



# UNITED STATES PATENT OFFICE

GEORGE W. NICKLE, OF MATTOON, ILLINOIS.

## IMPROVEMENT IN DERRICKS.

Specification forming part of Letters Patent No. 184,168, dated November 7, 1876; application filed May 13, 1876.

*To all whom it may concern:*

Be it known that I, GEORGE W. NICKLE, of Mattoon, in the county of Coles, and in the State of Illinois, have invented certain new and useful Improvements in Derricks; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a derrick, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which represents a perspective view of my invention.

A represents the usual platform, supported upon the frame-work B, and having the vertical shaft C of the crane passing through it. D is the projecting arm of the crane, braced in the usual manner. On top of the platform, along two sides thereof, are secured arms or timbers E E, each of which has a pulley or sheave attached to its outer end on the inner side, said pulleys being, respectively, marked *a* and *a'*. To the projecting arm D of the crane are attached two ropes, *b* *b'*. The rope *b* passes around the pulley *a*, and has a pulley or sheave, *d*, attached to its lower end. The other rope, *b'*, passes around the pulley *a'*, and has a weight, G, attached to it. *h* is

the hoisting-rope, passing over two sheaves, *f* *f'*, on the crane-arm D; thence through an opening, *x*, in the platform, around the sheave or pulley *d*, and around the pulley *m* at the bottom of the derrick. On the hoisting-rope *h*, between the pulleys *f* and *d*, is an adjustable slide, *i*, fastened at any point on the rope desired by a set-screw or other suitable means. This slide is to be adjusted according to the height the load is to be elevated.

When the rope *h* is drawn to hoist the load, the slide *i* will strike the sheave or pulley *d*, and thereby pull the crane around with its load to the desired point of unloading, and when the rope *h* is slackened up, the weight G on the rope *b'* will bring the crane back to the point of starting.

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

The combination of the frame B, having slotted platform A and timbers E E, with pulleys *a* *a'*, revolving crane C D, pulleys *f* *f'*, rope *b*, pulley *d*, rope *h*, and the rope *b'*, having weight G, all constructed substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 24th day of April, 1876.

GEO. W. NICKLE.

Witnesses:

JAMES JOHNSON, Jr.,  
A. PRITCHETT.