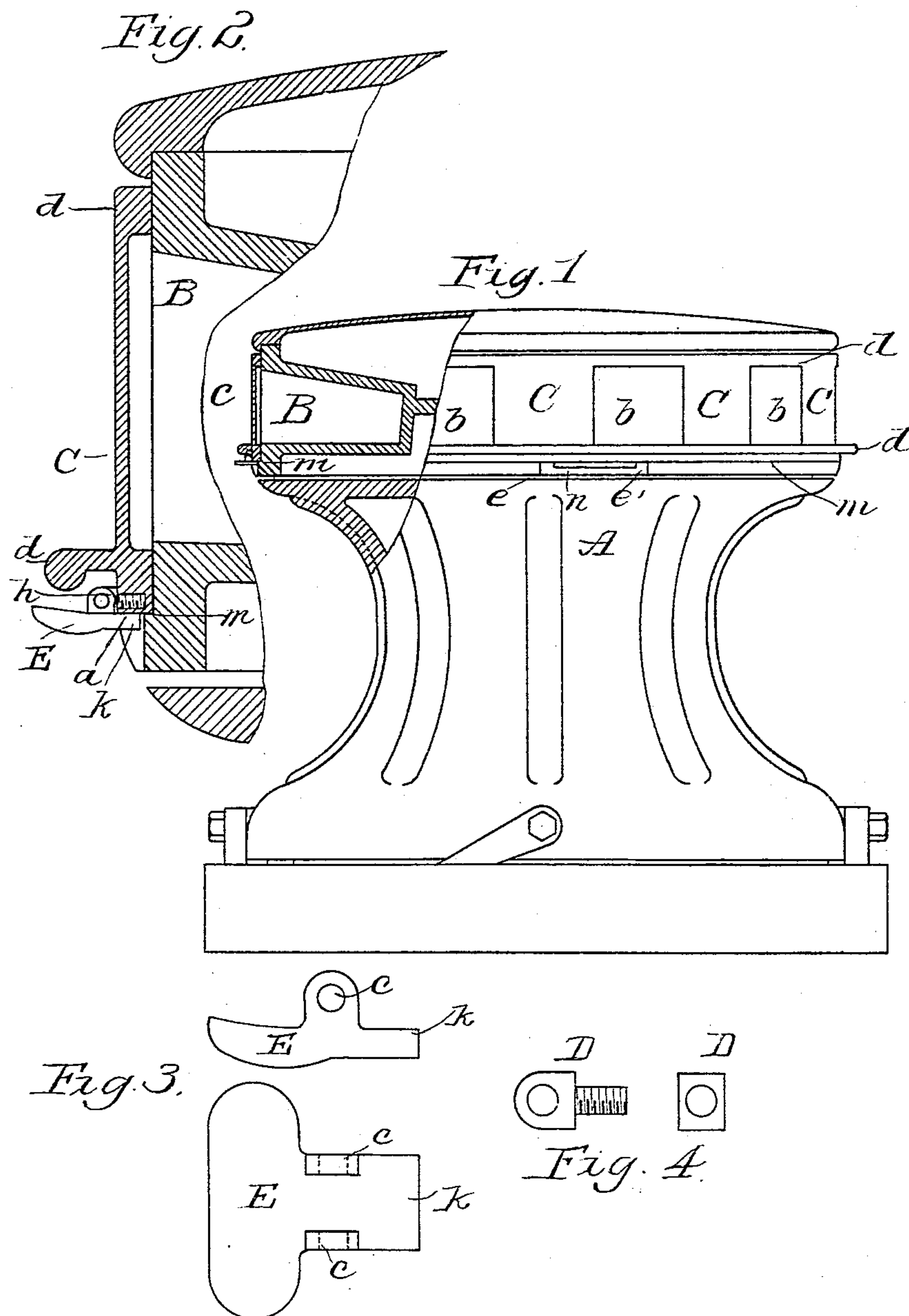


(No Model.)

C. A. POTTER.
CAPSTAN.

No. 555,121.

Patented Feb. 25, 1896.



WITNESSES:
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AMERICAN SHIP WINDLASS COMPANY, OF SAME PLACE.

CAPSTAN.

SPECIFICATION forming part of Letters Patent No. 555,121, dated February 25, 1896.

Application filed October 30, 1895. Serial No. 567,434. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. POTTER, a resident of Providence, in the county of Providence and State of Rhode Island, have
5 invented certain new and useful Improvements in Capstans; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it ap-
10 pertains to make and use the same.

My invention relates to capstans, and more particularly to those which are provided with sockets or pockets for the insertion of removable bars, by which the capstan may be driven
15 by manual power. Hitherto the bar holes or sockets of capstans have usually been protected from the weather, if at all, by plugs of wood or metal, and the objection to their use is that they are liable to get loose, and
20 are constantly getting misplaced, and too much time is consumed in inserting and removing them.

Another form of bar-hole stopper occasionally employed hitherto consists of a hinged
25 cap or lid, one for each hole, and so arranged as to drop down when the bar is removed and to cover the opening. These hinged lids close themselves and may be made to lock themselves closed; but when the bars are to
30 be inserted it is necessary to raise each lid separately and hold it up while the bar is being inserted, which is a tedious and sometimes troublesome operation. These lids are also liable to become broken or get loose when the
35 vessel is rolling in a seaway.

The object of my invention is to provide a capstan with simple yet efficient means of closing or covering the bar sockets or pockets when the capstan-bars are removed, so that
40 all the bar sockets or pockets of a capstan can be opened simultaneously with a single movement and automatically locked open or all closed with a single movement and automatically locked in that position.

My invention consists of certain combinations of the capstan with covers for the capstan-bar holes, the covers being so connected that they may all be opened by a single movement, and also with means for locking the
50 series of covers in position.

My invention may be embodied in various forms as circumstances or the views of differ-

ent constructors or uses render expedient; but in order that it may be fully understood I have represented in the accompanying draw-
55 ings and will proceed to describe the best form in which I have thus far embodied it for practical use.

In the accompanying drawings, Figure 1 represents an elevation, partly in section, of
60 a capstan embodying my invention. Fig. 2 is an enlarged sectional view of a portion of the capstan-head with my ring bar-hole stopper in its closed position. This figure also shows a means for locking the bar-hole stop-
65 per in position. Figs. 3 and 4 represent details of the locking device selected for illustration.

The capstan A represented in said drawings has in its head a series of sockets or
70 pockets B for the insertion of removable bars. These pockets or sockets may be of any suitable form; but it is necessary for the proper application of my invention that the diameter of the bar-hole be less than the breadth
75 of the space between adjacent bar-holes.

A series of hole-covers C, one for each hole, is provided, and these are connected by two flanges or rims *d d*, forming as a whole a ring
80 bar-hole stopper or circular frame, having as many openings *b b*, similarly spaced, as there may be bar-holes in the capstan, these openings being of course large enough for the bars to pass through. The covers C should be
85 larger than the bar sockets or pockets and similarly spaced. A shelf or collar *m* on the capstan serves to hold up the circular frame or ring bar-hole stopper, and furnishes a support upon which it may be turned upon the
90 capstan-head. It is evident that if this circular frame or ring bar-hole stopper be placed upon the capstan, resting on the shelf *m*, so that a hole *b* in the said stopper corresponds with a bar-hole B in the capstan-head, all the bar sockets or pockets B will be exposed to
95 receive the bars, and if now the ring be turned upon the capstan-head so that the openings *b* will come opposite the solid parts of the capstan-head the solid parts of the cover C will cover the pockets in the capstan and all
100 the capstan-holes will be covered.

A convenient method of locking the ring bar-hole stopper will now be described; but the invention is not restricted to any particu-

lar means for locking said ring-stopper. The said method is by a latch and a recess. The latch E may be so hinged to the bottom flange or rim *d* of the ring bar-hole stopper that it will drop by its own gravity into the recesses *e e'* provided in the support or collar *m*. This cover-latch E may be hinged at *h* by a pin passing through lugs *c c* on the cover-latch E, Fig. 3, and through a corresponding lug D, Fig. 4, which may be screwed into the flange or rim *d*, as shown at *a*, Fig. 2.

When the bar-hole covers C C are in position to completely cover the sockets or pockets, or when the latter are open for admission of the capstan-bars, the nose or point *k* of the latch E swings, by reason of the excess of weight in the thumb-piece of the latch, into one or other of the recesses *e e'* in the capstan-head.

The slit *n*, in which the latch E travels when disengaged from a recess, is of limited length, so that the ring bar-hole stopper cannot over-travel and the latch finds its own seat in the recess.

In the operation of the device it is simply necessary to raise the thumb-piece of the cover-latch E (thus unlocking all of the covers at once) and to partly turn the circular frame or ring bar-hole stopper, which was locked at *e*, until the cover-latch E catches automatically at the position *e'*, thus locking all the covers in a position to leave open all of the bar sockets or pockets and admit the insertion of the bars.

In closing, the covers are unlocked by raising the thumb-piece of the cover-latch E from the recess *e'*, and the bar-hole stopper is turned until its latch reaches the recess *e*, where they are automatically locked, as before.

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

1. The combination with a capstan provided with sockets or pockets, adapted to receive an operating bar or lever, of a ring bar-hole cover having openings corresponding with the pockets or sockets of the capstan, and arranged to inclose that portion of the capstan which is provided with such pockets, so that by a turning movement of the ring bar-hole cover its openings may be placed opposite the corresponding pockets or sockets in the capstan for the admission of the operating bars or poles; or by a return movement the solid parts between the openings of the ring bar-hole cover will form suitable covers for the operating-bar pockets or sockets in the capstan, substantially as before set forth.

2. The combination of a capstan provided with pockets or sockets, adapted to receive an operating bar or pole, a ring bar-hole stopper having corresponding openings which by a turning movement are placed opposite the corresponding pockets or sockets in the capstan for admission of the operating-bars, the solid parts between said openings in the said cover forming suitable covers for the pockets or sockets in the capstan, and a cover latch or locking device, so arranged as to lock the covers, either in a close or an open position, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CHARLES A. POTTER.

Witnesses:

GILMAN E. JOPP,
WM. W. RICKARD.