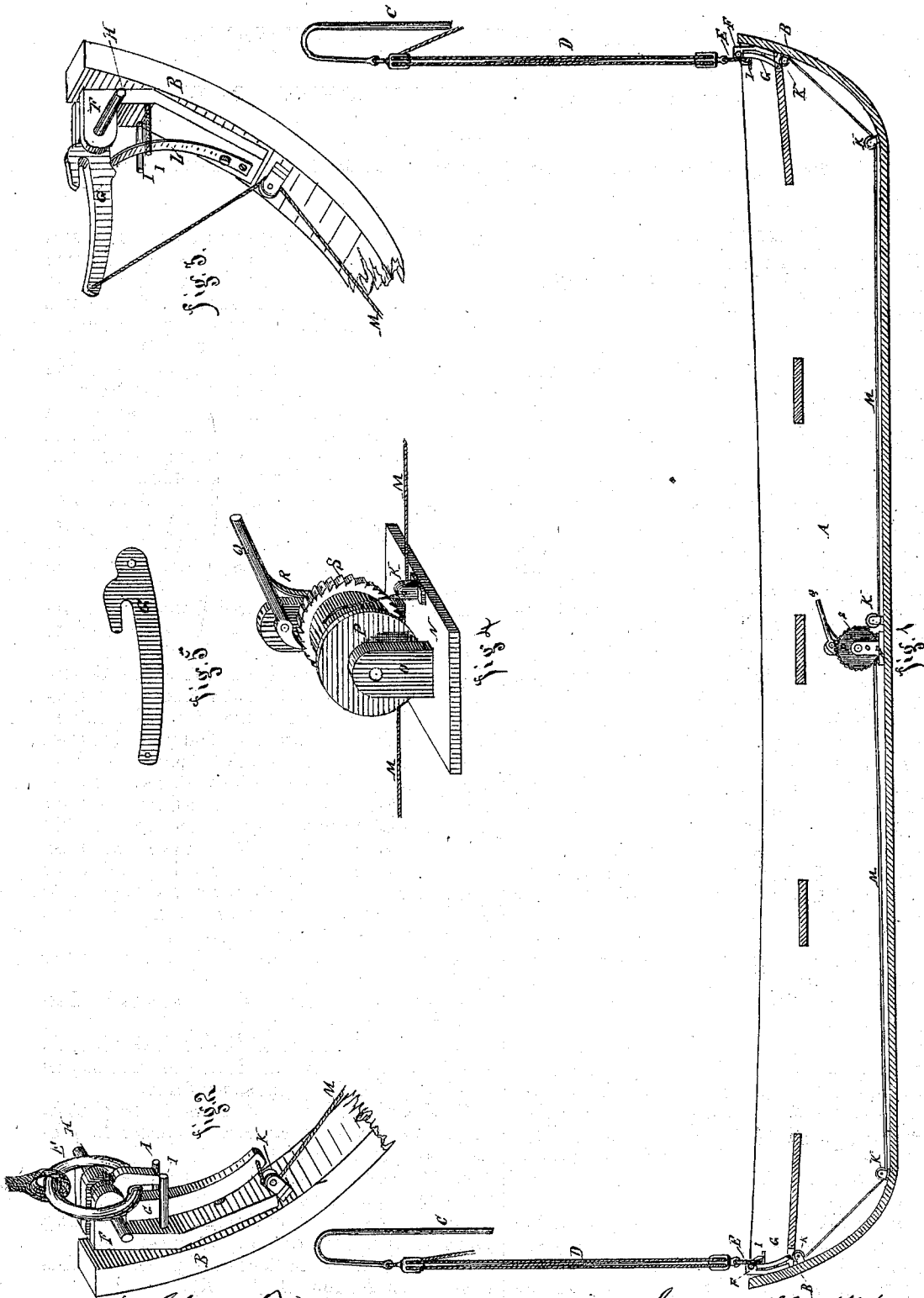


LEWIS H. WATSON.

Improvement in Method of Detaching Boats.

No. 124,923.

Patented March 26, 1872.



Witnesses { *Charles H. Fowler*
J. S. Bourne

Inventor *Lewis H. Watson*

UNITED STATES PATENT OFFICE.

LEWIS H. WATSON, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN METHODS OF DETACHING BOATS.

Specification forming part of Letters Patent No. 124,923, dated March 26, 1872.

SPECIFICATION.

To all whom it may concern:

Be it known that I, LEWIS H. WATSON, of the city of Pittsburg, county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Lowering Boats from Vessels, of which the following is a full, clear, and exact description.

The nature of my invention consists in the construction of a simple and effective apparatus for instantly detaching boats after they have been lowered to within a short distance of the water, as will be hereinafter more fully set forth.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawing, Figure 1 represents a sectional and interior view of a boat, showing my apparatus attached. Fig. 2 is a side view of the stern of a boat, showing the ring placed in the hook, and said hook closed, ready for lowering. Fig. 3 is a side view of the stern of a boat, illustrating the position of the hook after it has been released. Fig. 4 is a part side and end view of the drum, having ratchet-teeth on one end and designed to operate the hooks by winding the ropes attached to said hooks around its barrel. Fig. 5 is a side view of the hook when removed, showing the relative position of the ring with the pivot.

A represents an interior view of a boat, showing my apparatus in position for lowering; B, the stem and stern posts to which my apparatus is attached. Extending along the bottom of a boat is a small rope or cord, M, which operates the hooks. In the bottom of the boat is placed a drum, P, around which the rope M winds, it being guided from one hook to the other by means of small sheaves or rollers, as shown at K, one of which is placed immediately under the long end of each of the hooks G, as shown at K, Fig. 2, and others at suitable intervals, being of the right length, and suitably adjusted. The long ends of hooks G will both come down at the same time, and the slack will be wound up when the hooks touch the stops. The drum P should have a slight horizontal movement in the direction of the stem or stern of the boat, as the case may be, to secure an equal strain upon either end of the hooks G. The main plates F should be se-

curely fastened to the stem or stern posts, and upon the upper end of said plates are made two lugs or projections to receive the hook G, as seen at F. The pivot H should be true and smooth, to secure the easy turning of the hook, and also project far enough from each side of the plate F to act as guards in preventing the ring E from coming too near the post B, in which case it would be on the dead-center and become inoperative. The pins I, though not really essential, are for additional security in preventing the ring E from becoming detached accidentally. The spring L is intended to force up the hook G when no strain comes on the tackle. Though I have shown the pins I and spring L, they may be dispensed with if desired.

Having described the construction and nature of my invention, I will now proceed to describe its operation, which is as follows: The rings E are placed in the hooks G, and the long ends of said hooks forced down by the hand, when the drum P will be turned and the slack all wound up. The pawl Q is then placed in the ratchet-teeth S, and secured by the spring R; the boat will then be swung over the side, and lowered in the ordinary manner by means of the davits C, and blocks and tackle D, as shown in Fig. 1. When the operator desires to detach the boat, he will press down upon the handle P, allowing the rope M to unwind, which in turn releases the movable end of the hook G, said hook turning upward, thus releasing the rings E and detaching the boat.

What I claim, and desire to secure by Letters Patent, is—

1. The combination of the hook G, plate F, pivot H, ring E, and guide I, substantially as described, for the purpose set forth.

2. The combination of drum P, ratchet S, pawl Q, cord M, hook G, and spring L, substantially as described.

3. The combination of drum P, ratchet S, pawl Q, rope or cord M, pulleys K, hook G, plate F, pivot H, spring L, guard I, and ring E, as set forth, for the purpose described.

The foregoing specification signed by me this 31st day of August, A. D. 1871.

Witnesses: LEWIS H. WATSON,

T. C. CONNOLLY,
CHAS. H. FOWLER.