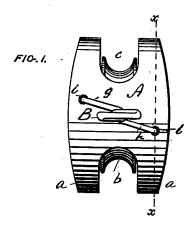
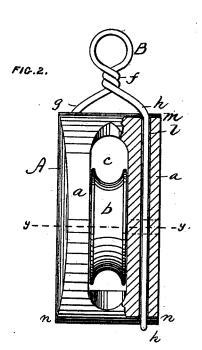
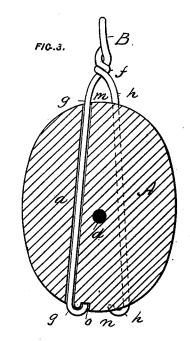
H. LOUD. Pulley-Block.

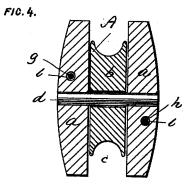
No. 214,931.

Patented April 29, 1879.









WITNESSES. Sand Despeacy Geo. Ho Garl.

H. Lond Du Brown Bess Attorneys.

## UNITED STATES PATENT OFFICE.

HERBERT LOUD, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN PULLEY-BLOCKS.

Specification forming part of Letters Patent No. 214,931, dated April 29, 1879; application filed March 25, 1878.

To all whom it may concern:

Be it known that I, HERBERT LOUD, of Boston, county of Suffolk, and State of Massachusetts, have made a certain new and useful Improvement in Pulley-Blocks, of which the following is a full, clear, and exact description.

This invention relates to certain improvements in that class of pulley blocks which are provided with bands or arms extending through passages in the cheeks of the block or around the same, for the purpose of strengthening the blocks, and having a loop at the upper end, by which the block may be sus-

pended.

Heretofore such blocks have been constructed with vertical passages through the same, one on each side of the axle extending through the cheeks, through which the arms extend transversely to the fiber, or with vertical recesses on each cheek, in which the bands or arms sit, so as to clear the ends of the axle, with suitable means for confining the arms or bands below.

In the first-mentioned case, it is necessary to employ a rod having two branches extending through apertures formed in each cheek of the block, in order to clear the ends of the axle. This necessitates four apertures, which unnecessarily weaken said block. In the latter case, as the bands are seated simply in recesses on the outside, they are liable to pull out, and become rapidly rusted and destroyed by the action of the weather.

My invention is designed as an improvement upon the above-mentioned blocks, and is intended to obviate the objections enumer-

To this end the invention consists in the combination, with a pulley-block having inclined passages through its opposite cheeks in the direction of its length, of a suspension-loop made of a single piece of wire, and twisted at a point intermediate of its length to form an eye and two branching arms, which are inserted and passed through the openings in the blocks, and bent up to form prongs for fastening the loop upon the block, the upper part of the loop extending diagonally across the top of the block, whereby the branching arms in their passage through the cheeks will clear the axle-pins, as more fully hereinafter specified.

In the drawings, Figure 1 represents a top view of my improved pulley-block; Fig. 2, a side elevation with a portion broken away. Fig. 3 represents a vertical sectional view, and Fig. 4 a horizontal section on the line y yof Fig. 2.

The letter A represents a pulley-block, and

a a the cheeks of the same.

The letter c represents the recess in which the pulley b is journaled on a suitable axle-

pin, d.

The letter B represents a loop of wire, twisted at f to form an eye at the upper part, and two branching arms, g h, which are extended through inclined passages l l, formed in the opposite sides of the cheeks, one at each side of the axle-pin, and turned up at their lower ends, forming inwardly-turned prongs, adapted to engage in recesses o n and bind the arms in the block.

It will be perceived that as thus constructed the arms branch apart on each side of the axle-pin as they pass through the cheeks of the block, thus clearing the axle without the necessity of more than two recesses through

the block.

The block by this means will be truly balanced on its supporting-hook, and there will be no tendency of the arms or bands to pull out of the block, or rust and become injured from exposure, as they would be liable to if simply confined in recesses on the sides of the block.

What I claim is-

In combination with a pulley-block having inclined passages throughout its length, one on each side of the axle-pin in opposite cheeks, the suspension-loop B, made of a single piece of wire, twisted at a point intermediate of its length to form an eye, and two branching arms, which, when inserted and passed through the openings in the tackle-block, are bent up to form prongs for fastening the loop in the block, the upper part of the loop extending diagonally across the top of the pulley-block, whereby the branches in their passage through the cheeks will clear the axle-pin, substantially as specified. HERBERT LOUD.

Witnesses:

EDWIN W. BROWN, GEO, H. EARL.