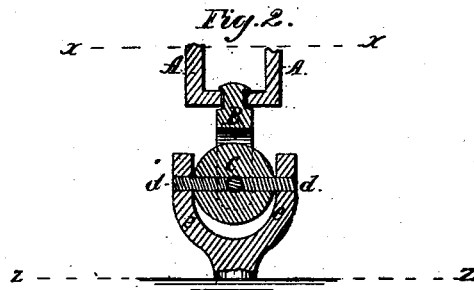
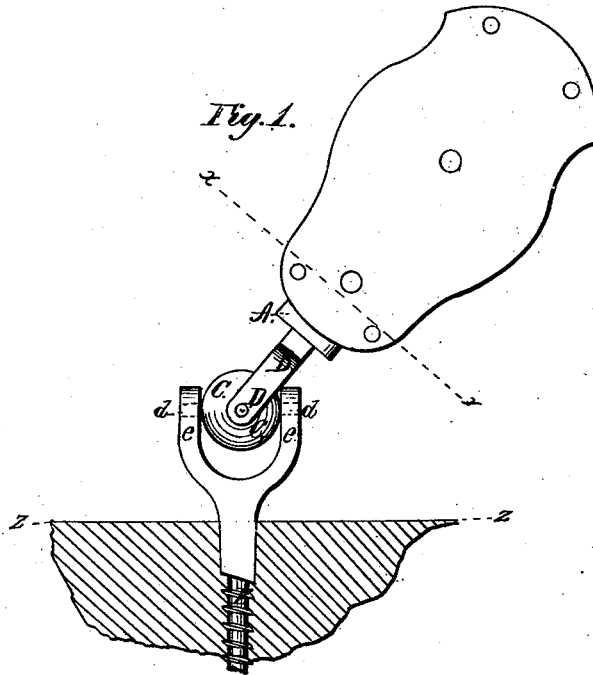


F. S. BURR.  
DOCK BLOCK.

No. 180,107.

Patented July 25, 1876.



*Attest:*  
*John T. Bladen*  
*John Wilson*

*Inventor:*  
*Frederick S. Burr.*

# UNITED STATES PATENT OFFICE.

FREDERICK S. BURR, OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN DOCK-BLOCKS.

Specification forming part of Letters Patent No. **180,107**, dated July 25, 1876; application filed May 10, 1876.

*To all whom it may concern:*

Be it known that I, FREDERICK S. BURR, of the city of Brooklyn, in the county of Kings and State of New York, have invented certain Improvements in Pulley-Blocks known as Dock-Blocks, of which the following is a specification, reference being had to the accompanying drawings.

Heretofore dock-blocks have been made with a screw-bolt and stiff swivel, or a swivel fastened on a single joint, or attached to a spring; all these methods having been devised to allow the rope to run true with the sheave, so as to obviate the wear of the rope upon the edges of the block. These methods only imperfectly provide for the purpose intended; and the object of my invention is to wholly meet this objection, and provide such a joint in connection with a swivel as will cause the block to lean in whatever way the rope may be guided, and so obviate any wear whatever on the rope from coming in contact with the edges of the block.

I will proceed to describe the construction and operation of my improved dock-block.

In the accompanying drawing, Figure 1 is a front view of my improved dock-block falling at an angle to correspond with a fall suspended from a block on a gaff and being hauled upon. Fig. 2 is a side sectional elevation of my invention broken off at the line *x x*, as my improvement only relates to that portion between the lines *x x* and *z z*.

Similar letters of reference indicate corresponding parts.

A represents the strap of the block, to which is attached a swivel-jaw, B, with jaws of a sufficient length to pass over the ball C, and embrace the pivots or studs D in holes prepared in the jaws for the purpose. E represents the screw to be placed in the dock, wharf, or floor, supplied with jaws *e*, similar in all respects to the jaws upon the swivel, embracing the ball in the same manner on the opposite side, being held by two other pivots or studs, *d d*, entering and being secured in holes prepared in the lower jaws. The ball working upon these four studs in the holes in the upper and lower jaws in connection with the swivel gives such position to the block that it will stand at the proper angle when being hauled upon; and should the fall get twisted, it will immediately resume its normal position when the strain is brought upon it.

I am aware that the ball-joint in itself is not novel; nor do I claim such without a further mechanical attachment; but

What I claim as new, and desire to secure by Letters Patent, is—

The combination of the pivoted ball C with four studs *d*, working in lower and upper jaws *e* B, each furnished with holes for the said studs to work in, and the upper jaw provided with a swivel set in the strap A, substantially as described, and for the purpose specified.

FREDERICK S. BURR.

Witnesses:

THEO. F. JACKSON,  
J. S. BURR.