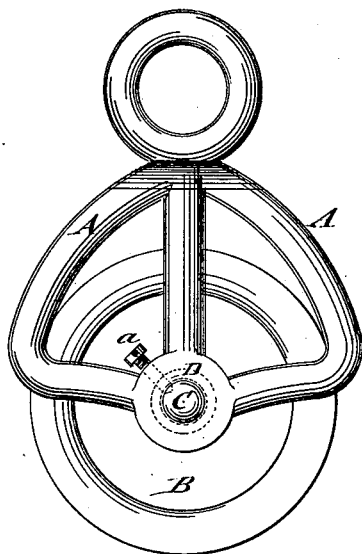


E. B. BEACH.  
Pulley-Block.

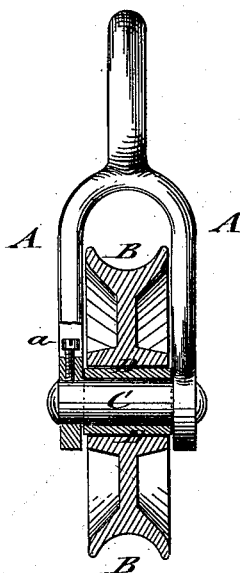
No. 199,400.

Patented Jan. 22, 1878.

*Fig: 1.*



*Fig: 2.*



WITNESSES:

*Chas. Nida*  
*C. Sedgwick*

INVENTOR:

*E. B. Beach*

BY

*Munn & Co*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

EDGAR B. BEACH, OF WEST MERIDEN, CONNECTICUT.

## IMPROVEMENT IN PULLEY-BLOCKS.

Specification forming part of Letters Patent No. **199,400**, dated January 22, 1878; application filed December 31, 1877.

*To all whom it may concern:*

Be it known that I, EDGAR B. BEACH, of West Meriden, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Bearings for Sheaves and Pulleys, of which the following is a specification:

In the accompanying drawings, Figure 1 represents a side view, and Fig. 2 a vertical transverse section, of a pulley with my improved bearing.

Similar letters of reference indicate corresponding parts.

This invention is intended to so improve the pulleys and sheaves that are exposed to the influence of the weather—such as used for barn-doors, vessels, and for other purposes—that they will wear longer, will always be ready to move without the disagreeable noise of the present pulleys, and will admit the replacing of the worn-out pin in convenient manner.

The main objection to the metallic outdoor pulleys, in which metal runs on metal, is that the influence of the weather causes them to rust and wear out in a short time by cutting up the pin; also, that sometimes they refuse to work at all, or are only worked with great difficulty. When they do revolve they cut, by the grinding of the metallic surfaces, the pin, and soon wear out the same.

This invention avoids these objections by interposing between the pin and pulley a wooden sleeve that is preferably soaked in oil.

Referring to the drawing, A represents a skeleton or other hanger or block, in which the pulley B runs, being supported on a pin, C, that is attached to the block by a clamp-screw or other suitable fastening device, *a*. Between the pin and pulley is interposed a wooden sleeve, D, that is soaked in oil, so as to be self-lubricating to some extent. The sleeve D prevents the wear of metal on metal, also the rusting of the pulley and the cutting of the pin. It secures the effective working of the pulley at all times, and is readily replaced, in case it is worn out, by removing the pin and worn sleeve and replacing a new sleeve, so that the pulley is just as good as new, and may thus be kept in good state for any length of time. The pin may also be replaced, if necessary, at a small expense, furnishing thus a better and more durable pulley for indoor and outdoor use, that works in reliable manner and without the least creaking.

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

As an improvement in sheaves and pulleys, the combination of a pulley and center-pin, secured detachably to hanger or block, with a wooden sleeve interposed between pulley and pin, substantially as and for the purpose set forth.

EDGAR B. BEACH.

Witnesses:

GEO. W. SMITH,  
HARVEY FOSTER.