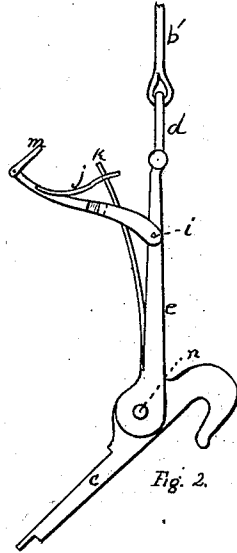


*J.R. Thorne,*

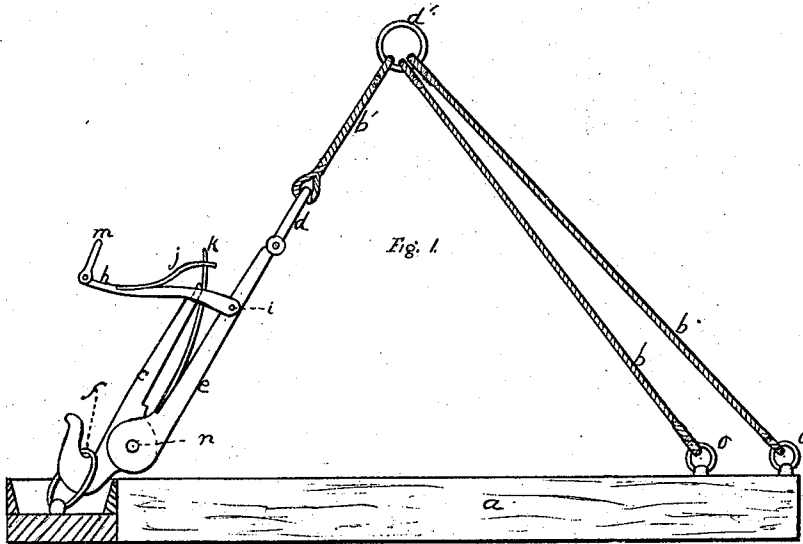
*Graphite.*

*No. 109274.*

*Patented Nov. 15. 1870.*



*Fig. 2.*



*Fig. 1.*

*Witness*  
*Henry C. Houston*  
*Wm. Frankliffe*

*Inventor*  
*J.R. Thorne*  
*Wm. H. Clifford*

# United States Patent Office.

JOHN R. THORNE, OF WALDOBOROUGH, MAINE.

Letters Patent No. 109,274, dated November 15, 1870.

## IMPROVEMENT IN HOOKS FOR DUMPING TUBS.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that I, JOHN R. THORNE, of Waldo-borough, in the county of Lincoln and State of Maine, have invented a new and useful Improved Hook for Dumping a Scale; and I do hereby declare the following to be a full, clear, and exact description of the same, which will enable others to make and use my invention, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 shows a side elevation of my invention attached to the device with which it operates.

Figure 2 shows the hook when released or uncaught.

My invention relates to a hook or device to be employed in certain kinds of work to release or deposit the load at a certain point when the load is elevated in the air. It is to be used in excavations and fillings, to deposit soil, rocks, &c., which are raised from their bed, swung around by a derrick, and then dropped at the desired point.

In the drawing—

*a* shows the receptacle for the earth or rock.

*b*, the ropes or chains by which the same is suspended.

When filled the receptacle *a* is raised by a derrick, or other device, and then swung around, as common, to the desired point, when the hook is unloosed and the receptacle, by tipping or dropping, discharges its load.

The hook may be thus described:

*e* is the stock.

*d*, the ring in the stock, to receive the cord *b'*, which is attached to the ring *d'*, to which the several cords attached to the receptacle *a* are united, as illustrated.

The ring *d* is pivoted to the stock *e*, as shown.

The hook and its stock is seen at *c*, the hook part entering a ring, or other device, in or on the receptacle *a*. (See *f*.)

*h* is an arm pivoted to the stock *e*, at *i*, and having the piece *j*, to receive the spring *k*, attached to the stock *e*.

*m* is a pivoted ring in the end of the arm *h*.

The stock of the hook *c* is pivoted to the stock *e*, at *n*, in a slot between two ears rising from the lower end of *e*, so that the hook may drop down, as seen in fig. 2.

*h* has a slot or opening to receive the upper end of *c*, as illustrated in fig. 1.

The spring *k* holds the arm *h* in place, and replaces it when it is drawn up to allow the stock *c* to drop, as in fig. 2.

A cord is attached to the ring in *h*, and passes up over a sheave or pulley at some point above the hook, wherever is convenient, either in the derrick or elsewhere.

When the table or receptacle *a* is swung around to its position, the end of this cord, attached to the ring *m* in the arm *h*, is pulled up, and thus the upper end of *c* released, when, by the weight of the article or articles in the receptacle *a*, the hook is pulled down, as seen in fig. 2, and one side of *a* dropped down, so that it is left suspended only from rings *o*, and thus the load is discharged.

When the operation of reloading *a* begins the part *c* is drawn up, so as to enter the slot in *h*, and the hook is again entered in the ring *f*.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the stock *e*, ring *d*, arm *h*, ring *m*, piece *j*, pivot *i*, spring *k*, stock and hook *c*, pivot *n*, and ring *f*, as and for the purposes herein set forth.

JOHN R. THORNE.

Witnesses:

WM. HENRY CLIFFORD,

HENRY C. HOUSTON.