

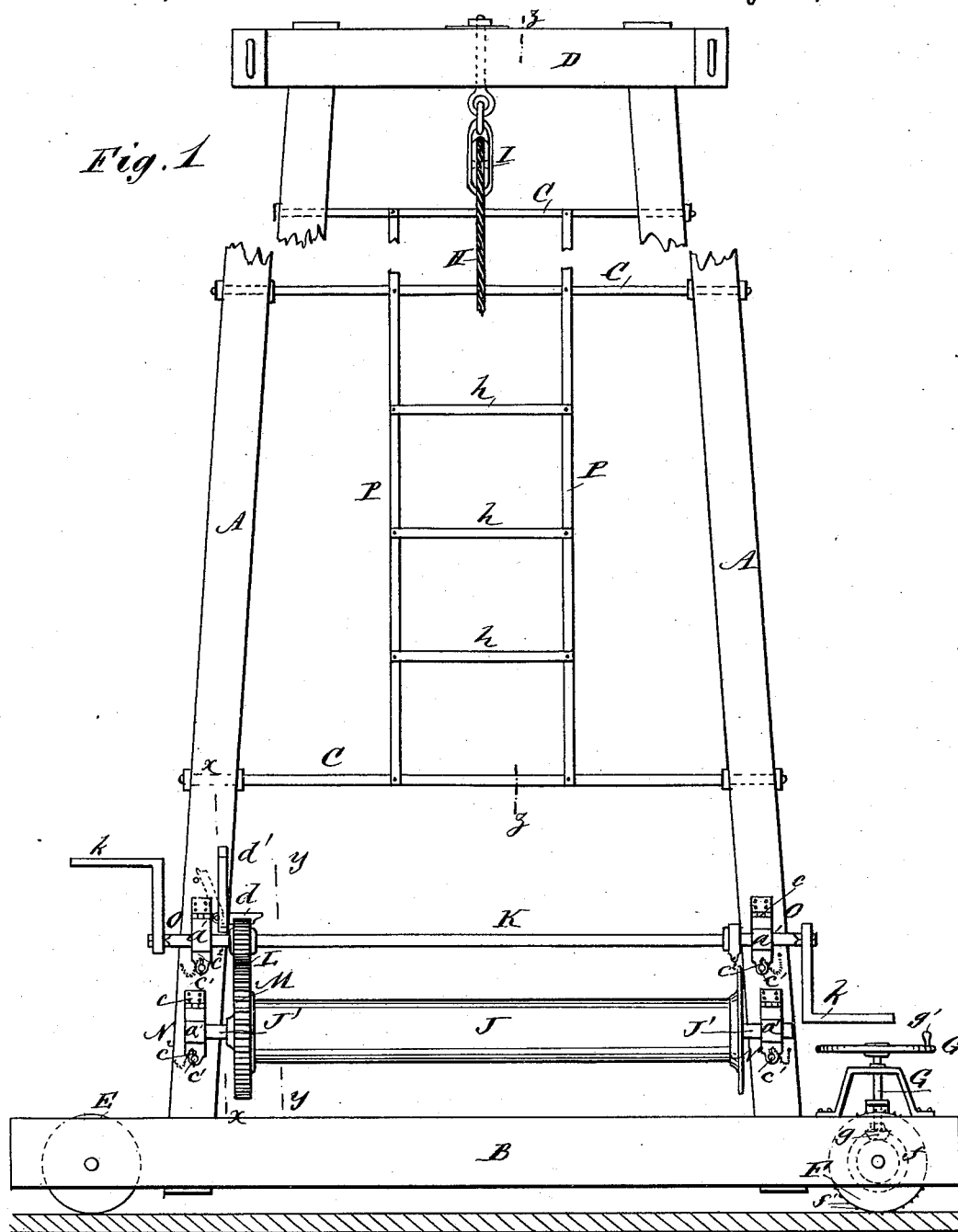
(No Model.)

2 Sheets—Sheet 1.

W. J. BLUNDELL.
DERRICK.

No. 345,478.

Patented July 13, 1886.



WITNESSES:

C. Neveu
C. Bedgwick

INVENTOR:

BY *H. F. Blundell*
Munn & Co
ATTORNEYS.

(No Model.)

2 Sheets—Sheet 2.

W. J. BLUNDELL.
DERRICK.

No. 345,478.

Patented July 13, 1886.

Fig. 4

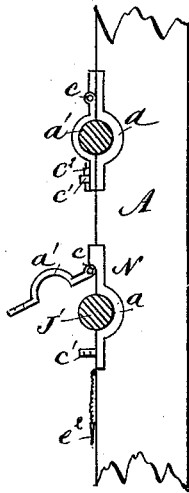


Fig. 5

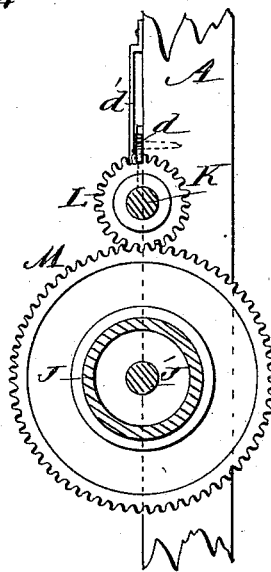


Fig. 6

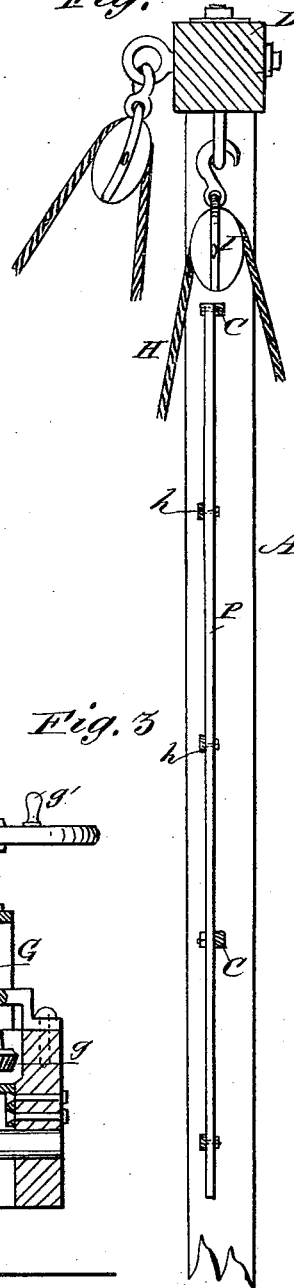


Fig. 2

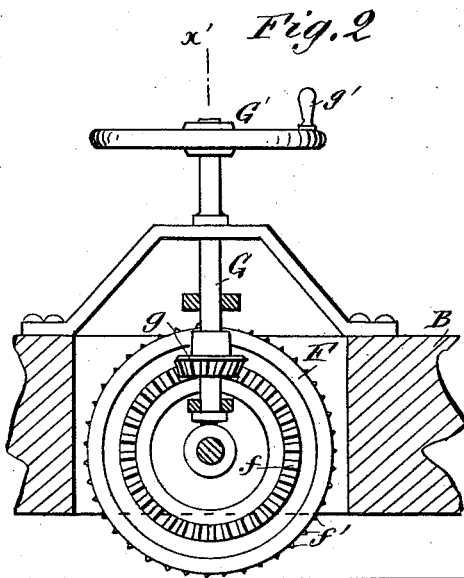
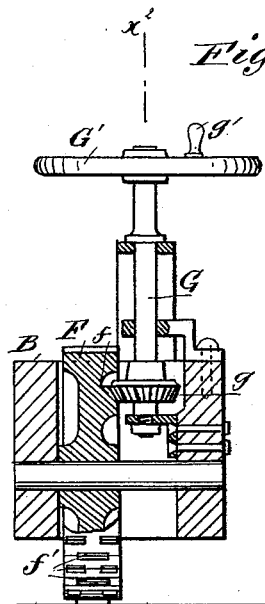


Fig. 3



WITNESSES:

C. Neveu

C. Sedgwick

INVENTOR:

W. J. Blundell

BY

Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM J. BLUNDELL, OF NEW YORK, N. Y.

DERRICK.

SPECIFICATION forming part of Letters Patent No. 345,478, dated July 13, 1886.

Application filed February 6, 1886. Serial No. 191,103. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. BLUNDELL, of the city, county, and State of New York, have invented a new and Improved Derrick, of which the following is a full, clear, and exact description.

The invention consists of the construction, arrangement, and combinations of parts, all as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a broken front elevation of a derrick having my improvement applied thereto. Figs. 2 and 3 are opposite detail sectional views showing the preferred construction of the means for shifting the derrick on the line $x'x'$ and $x''x''$, respectively. Fig. 4 is a sectional detail elevation taken on the line xx , Fig. 1. Fig. 5 is a similar view taken on the line yy , Fig. 1. Fig. 6 is a sectional view of the upper part of the derrick, taken on the line zz , Fig. 1.

A A represent the main uprights of the derrick, which rise from the platform or base B, and are connected by the cross pieces or rods C C and top cross-bar, D, in the ordinary way. The base B is provided at one end with a plain wheel or roller, E, and at the other end with a roller, F, formed or provided with cogs f , by which it may be revolved for shifting the derrick. The periphery of the wheel F is provided with ribs or projections f' , which prevent the wheel from slipping.

The wheel F may be revolved by various means; but I prefer to employ the upright shaft G, journaled in suitable bearings, and to which a bevel cog-wheel, g , is attached, which meshes with the cogs f , formed upon or attached to the wheel F, as shown clearly in Figs. 2 and 3. The upper end of the vertical shaft G is provided with a crank or crank-wheel, G' , having a handle, g' , for conveniently revolving the shaft G, which will communicate rotary motion to the wheel F and cause it to move the derrick. The hoisting-rope H of the derrick passes over a pulley, I, attached to the cross-bar D, and thence over the hoisting-drum J, which is revolved by the main crank-shaft K and cog-wheels L M in usual manner. The shaft J' of the drum J is journaled in the bearings N N, which are made in two parts and adapted to be easily opened for removing the drum from its bear-

ing, which enables the derrick to be more easily transported, and the main crank-shaft K is journaled in bearings O O, which are also made in two parts, and adapted to be opened for detaching said shaft from the derrick. The bearings N O are each constructed of a pillow-block, a , and a cap-piece or keeper, a' , hinged to the pillow-block a by a suitable hinge, c , so that the cap-piece or keeper a' may be opened or closed for easily removing and replacing the shaft in its bearings. The pillow-block a of each bearing N O is formed or provided with a stud, c' , to which the cap-plate a' may be locked, when the same is closed, by a pin or key, c'' , passed through an orifice made in the said stud c' , as shown clearly in Figs. 1 and 4, so that any power applied to the crank k of the crank-shaft K, or strain that may be brought upon the drum J, cannot dislodge the crank-shaft K or shaft J' from their bearings while the keys are in place. To one of the uprights A is pivoted the pawl d , which is kept in place and guarded, when swung to a vertical position, by strap n' . (Shown in Fig. 1.) The pawl d is adapted to engage with the cogs of the small cog-wheel L for locking the shaft K and the drum J, so that the load being hoisted by the derrick may be stopped in the course of its ascent and held at any desired position, and to the cross-rods C, which unite and brace the uprights A A, I secure the parallel bars P P, to which are attached horizontal cross-pieces h , which constitute, together with the parallel uprights P, a ladder by which a person can easily ascend and descend the derrick.

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

The platform B, provided with the uprights A and supported at one end upon the plain wheel or roller E, and provided at the other end with the tractive roller F, formed with a beveled gear, f , in combination with the vertical crank-shaft G, and the beveled pinion g , secured thereon, the shaft G being journaled in and above an opening in the platform, so that the beveled pinion meshes with the beveled gear f of the tractive wheel G, substantially as and for the purposes set forth.

WILLIAM J. BLUNDELL.

Witnesses:

H. A. WEST,
C. SEDGWICK.