### D. KNOWLTON.

## VARIABLE POWER WINDLASS BEAMS.

No. 189,751.

Patented April 17, 1877.

## Fig.1.

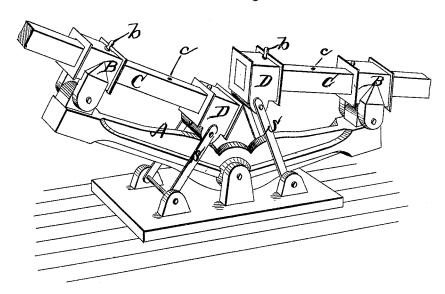
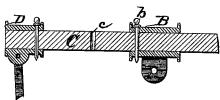


Fig. 2.



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# UNITED STATES PATENT OFFICE.

DAVID KNOWLTON, OF CAMDEN, MAINE.

#### IMPROVEMENT IN VARIABLE POWER WINDLASS BEAMS.

Specification forming part of Letters Patent No. 189,751, dated April 17, 1877; application filed November 22, 1876.

To all whom it may concern:

Be it known that I, DAVID KNOWLTON, of Camden, in the county of Knox and State of Maine, have invented a new and Improved Variable Power Windlass Beam; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a perspective view of my invention, and Fig. 2 is a detail sectional view.

Similar letters of reference in the accompanying drawings denote the same parts.

My invention relates mainly to improved means for operating windlasses on vessels, but is applicable to other contrivances for heavy lifting or pulling; and it consists in certain devices and combinations whereby the power of the windlass may be varied in an easy and expeditious manner, as I will hereinafter more fully describe.

In the drawings, A represents an ordinary windlass-beam, having sockets B B pivoted to the ends thereof, which are adapted to receive the operating levers C C and conform to the movements of the same.

The levers are each provided with a series

of holes, c, and are secured to the sockets B B by pins or bolts b passing through the lat-

ter and through one of said holes.

To the inner ends of the levers are secured sockets D D, which are pivoted in oscillating standards S S firmly secured to the base of the windlass. These sockets act as fulcrums for the levers. To shorten the leverage and thus increase the power of the windlass it is only necessary to remove the pins b from the pivoted sockets B B, slip the levers out as far as desired, and then fasten them again with the pins. The power of the windlass may thus be increased or diminished in a very easy and expeditious manner.

I claim as my invention—

1. The pivoted sockets BB, in combination with the levers CC, having holes or orifices c and pins b b, substantially as described, for the purpose specified.

2. The pivoted sockets BB, levers CC, and fulcrum - sockets DD, in combination with the windlass-beam A, substantially as described, for the purpose specified.

DAVID KNOWLTON.

Witnesses:

W. G. ADAMS,

A. J. Q. Knowlton.