and the operation of the tongs shall be improved.

It is my object, also, to remove certain conditions now existing, from which oystermen are exposed to much suffering. These conditions may be briefly explained as follows:

Oyster-beds lie at various depths, but are very often from twenty-five to twenty-eight feet below the surface. The season during which oysters are taken includes the most stormy and inclement months of the year. The oysters are torn from their bed and gathered in the tongs, which are operated until filled with oysters, shells, mud, and any other material which their teeth may encounter. This mass will weigh from fifty to eighty pounds, and to raise it from the bottom, lift it on board, and at the same time hold the tongs firmly together, is an effort which requires great strength and practice. As this work is frequently carried on in extremely cold weather and during high winds and storms of rain, snow, and hail, the oystermen are not only exposed to much suffering, but are liable to become exhausted before their work is completed. One of the most difficult requirements of this work is that during the raising of these heavy loads from the bottom, which calls for the exertion of great strength, the tongs must also be held closed to prevent the escape of what they contain. This imposes a serious strain upon muscles already overtaxed, besides rendering the prosecution of the work slower, since the tongs must be raised with such care as to avoid the possibility of their contents escaping. It is the purpose of my invention to provide means for automatically locking the tongs after a load has been accumulated, thereby relieving the operator of this portion of the work, and to com-

bine with the automatic lock simple means for controlling its action.

The invention consists, to these ends, in the novel features of construction and new combinations of parts hereinafter fully explained, and then particularly pointed out and defined in the claims which conclude this specification.

For the purpose of this description reference will be had to the accompanying drawings, in which—

Figure 1 is a side elevation of a pair of oyster-tongs equipped with my invention and shown as being opened. Fig. 2 is a side elevation of the same when closed, showing the operation of the automatic lock. Fig. 3 is a front elevation of the tongs, upon a slightly enlarged scale, showing the means for holding and releasing the automatic lock.

The reference-numeral 1 in said drawings indicates the two handles of the oyster-tongs, which are pivotally connected together by a pivot 2. Their construction need not differ from the tongs now in common use, and for this reason I have not shown in the drawings the teeth or fingers upon the cross-heads at the lower ends of the said handles, as these are perfectly familiar to all who are acquainted with this industry. Between the pivotal point 2 and the lower ends of the handles 1 is the automatic lock 3. It consists of a loop or oblong link of such length and width as to allow the two handles to open and close within it when said loop is sustained at a given distance below the pivot 2, and to enable it, when dropped to a lower point upon said handles 1, to lock the latter in a closed position with their load, the closed position being that in which the points of the teeth are brought together.

The locking device is sustained at the proper point, while the tongs are gathering the oysters, by means of a short wire or cord 4, having an eye 5 at its upper end, which is slipped over a projection on one of the handles, such, for example, as the head of the pivotal bolt 2, upon which said eye is held by the curved end of a keeper-plate 7. This plate is arranged in guide-loops 8 upon the handle, and has a limited movement thereon in a longitudinal line, limited by a slot 9 in the plate

and a pin 10, passing through the slot into the handle. The keeper-plate is elastic or sufficiently so to enable its curved end to yield when forced down over the eye in the end of the wire supporting the lock, thereby giving it a frictional engagement which retains it in said engagement.

To the upper end of the keeper-plate is attached a wire or slender rod 12, which runs along the face of the handle and is held at suitable intervals in guide-staples 13. Its upper end, which is at or near the end of the handle, is provided with an eye or ball 14, with which a finger may engage to draw the keeper-plate off the eye 5, and thereby release the lock, which falls by its own gravity until it is arrested by the divergence of the handles. When the latter are closed as far as their teeth will permit, the locking device will hold them securely in this position until the load is raised and emptied on board. The lock is then drawn toward the pivot 2, and the tongs are released after their load is discharged. The oysterman is thus at liberty to exert his entire strength and give his attention simply to the raising and securing of the load held by the tongs. He is enabled, therefore, to work more rapidly, as he is relieved of the necessity of constantly guarding against the accidental opening of the tongs.

What I claim is—

1. An oyster-tongs having pivotally-connected handles, an automatic locking-loop encircling the handles and located at a point between the handle-pivot and the lower ends of the handles, a device for supporting said loop raised in juxtaposition to the handle-pivot, and means for releasing the said supporting device from the locking-loop to permit the latter to automatically descend, substantially as described.

2. The combination with the pivoted handles of an oyster-tongs, of a locking-loop encircling the handles at a point between the handle-pivot and the lower ends of the handle, a plate movable on one of the handles and

having means to engage and disengage a part of said locking-loop, and means for sliding the said plate to disengage the locking-loop and permit the latter to automatically descend, substantially as described.

3. The combination with the pivoted handles of an oyster-tongs, of a locking-loop encircling the handles and located at a point below the handle-pivot, a locking-loop-sustaining device arranged on one of the handles and having means to engage a part of the locking-loop, and means for operating the loop-sustaining device to release the said loop and permit it to automatically descend, substantially as described.

4. The combination with an oyster-tongs of a locking-loop between the pivot and the lower ends of the handles, a wire or cord attached to the locking-loop and having an eye to engage a projection on the handle, a keeper-plate movable in guides on the handle, one of its ends engaging and holding said eye, and a wire or rod attached to the keeper-plate and extending to a point where it can be operated by the one using the tongs, substantially as described.

5. The combination with the pivoted handles of an oyster-tongs, of a locking-loop inclosing the handles below their pivotal point, a wire or cord attached to the locking-loop and having an eye to engage a projecting point on the handle, a keeper-plate having a curved end bearing elastically upon the eye to retain it upon the projecting point, and a rod or wire lying in guide-staples on the handle to withdraw the keeper-plate and permit the locking-loop to fall by gravity, substantially as described.

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

SAMUEL T. RICHARDSON.

Witnesses:

THOS. KELL BRADFORD,
SAML. D. BRADFORD.