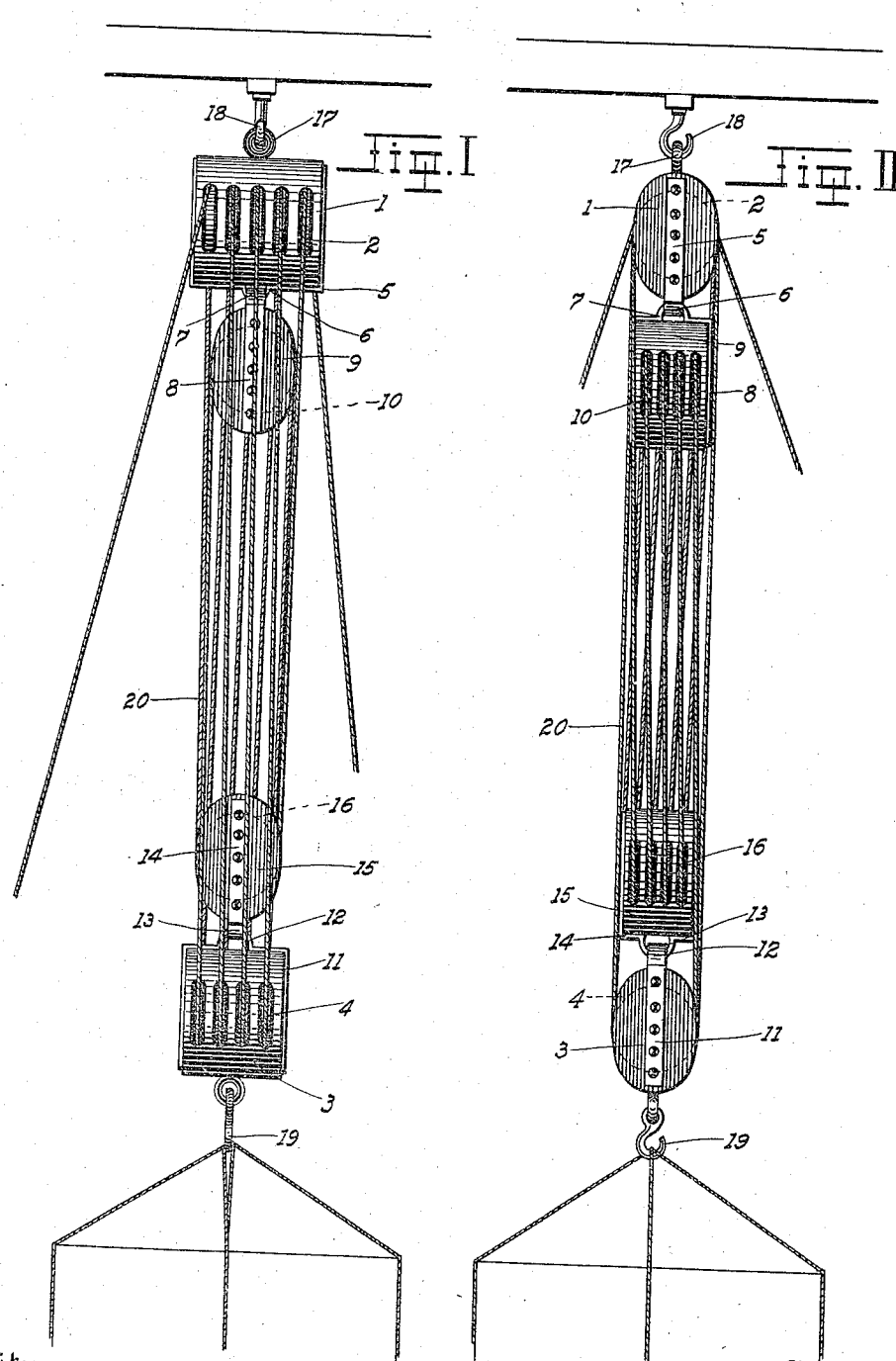


W. HARRIS.
 BLOCK AND TACKLE.
 APPLICATION FILED FEB. 7, 1910.

1,043,928.

Patented Nov. 12, 1912.



Witnesses
Frank H. Carter
J. B. Carter

Inventor
 Warren Harris
 By *Barnes Schuster*
 Attorney

UNITED STATES PATENT OFFICE.

WARREN HARRIS, OF TURLOCK, CALIFORNIA, ASSIGNOR OF ONE-HALF TO ARTHUR J. EDDY AND R. F. BERRYMAN, OF TURLOCK, CALIFORNIA.

BLOCK AND TACKLE.

1,043,928.

Specification of Letters Patent.

Patented Nov. 12, 1912.

Application filed February 7, 1910. Serial No. 542,596.

To all whom it may concern:

Be it known that I, WARREN HARRIS, a citizen of the United States, residing at Turlock, in the county of Stanislaus, State of California, have invented certain new and useful Improvements in Block and Tackle; and I do declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this application.

This invention relates to improvements in block and tackle mechanism, the object of the present invention being to produce such a device as will lift the greatest amount of weight with the least expense of energy and a minimum amount of friction.

A further object of the invention is to produce a simple and inexpensive structure and yet one which is exceedingly effective for the purposes for which it is formed.

These objects I accomplish by means of such structure and relative arrangement of parts as will fully appear by a perusal of the following specification and claim.

In the drawings similar characters of reference indicate corresponding parts in the several views.

Figure 1 is a side elevation of the complete structure. Fig. 2 is a side view of the adjacent side of the device to that shown in Fig. 1.

Referring now more particularly to the characters of reference on the drawings, 1 designates an upper block having five pulleys 2 while 3 is a lower block having four pulleys. Disposed longitudinally around the block 1 is a band 5 formed into an eye 6 at its lower end into which eye 6 is flexibly engaged an eye 7 on a band 8 disposed longitudinally around a block 9 disposed transversely with respect to the block 1 and having four pulleys 10. Similarly the block 3 has a longitudinal band 11 formed into an eye 12 into which is flexibly engaged an eye 13 on a band 14 on a block 15 disposed transversely with respect to the block 3 and having four pulleys 16.

On the block 1 is an eye 17 to be engaged with any fixed fastening as a hook 18 while on the block 3 is a flexible hook or fastening 19 to be secured to the thing to be moved.

20 is the rope or cable which is wound through the pulleys 2, 4, 10 and 16 in such manner as to permit the two free ends to come out over the two outer pulleys 2 and on opposite sides of the block which gives such free ends a down and double pull when connected with power the entire structure shown as I have found, giving a high degree of power with a minimum amount of expense of energy. The blocks 9 and 15 are smaller than the blocks 1 and 3 to permit the cable 20 to readily pass by the same.

From the foregoing description it will be readily seen that I have produced such a device as advances a novel step in the construction and adaptation of the commonly used block and tackle.

While this specification sets forth in detail the present and preferred construction of the device, still in practice such deviations from such detail may be resorted to as do not form a departure from the spirit of the invention.

Having thus described my invention what I claim as new and useful and desire to secure by Letters Patent is:

A block and tackle comprising an upper and lower block, a metal band secured to the sides and one end of each of said blocks, each of said bands being formed into a loop on the end of its respective block, another block disposed transversely adjacent to each of said first named blocks, a metal band secured to the sides and end of each of said last named blocks, each band having a loop formed at the end of its respective block, such loop engaging the loop on the band on the adjacent block, a plurality of pulleys in each of said blocks and a cable interwoven through all of said pulleys, as described.

In testimony whereof I affix my signature in presence of two witnesses.

WARREN HARRIS.

Witnesses:

JOSHUA B. WEBSTER,

PERCY S. WEBSTER.