

E. Buel,

Capstan.

No. 102,088.

Patented Apr. 19. 1870.

Fig. I.

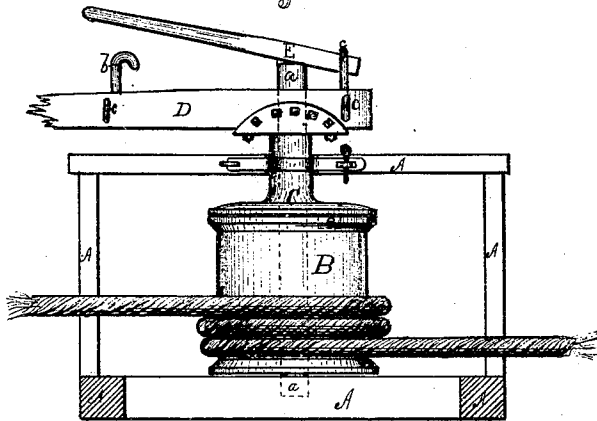


Fig. II

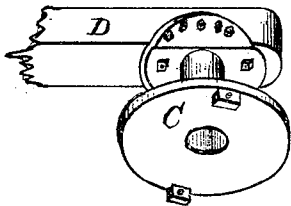
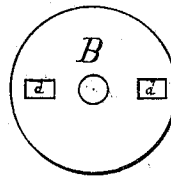


Fig. III



Witnesses.

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EBENEZER BUEL, OF SILVER CREEK, NEW YORK.

Letters Patent No. 102,088, dated April 19, 1870.

IMPROVEMENT IN CAPSTANS.

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

To all whom it may concern:

Be it known that I, EBENEZER BUEL, of Silver Creek, in the county of Chautauqua and State of New York, have invented a new and useful Improvement in Capstans; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

Figure I is a vertical section or end view.

Figure II shows the sleeve and its bosses on the under side thereof.

Figure III shows the top of cylinder and its sockets.

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

A A A represent a frame of wood, made in the form usually given to similar structures, which is securely braced with iron, bent to proper form and bolted fast.

The barrel or cylinder B may be made of wood, but I prefer to make it of iron, casting it hollow, that the weight may not be too great.

The upper journal of this barrel is made of sufficient length to pass up through the sleeve C, and the sweep or lever D projecting above them sufficiently to form a fulcrum, as at *a*, on which the hand-lever E acts.

The upper head of the barrel is made with sockets, corresponding in number, position, and depth *d d*, fig. III, to bosses *e e* on the sleeve C receiving them and forming a clutch-connection, by means of which the barrel is caused to move in the direction given to the sweep D. The sleeve C is also of cast-iron, made to work easily on the upper journal of the barrel B, and has the bottom plate of a diameter corresponding to the diameter of the cylinder B, and, on the under side, a number of bosses or projections corresponding

to the sockets in the cylinder-head, and fitting into them, as described above.

The sleeve is further provided with a plate at its upper end, with flanges projecting up to receive and support the end of the sweep D, which is securely bolted thereto. The neck between the plates forms the true upper journal on which the whole turns when in connection. The weight of the sleeve and sweep is sufficient to hold the clutch together.

After the cable is wound upon the barrel as far as desired, the hand-lever E is put into the loop *f* across the head of spindle *a*, and depressed and passed under the hook *b*, raising sleeve out of connection, when the cylinder is now free to move independently of the sweep D.

When not in use, the handspike or hand-lever E is laid upon hooks, *c c*.

For use, the capstan is coupled, and a cable or line attached to the barrel and wound up to the desired point, when, by means of the hand-lever E, the sleeve C is raised up, when the barrel revolves backward and the line is uncoiled.

Having thus fully described the nature of my invention, its construction and operation,

What I desire to secure by Letters Patent of the United States is—

The loose clutch-sleeve C, carrying the sweep D, in combination with the drum B and shaft *a*, projecting through and above the sweep, and the hand-lever E, the several parts being arranged to operate as hereinbefore set forth.

EBENEZER BUEL.

Witnesses:

C. N. WOODWARD,
J. R. DRAKE.