

No. 630,260.

Patented Aug. 1, 1899.

G. A. McLANE.

DEVICE FOR CLEANING HULLS OF SHIPS.

(Application filed Feb. 7, 1899.)

(No Model.)

Fig. 1.

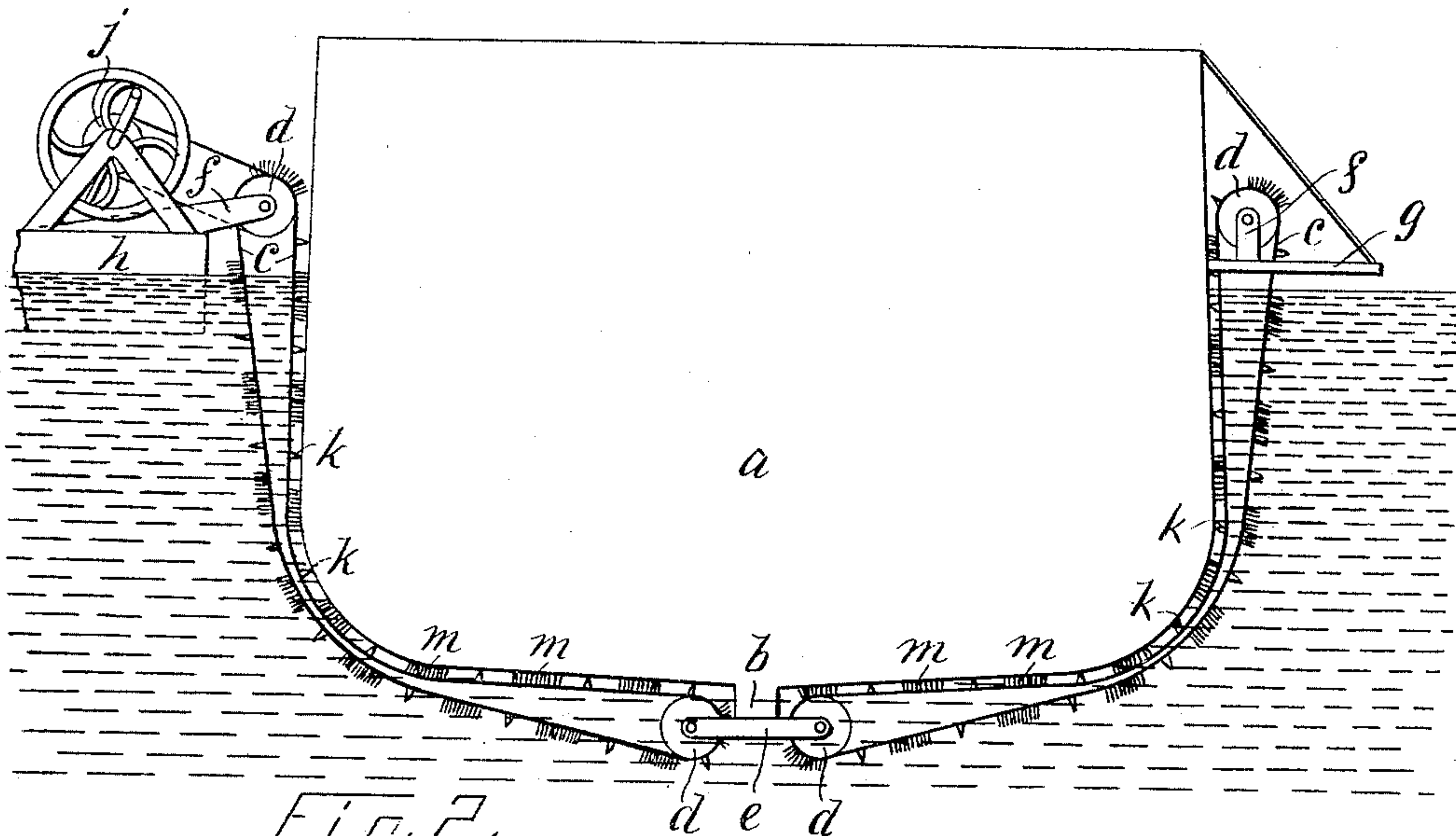


Fig. 2.

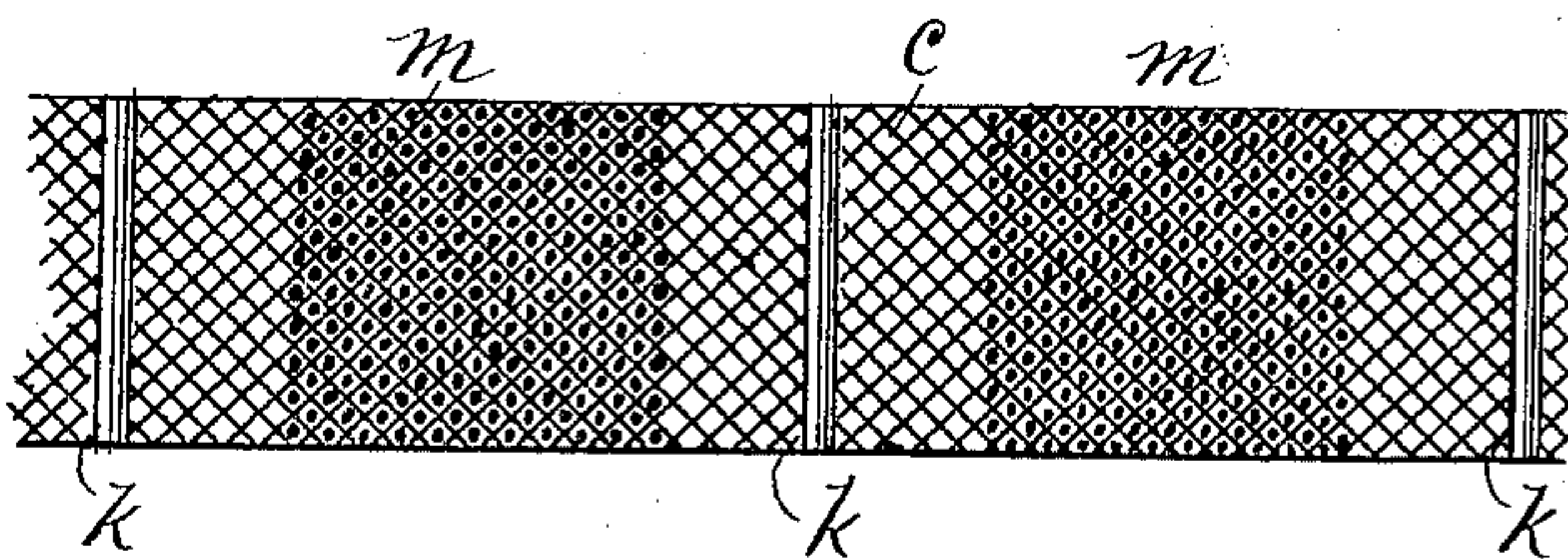
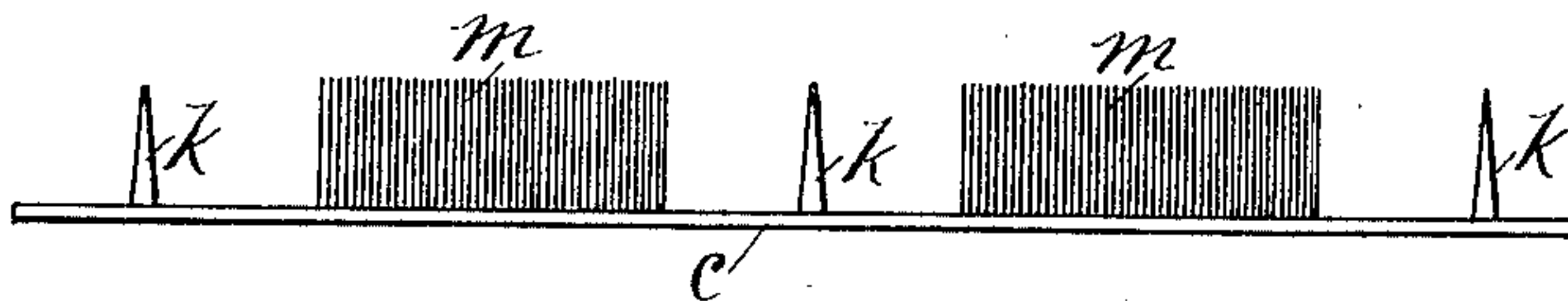


Fig. 3.



WITNESSES:

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DEVICE FOR CLEANING HULLS OF SHIPS.

SPECIFICATION forming part of Letters Patent No. 630,260, dated August 1, 1899.

Application filed February 7, 1899. Serial No. 704,843. (No model.)

To all whom it may concern:

Be it known that I, GEORGE ALVAH McLANE, a citizen of the United States, and a resident of New York, (Brooklyn,) county of Kings, and State of New York, have invented certain new and useful Improvements in Devices for Cleaning the Hulls of Ships, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

This invention relates to an improved device for cleaning the hulls of ships, the object being to provide means for removing barnacles, grass, or any other foreign substance which may adhere to the ship's bottom irrespective of the ship's draft.

All ships, whether constructed of iron or of wood sheathed with copper, are subject to a retarding influence of marine growth, barnacles, and the like, which adheres to the bottom when the paint has worn off or the copper sheathing has become old.

This invention provides a device which may be carried by any ship and operated in any port at any time by a few men.

The invention will be hereinafter fully described, and specifically set forth in the annexed claim.

In the accompanying drawings, Figure 1 shows the device in operative position. Fig. 2 is a plan view of a portion of the belt. Fig. 3 is a side elevation of same.

A cross-section of the ship's hull *a* is shown in outline with the keel *b* attached. A belt *c*, preferably formed of a non-corrosive metallic network, is endless and passes over suitable rollers *d d*. Links *e* connect two of these rollers, one belonging to each belt, and when the device is in operative position this link *e* rests against the under side of the keel

b. The rollers *d d*, which are not linked together, are journaled in suitable standards *f f*, which may be mounted upon a stage slung over the ship's side or may be mounted in a scow or boat *h*. A winch *j*, mounted upon said stage or in said scow, is adapted to revolve the rollers *d d*, carrying the belt *c*.

The belt *c* has a series of scrapers *k k* fixed thereto, preferably at regular intervals, and between said scrapers a series of brushes *m m*, preferably of wire and interwoven with the mesh of the belt itself, are fixed.

In the operation of the device the belts, linked together, are slung over the bow or stern and brought under the ship's bottom, the link *e* resting upon the keel. The winches are then operated, and the belt in passing along the dead-rise and bilge will scrape and brush off any foreign matter adhering thereto. As soon as one section has been in this manner cleaned the stage or boat is moved forward or aft a distance equal to the width of the belt *c* and the operation repeated.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A device for cleaning a ship's hull embodying an endless belt of wire mesh provided with a series of scrapers and brushes alternating upon its outer face, rollers over which said belt runs, means for holding one of said rollers below the water-line, and a winch for revolving the other roller, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 4th day of February, 1899.

GEORGE ALVAH McLANE.

Witnesses:

ROBERT A. WILLIAMS,
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