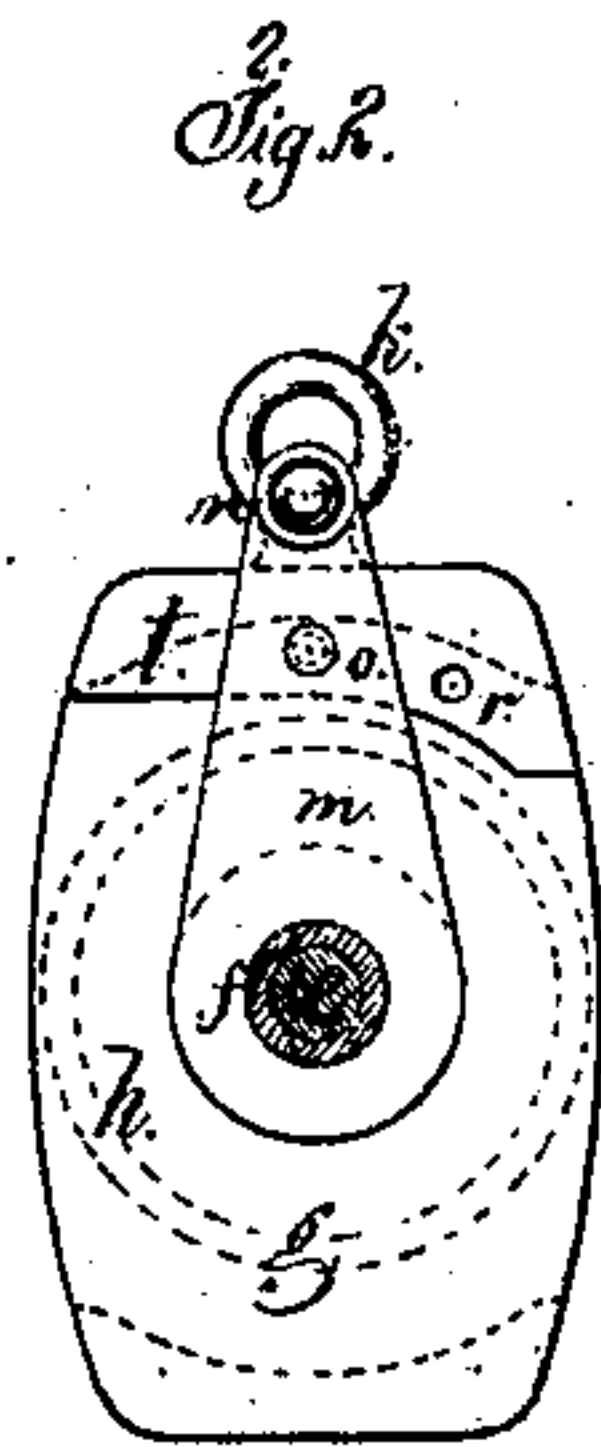
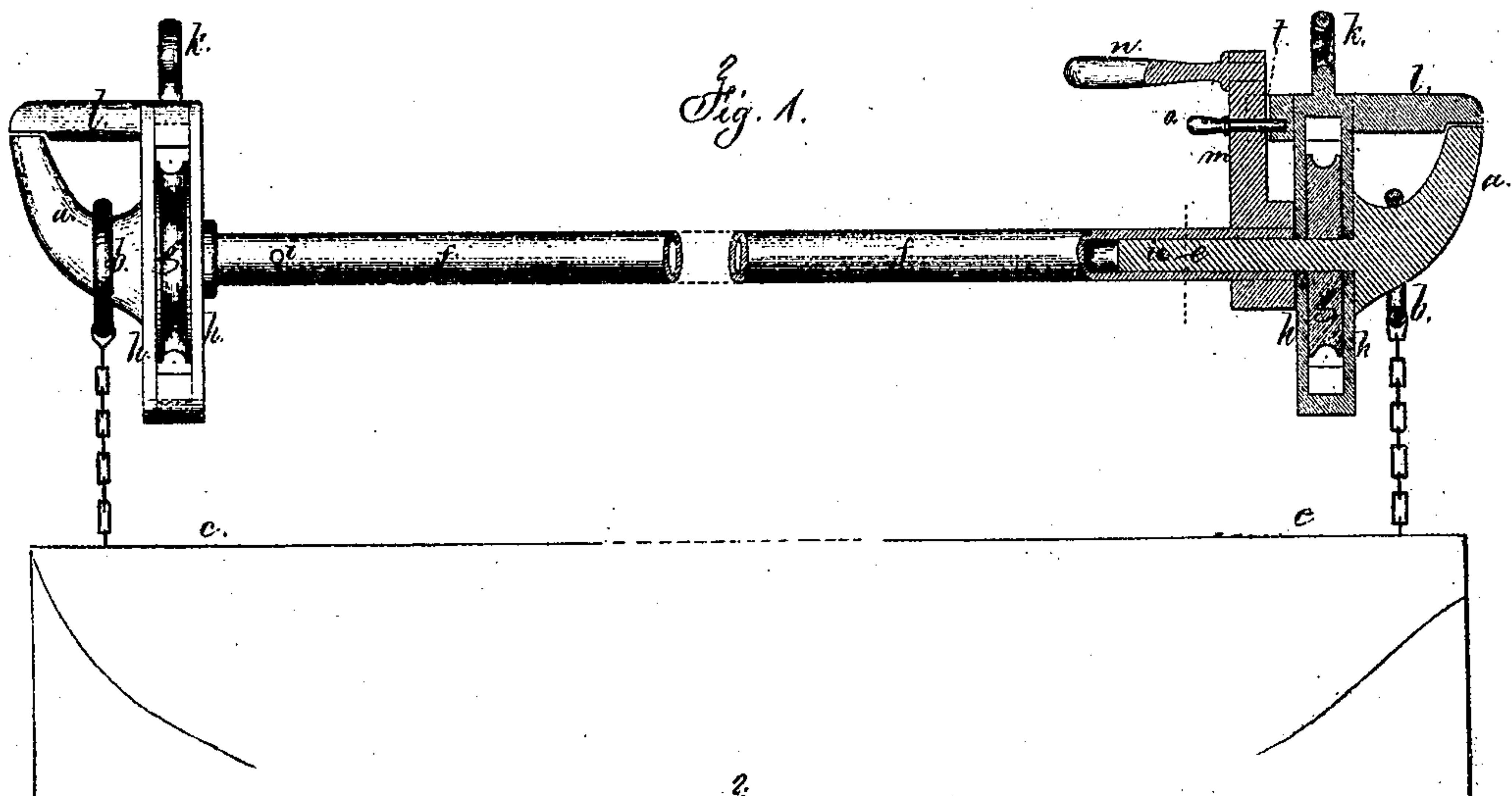


Ryerson & Stancliff.

Detaching Boats.

No. 10,665.

Patented Apr. 5. 1870.



Witness,

Charles Smith

Geo. D. Walker

William S. Ryerson
George Stancliff
Lemuel W. Perrell
Attys.

United States Patent Office.

WILLIAM S. RYERSON AND GEORGE STANCLIFF, OF NEW YORK, N. Y., ASSIGNORS TO THEMSELVES, OLIVER T. MCINTOSH, AMOS L. TRIPP, AND CHARLES CHAMBERS, OF SAME PLACE.

Letters Patent No. 101,665, dated April 5, 1870.

IMPROVEMENT IN BOAT-DETACHING APPARATUS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, WILLIAM S. RYERSON and GEORGE STANCLIFF, of the city and State of New York, have invented and made an Improvement in Detaching Boats; and the following is declared to be a full, clear, and exact description of the same.

This invention is an improvement upon that for which Letters Patent No. 91,488 were granted June 15, 1869. In that patent a hook-ended shaft is shown as applied to an ordinary fall from the davits, so that the boat is disconnected by the rotation of the shaft slipping the rings off said hooked ends.

Our invention is made for lessening the distance between the upper block of the fall and the boat by making the lower block of a sheave revolving upon the turning shaft, by which construction the cost of the apparatus is lessened, the davits do not require to be as long, and there is less risk of any of the parts fouling, than in boat-detaching apparatus heretofore constructed. We also make the horn with a shank passing into a tube, so that the apparatus can be applied with ease to any length of boat by varying the length of the tube.

In the drawing—

Figure 1 is an elevation showing the said detaching-apparatus, a portion thereof, however, being in section, and

Figure 2 is a view of the detaching-end sectionally of the connecting-tube.

The horns *a a* form hocks for the rings *b* or their equivalents, that are attached to the boat, portions of which are shown at *c*. These horns *a* are preferred, when made of the shape shown, so as to hold the said rings *b* firmly, but cast them off with unerring certainty when said horns are turned with and by their connecting-shafts.

The horns *a a* are formed with tangs or shanks, *e*, that pass into the connecting-pipe *f*, and are there secured.

We prefer to have the tang held in by at cross-pin

at *i*, so that the parts may be separated for repair; but any other mode of fastening the tang into the pipe may be employed, and the tang and pipe may be round or polygonal.

The sheaves *g* are between the check-pieces *h*, which form the lower block of the fall, and these are around the shank of the horn between the conical flange thereof and the end of the pipe *f*, the parts being free, so that the pipe and horn can be turned.

The eyes *k*, for the ends of the ropes or chains of the falls, are provided upon the upper part of the block formed by the cheek-pieces *h*.

From one side of each of the blocks *h*, the guard-finger *l* projects, so as to prevent the ring *b* slipping off the horn accidentally.

The lever-arm *m* and handle *n* are provided, for rotating the shaft and horns, and a pin, *o*, is passed into an opening in the block *h*, so as to prevent the lever *m* and shaft turning, until said pin *o* is withdrawn.

An offset, *t*, upon one of the cheek-pieces *h*, serves for a stop to the lever *m* in one direction, and a second hole should be provided at *r* for the pin *o*, so that the horns may be held with their upper ends a little distance from the fingers *l*, to allow the rings *b* to be hooked upon the horns.

We claim as our invention—

1. The sheaves *g* and blocks *h*, around the shanks of the horns, in combination with the turning shaft that connects the said horns, substantially as and for the purposes specified.

2. The horns *a* of the boat-detaching apparatus, made with shanks introduced in a tubular shaft that connects the said hocks, substantially as and for the purposes set forth.

Signed by us this first day of March, A. D. 1870.

WM. S. RYERSON.

GEO. STANCLIFF.

Witnesses:

GEO. D. WALKER,

GEO. T. PINCKNEY.