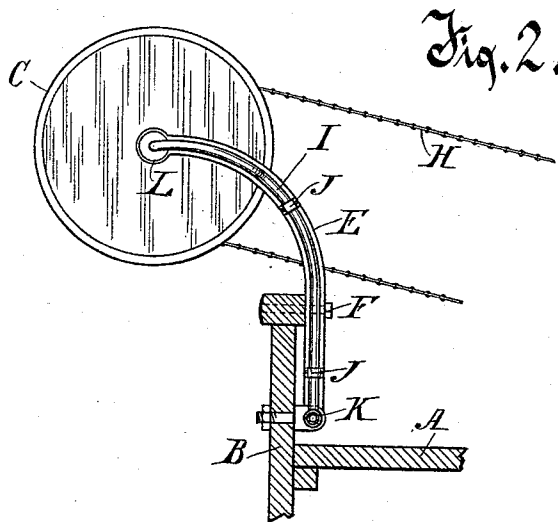
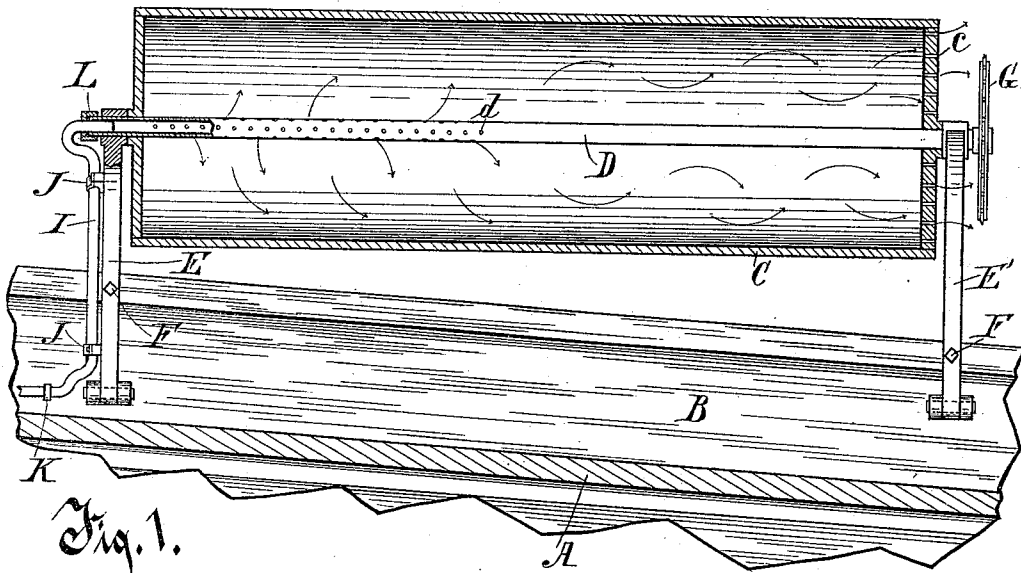


(No Model.)

H. THIEL.
SEINE HAULING APPARATUS.

No. 490,375.

Patented Jan. 24, 1893.



Witnesses.

A. K. Kenev

Fred S. Hunt.

Inventor.

Henry Thiel

By
Benedict and Morsell
Attorneys.

UNITED STATES PATENT OFFICE.

HENRY THIEL, OF MILWAUKEE, ASSIGNOR OF ONE-HALF TO HENRY
VENELLS, OF PORT WASHINGTON, WISCONSIN.

SEINE-HAULING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 490,375, dated January 24, 1893.

Application filed October 24, 1892. Serial No. 449,805. (No model.)

To all whom it may concern:

Be it known that I, HENRY THIEL, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented a new and useful Improvement in Devices for Elevating or Lifting Fish-Nets, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

My invention has relation to an improved device for lifting nets.

The elevation of fish nets from the water on to the deck of a vessel, so far as I am aware, is now accomplished entirely by hand, which, as is obvious, is a tedious and expensive operation, requiring at least the labor of two men.

It is the object of my invention to provide a device capable of effecting the work in a simple, efficient and expeditious manner, rendering it possible for one man to accomplish the entire work.

With the above object in view the invention consists in the improved construction and combination of parts as hereinafter more fully set forth.

In the accompanying drawings, Figure 1, is an inner side elevation of a portion of a rail of a vessel, showing my improved device secured thereto, the rotatable reel being shown in longitudinal section, and a portion of the hollow shaft, standard and stuffing box being in section, and Fig. 2, is an end elevation of the reel, the rail and a fragment of the deck of the vessel being in transverse section.

Like letters of reference denote like parts in both figures of the drawings.

Referring to the drawings the letter A indicates the deck of a vessel, having the rail B projecting therefrom, in the usual manner.

The letter C indicates a hollow reel, which is rotated on a hollow shaft D, said shaft provided for a certain distance along its length with perforations, *d*. The extremities of the shaft projecting laterally beyond the end pieces of the reel pass into apertures in the upper ends of standards E E', the lower end of said standards being hinged to the inner sides of the rail. These standards are curved considerably at their upper ends so as to project the reel a desired distance beyond the rail

of the vessel, and are normally held rigidly to said rail by means of bolts F, F, which enter the cap piece of the rail.

It will be noticed that the standard E' is considerably shorter than its companion E and that also the hinge connection of the same with the rail is some distance higher than the hinge of standard E. This arrangement is made necessary, in order to bring the hollow reel to a true horizontal plane notwithstanding the inclination of the rail of the vessel, as fully shown in Fig. 1. It is obvious that if the two standards were of equal length, and the hinge connections made at corresponding points on the rail, not only would the reel be thrown at an incline corresponding to the inclination of the rail, but also it would be impossible to throw the standards back on their hinges whenever such operation should be found necessary.

The right hand end of shaft D, in Fig. 1, is shown as provided with a sprocket wheel G, around which passes a sprocket chain H leading to a small engine, or other suitable motor, not shown, arranged in any convenient portion of the vessel. In this manner rotation is imparted to the shaft and the reel carried thereby. The opposite end of the shaft is open, and receives therein a pipe I, said pipe throughout a certain portion of its length conforming to the contour of standard E, and passing through staples J, or equivalents, extending from the outer side of the standard. The lower end of this pipe after passing through a staple K extending from the rail connects with a suitable source of steam supply. In order to provide a tight joint between pipe I and the end of shaft D a stuffing box L surrounds said pipe and extends over the open end of shaft D.

In operation, the net extends up from the water over the reel and is grasped by an operator standing on the deck of the vessel. The reel is rotated in the manner hereinbefore pointed out, and this rotary motion necessarily facilitates to a great extent the hauling in of the net from the water to the deck of the vessel, the labor of one man being all that is requisite for this purpose. Of course, it is a desideratum that the net should pass freely over the reel without the slightest im-

pediment. In cold weather, the wet net would have a tendency to adhere to the periphery of the reel through freezing, and it is to guard against this tendency that I provide the steam pipe I leading to the hollow shaft. It will be readily understood that as the steam is injected into the hollow shaft, it passes from the same into the cylinder or reel through the apertures *d*, and has the effect of keeping the surface of the reel at the proper temperature to prevent congealing, the steam finally having its exit through apertures *c* in one end thereof.

When my improved device is not in active use, and in case of heavy storms accompanied by violent winds, it is desirable that the position of the device should be changed so as to be less exposed to the violence of the wind. In order to accomplish this the bolts F F are removed, after which the device may be readily swung inward upon its hinges, the steam pipe I, as will be readily understood from the construction shown in the drawings, not interfering in the least with this movement, and in fact being swung simultaneously with the reel.

Having thus described my invention what I claim and desire to secure by Letters Patent of the United States is:

30 1. In a device for elevating or lifting fish

nets, the combination of a vessel, standards secured thereto, a hollow rotatable shaft having its bearings in the standards provided with a series of perforations, a hollow reel carried by the shaft and provided with exit ports, and a steam pipe connecting with one end of the hollow shaft, and adapted to inject steam into the same and through the apertures thereof into the hollow reel, substantially as set forth. 35

2. In a device for elevating or lifting fish nets, the combination of a vessel, standards hinged thereto at their lower ends, a hollow rotatable shaft having its bearings in the upper ends of said standards and also provided with a series of apertures, a hollow reel carried by the shaft and provided with exit ports, and a steam pipe leading from a suitable source of supply, passing through staples extending from the side of one of the standards and connecting at its upper end with the end of the hollow shaft adjacent, whereby said pipe may be thrown inward with the hinged standards, substantially as set forth. 40 45 50

In testimony whereof I affix my signature in presence of two witnesses. 55

HENRY THIEL.

Witnesses:

ARTHUR L. MORSELL,
C. T. BENEDICT.