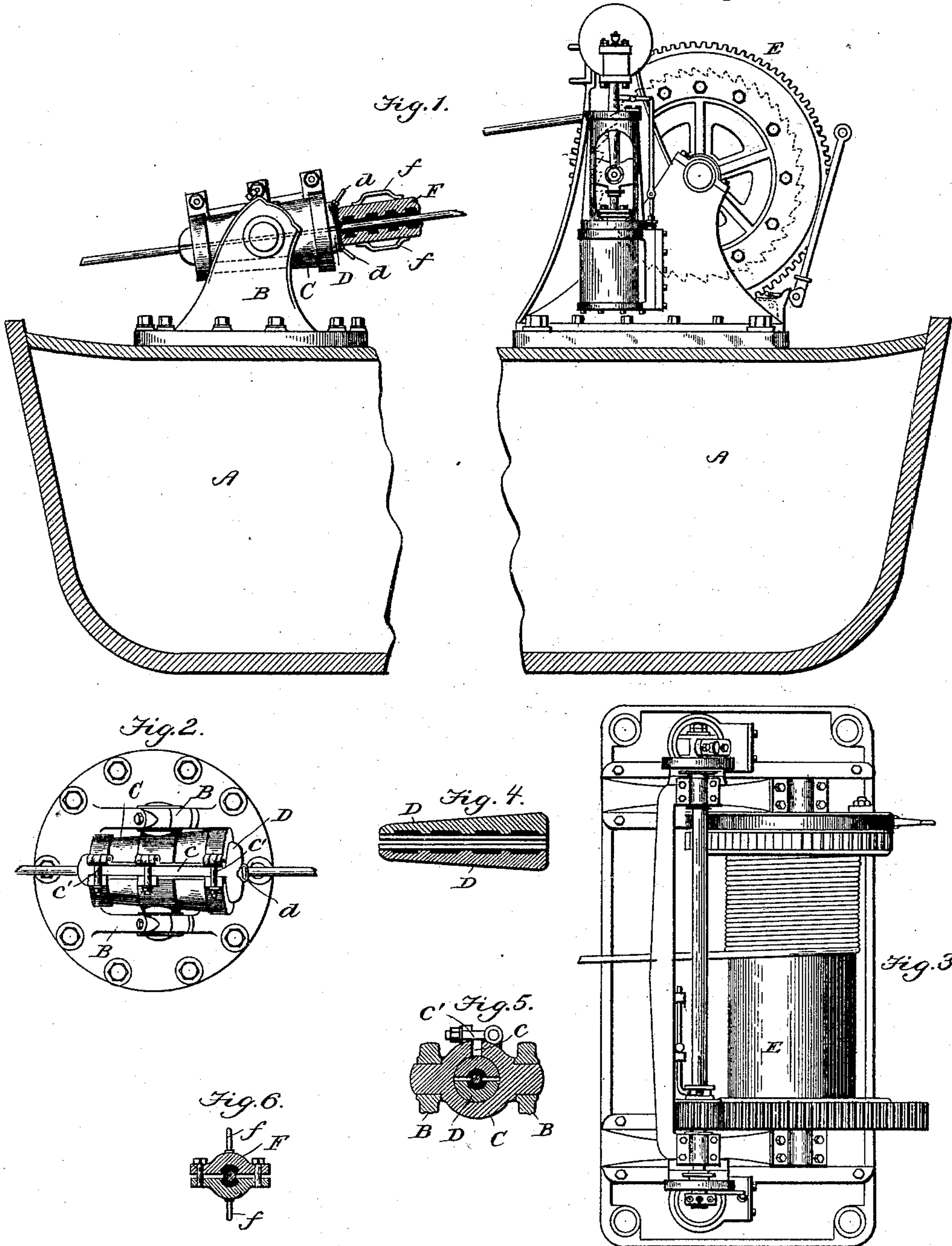


(No Model.)

J. P. MANTON.  
MEANS FOR TOWING VESSELS.

No. 473,471.

Patented Apr. 26, 1892.



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# UNITED STATES PATENT OFFICE.

JOSEPH P. MANTON, OF PROVIDENCE, RHODE ISLAND.

## MEANS FOR TOWING VESSELS.

SPECIFICATION forming part of Letters Patent No. 473,471, dated April 26, 1892.

Application filed September 15, 1891. Serial No. 405,737. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH P. MANTON, a citizen of the United States, residing in the city of Providence, in the county of Providence, State of Rhode Island, have invented certain new and useful Improvements in Means for Towing Vessels; and I do hereby declare that the following is a full, clear, and exact description of the invention, reference being had to the accompanying drawings.

My invention relates to improvements in means for towing vessels; and it consists in the combination, with a barge or vessel, of a grip-standard and a grip pivotally connected with said standard.

It also consists in the combination of a grip pivotally connected with its standard and a windlass-drum for taking up and storing the towing-hawser. The breaking strain of a hemp hawser four inches in diameter, such as is commonly used for deep-sea towing, is less than that of a wire hawser one and one-fourth inches in diameter. The hemp hawser absorbs water, adding resistance, and thus causes an unnecessary expenditure of power for a given amount of work. A wire hawser of about the same tensile strength as a hemp hawser costs about the same and will last five times as long.

The object of my invention is to provide means for gripping and handling wire hawsers, so as to secure the advantages of convenient stowage, freedom from saturation, and great durability.

In the drawings, Figure 1 is a side elevation of a barge, showing my invention applied thereto. Fig. 2 is a plan of the grip-standard and grip. Fig. 3 is a plan of the hawser-windlass. Fig. 4 is a longitudinal section of grip blocks or jaws. Fig. 5 is a cross-section through the grip on the line *xx* of Fig. 2. Fig. 6 is also a cross-section of an auxiliary or hand grip for pushing the wire hawser and its gripping-jaws into the socket or jaw-holder.

A is a barge or other floating vessel.

B is a standard or frame securely bolted to the forward deck of the barge for supporting the grip.

C is a body provided with trunnions for mounting, so as to swing or vibrate on the standard, and with a conical bore or socket

for grasping and bringing the gripping-jaws or segments together, and with a slot *c*, through which the hawser may be brought laterally within said socket. It also has links or latches *c'* for sustaining the body against the wedging strain of the grip-jaws.

D D are the jaws proper, made of segments of a cone with a passage between them for grasping the hawser. These jaws are provided with recesses along the hawser-passage, in which I secure rubber or felt or other like material for gripping contact with the hawser to prevent galling and cutting the hawser-wires. Each of the segments is also provided with a loop or handle *d* for convenience in handling them and for withdrawing them from the socket to take up or pay out the hawser.

E is a windlass mounted on the deck of the barge behind the grip-standard. By preference the windlass is placed aft on the barge, so that the hawser will lead and wind regularly without an automatic feeding arrangement. Obviously the windlass may be arranged just abaft the grip, provided an automatic feeder is introduced between them.

F is an auxiliary or hand grip similar in construction and operation with the main grip. The jaws of this grip are clamped upon the rope by bolts, and, being provided with handles *ff*, afford means for handling the rope and pushing main grip-jaws in place.

In operation the hawser is paid out from the windlass and made fast to the tug. It is then introduced to the socket of C through the slot *c*. The links or latches *c'* are then adjusted and the gripping-jaws D D are placed upon or around the hawser and inserted into the socket. When the hawser is made taut, the conical form of the jaws and socket causes a firm grip upon the rope. To take in or pay out cable, the jaws are loosened by starting up the winch and then are drawn out of the socket by winch or hand, as most convenient.

Having now described my invention, what I claim is—

1. The combination of a standard, a socketed body pivotally connected with said standard, and segmental gripping-jaws fitted to said socket, substantially as described.

2. The combination of a standard, a sock-

eted body provided with a lateral slot leading to said socket, and segmental gripping-jaws fitted to said socket, substantially as described.

3. The combination of a standard, a swiv-  
5 eled socketed body mounted in said standard having a lateral slot and segmental gripping-jaws, substantially as described.

4. A hand gripping device for handling  
10 wire cables, consisting of the combination of segmental blocks or jaws provided with loops

or handles and with recesses to embrace the rope and means, as bolts, for opening and closing the jaws, substantially as described.

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

JOSEPH P. MANTON.

Witnesses:

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