

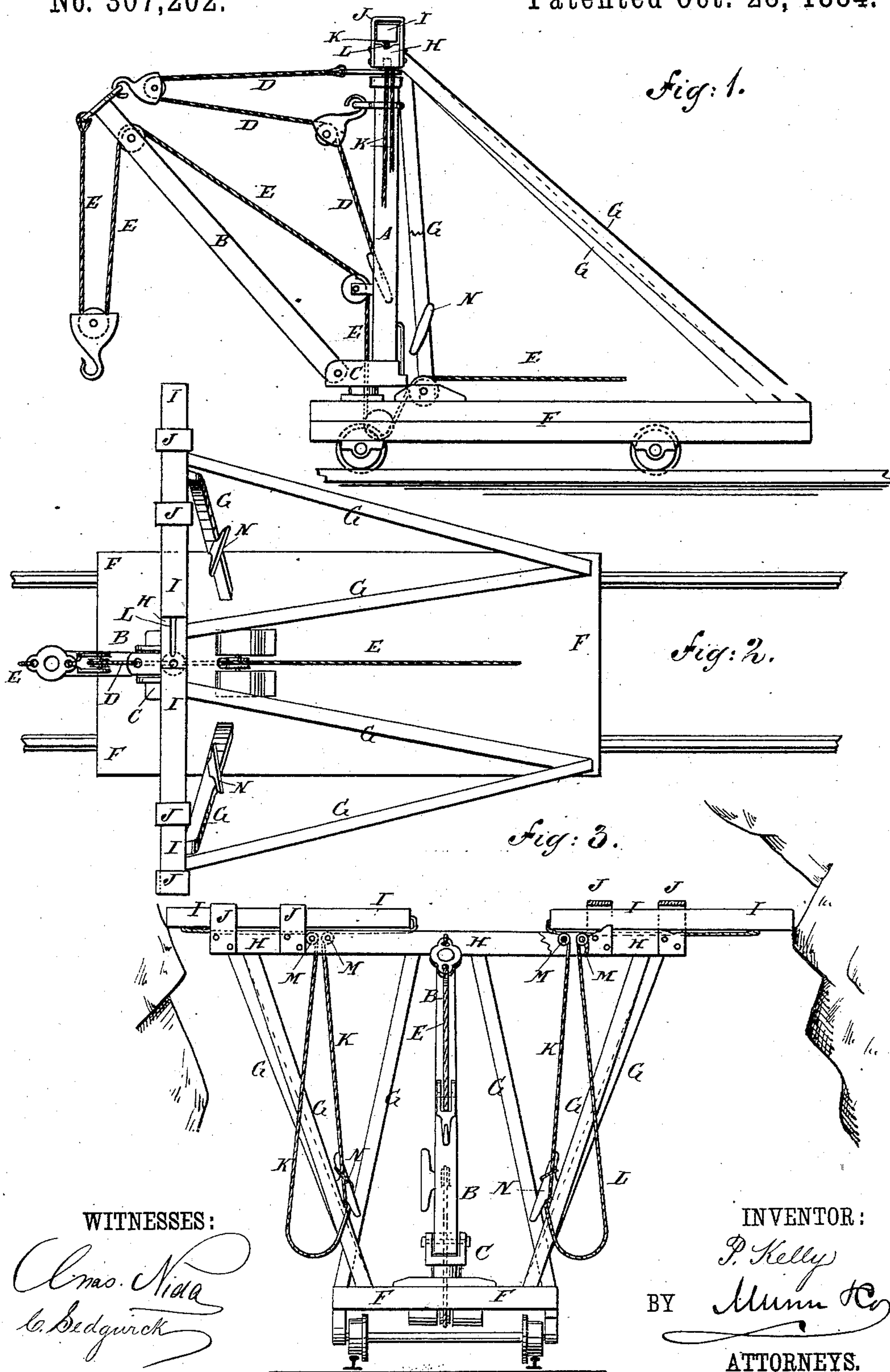
(No Model.)

P. KELLY.

DERRICK.

No. 307,202.

Patented Oct. 28, 1884.



# UNITED STATES PATENT OFFICE.

PATRICK KELLY, OF POUGHKEEPSIE, NEW YORK.

## DERRICK.

SPECIFICATION forming part of Letters Patent No. 307,202, dated October 28, 1884.

Application filed March 28, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, PATRICK KELLY, of Poughkeepsie, in the county of Dutchess and State of New York, have invented a new and useful Improvement in Derricks, of which the following is a full, clear, and exact description.

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 side elevation of my improvement, parts being broken away. Fig. 2 is a plan view of the same. Fig. 3 is a front elevation of the same, parts being broken away.

The object of this invention is to promote convenience in the use of derricks in mines, tunnels, and other cuttings.

The invention consists in the combination, with the cross-beam, braces, post, and carriage of a derrick, of sliding extension-bars and their operating-ropes, whereby the said derrick can be readily secured in place and released, as will be hereinafter fully described.

A represents the post, B the boom, C the foot, D the adjusting-rope, and E the hoisting-rope, of the derrick, which parts are constructed as shown and described in Letters Patent No. 271,474, issued to me January 30, 1883. The derrick is mounted upon a carriage, F, and the post A is secured in an erect position by braces G, attached at their lower ends to the carriage F, and at their upper ends to a cross-beam, H, attached at its center to the top of the said derrick-post A. Upon the upper side of the cross-beam H, at the opposite sides of its center, are placed bars I, which slide in keepers J, attached to the outer parts of the said cross-beam H. To the end parts of the sliding bars I are attached the ends of

ropes K, which pass along grooves L in the upper side of the cross-beam H, pass over pulleys M, pivoted in recesses in the said cross-beam, and pass down through openings in the said cross-beam, as shown in full and in dotted lines in Fig. 3. With this construction, by operating the ropes connected with the inner ends of the sliding bars I, the said bars will be forced outward to bring their outer ends against the sides of the cutting, and thus brace the derrick in place. The bars I are secured in place when projected by passing the ropes K around belaying-cleats N, attached to the braces G. When the derrick is to be moved, the ropes K, connected with the rear ends of the sliding bars I, are detached from the belaying-cleats N, and the ropes connected with the outer ends of the sliding bars I are drawn upon, which draws the said bars I inward and releases the derrick, so that it can be readily moved forward and run back to a safe distance when a blast is to be fired.

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

1. A derrick constructed with one or more adjustable cross-bars adapted to be braced against the side walls of a cutting for staying the derrick in position, substantially as described.

2. In a derrick, the combination, with the cross-beam H, braces G, post A, and carriage F, of the sliding bars I and the operating-ropes K, substantially as herein shown and described, whereby the said derrick can be readily secured in place and released, as set forth.

PATRICK KELLY.

Witnesses:

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EDGAR TATE.