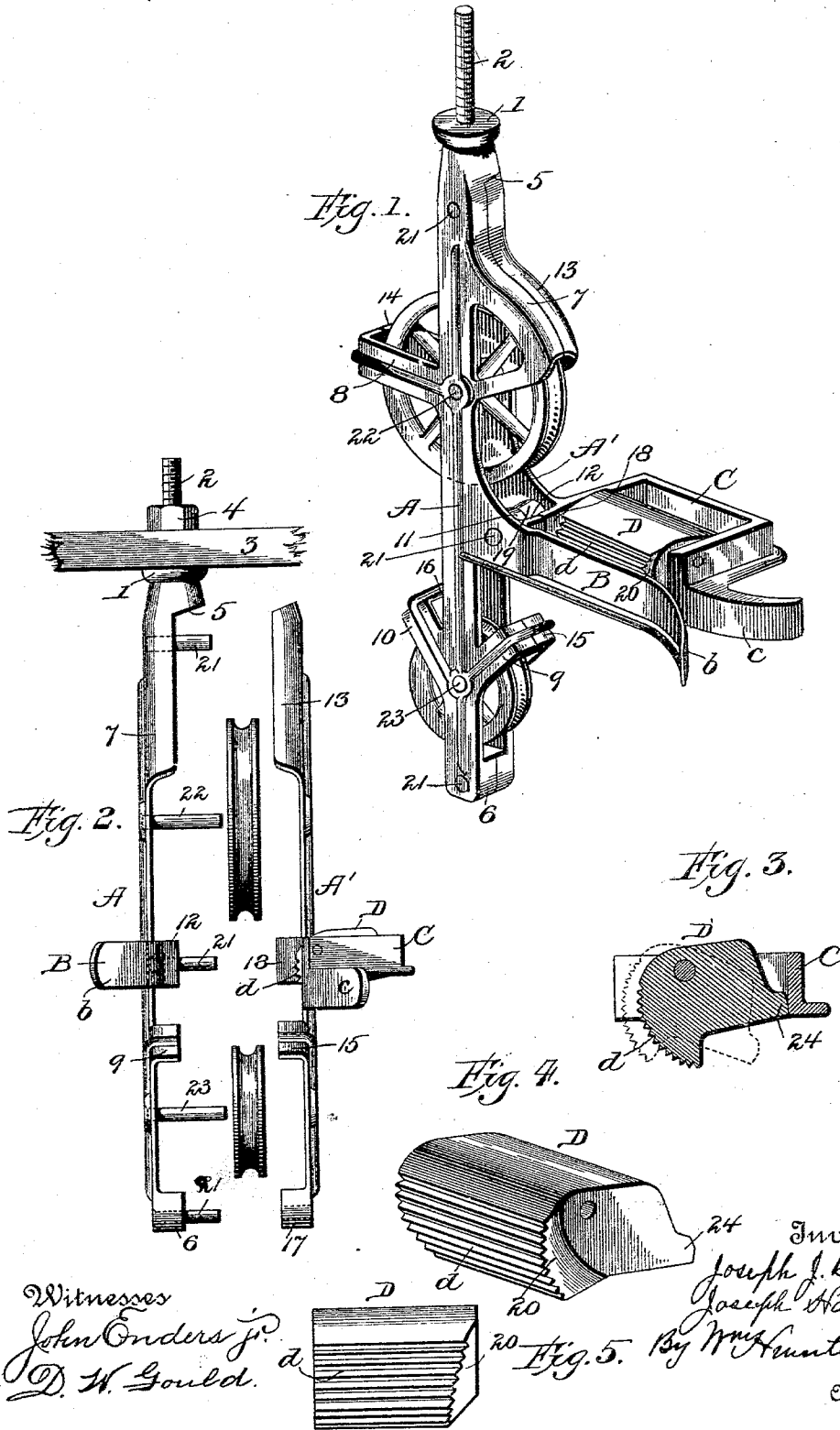


(No Model.)

J. J. BISEL & J. HANCOCK.
PULLEY BLOCK.

No. 559,766.

Patented May 5, 1896.



Witnesses
John Anders Jr.
D. W. Gould.

Inventors
Joseph J. Bisel,
Joseph Hancock,
By Wm. Hunter Myers,
Attorney

UNITED STATES PATENT OFFICE.

JOSEPH J. BISEL AND JOSEPH HANCOCK, OF PHILADELPHIA, PENN-
SYLVANIA.

PULLEY-BLOCK.

SPECIFICATION forming part of Letters Patent No. 559,766, dated May 5, 1896.

Application filed February 24, 1896. Serial No. 580,330. (No model.)

To all whom it may concern:

Be it known that we, JOSEPH J. BISEL and JOSEPH HANCOCK, citizens of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Pulley-Blocks, of which the following is a specification, reference being had therein to the accompanying drawings.

Our invention relates to an improved standing pulley-block provided with an automatic rope-clamp.

The invention will first be described in connection with the accompanying drawings, and then pointed out in the claims.

Figure 1 of the drawings is a perspective view of our improved pulley-block. Fig. 2 is a front elevation of the same, the parts being shown separated. Fig. 3 is a sectional view of the rope-clamp casing, the cam being shown in open position in full lines and in normal and clamping position in dotted lines. Fig. 4 is an enlarged detail perspective view of the cam. Fig. 5 is a front elevation of the cam.

Referring to Figs. 1 and 2 of the drawings, A A' represent the two parts of the shell, which are preferably of cast metal. Part A of the shell is somewhat longer than the other part, being formed at top with a fixed washer 1, from which rises an integral screw-threaded stem 2, designed to pass through a beam 3 or other support and receive a nut 4. Below the washer is a shoulder 5, against which the upper end of the part or section A' abuts, as clearly seen in Fig. 1. At the lower end of section A is an inwardly-projecting hollow boss 6. Formed integral with part A of the shell are sections 7 8 9 10 of rope-guards, standing at any desired angle to the upright of the shell.

B is an arm cast integral with the upright portion of section A. On this arm, immediately in front of said portion of the shell, is an inwardly-projecting hollow boss 11, and in front of the boss is an inwardly-projecting lip 12. Forward of the lip the arm is straight the greater part of its length, and then flares outward at *b*, as shown.

Part or section A' of the shell is formed with rope-guard sections 13, 14, 15, and 16,

similar in construction and arrangement to those on the other part of the shell, and also with an inwardly-projecting hollow boss 17 at its lower end. The inward extension of the rope-guard sections and of the bosses on the respective parts A and A' is such that when the two parts of the shell are together the interior width of the shell will be just sufficient to permit free revolution of the sheaves therein.

Projecting from the forward edge of part A' of the shell is a laterally-extending rectangular casing C, from the front end of which projects a flaring finger *c*, which, when the parts are assembled, stands opposite the flaring end *b* of arm B. At the rear end of the casing is an inwardly-projecting lip 18, and in rear thereof is a hollow boss 19, the lip and boss abutting against like parts on arm B.

In casing C is pivoted a cam D, the face *d* of which is serrated and is located opposite the straight portion of arm B. The forward end of the face portion of the cam is rabbeted in a spiral direction, as at 20, beginning at or slightly above the upper side of the face, as clearly shown in Figs. 4 and 5.

Parts A and A' are secured together by rivet-bolts 21, 22, and 23, on the latter two of which are revolubly mounted, respectively, the main and auxiliary sheaves E and F.

When the cam is in its normal or clamping position, as seen in dotted lines in Fig. 4, its face will not be far enough distant from arm B to permit the entrance of the elevating-rope, (not shown;) but as the free end of the rope is pushed inward between the flaring end of arm B and the flaring finger on casing C it will contact with the rabbet on the cam and swing the cam back to the full-line position shown in Fig. 4, thereby permitting the rope, to enter to the clamping position, the cam being prevented from further rotation by reason of its heel 24 striking against the casing. After the rope has passed to the clamping position the cam will by gravity swing back against it, when the upward pull on the rope, occasioned by the elevation of the weight to which the pulley-block may be attached, will cause the cam to tightly clamp it.

As will be seen in Fig. 1, the purpose of

the lips 12 and 18 is to prevent the rope from passing inward beyond the cam.

While we have shown and described the shell as made in two parts or sections, that being a construction most convenient in casting, it is to be understood that we do not limit ourselves in that particular, as the whole may be cast in one piece and yet be clearly within the scope of our invention.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a pulley-block, a shell provided with a horizontal arm and a cam-casing opposite to and parallel with said arm, both being rigidly connected to the shell, a cam pivoted within said casing and adapted to coact with said arm, and one or more pulleys revolubly mounted in the shell.

2. In a pulley-block, a shell cast in two parts or sections, a horizontal arm formed integral with one section and having its outer end flared, a rectangular casing formed on

the other section and having a flaring finger, a cam pivoted within said casing and adapted to coact with the arm, and one or more pulleys revolubly mounted in the shell.

3. In a pulley-block, a shell provided with an integral horizontal arm having its outer end flared, and also with an integral rectangular casing opposite said arm, the casing having a flared finger opposite the flared end of the arm, a cam pivoted within said casing and adapted to coact with the arm, the cam having a spiral bevel on its outer end in line with the opening between the finger and the outer end of the arm, and one or more pulleys revolubly mounted in the shell.

In testimony whereof we affix our signatures in presence of two witnesses.

JOSEPH J. BISEL.
JOSEPH HANCOCK.

Witnesses:

A. HERBERT,
WM. CURTIS.