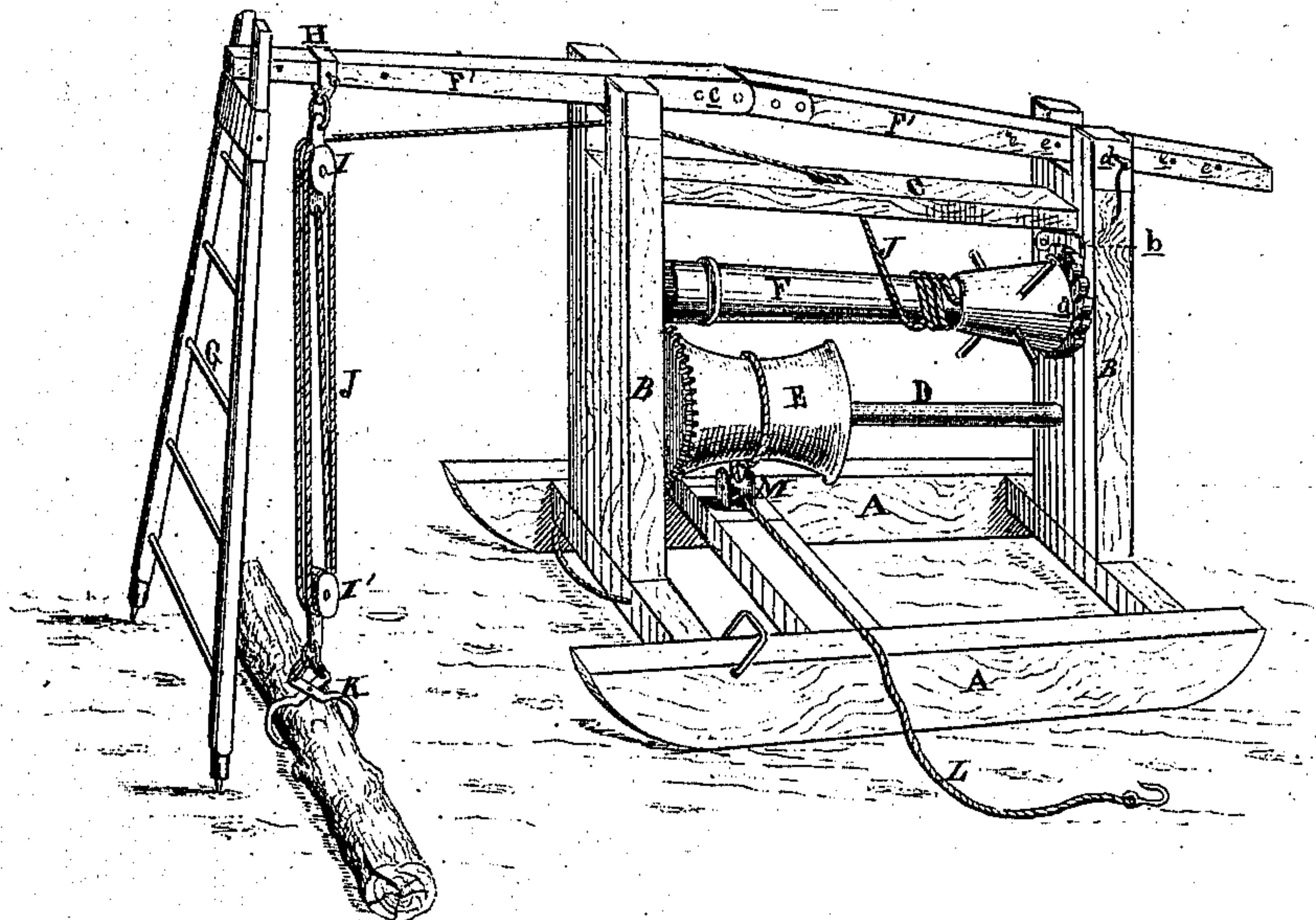


J.G. Brady,

Derrick.

No. 104,548.

Patented June 21. 1870.



ATTEST

Frederick Ebert
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INVENTOR

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United States Patent Office.

JAMES G. BRADY, OF FOREST HILL, MICHIGAN.

Letters Patent No. 104,548, dated June 21, 1870.

IMPROVEMENT IN LOG-LOADERS AND PILERS.

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

To whom it may concern:

Be it known that I, JAMES G. BRADY, of Forest Hill, in the county of Gratiot, and State of Michigan, have invented a new and useful Improvement in a Log-Loader and Piler; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon and being a part of this specification, the drawing showing my device in perspective.

The nature of this invention relates to the construction of a device for loading logs and heavy timbers onto a wagon, for piling up logs for burning them, in clearing up land, and for other like purposes.

It consists in the peculiar construction of a winch, to be operated by animal power, on a sled, and in connecting therewith an adjustable folding derrick with suitable tackles and fall, operating as more fully hereinafter set forth.

In the drawing—

A represents a sled, into the beams of which is framed a pair of heavy standards, B, connected near their tops by a beam, C.

D is a shaft journaled in the lower part of the standards, and carrying a geared drum, E, which meshes with and rotates a geared winch, F, journaled in the standards above it. One end of the winch is provided with a ratchet, *a*, with which engages a pawl, *b*, hung on the adjoining standard.

F' is a long beam resting in sockets at the tops of the standards, and, for convenience in transportation, may be made to fold, as at *c*. Sliding in the sockets, it may be made to overhang the inner standard more or less, being secured in position by a pin, *d*, passing through the top of the outer standard and one of the holes *e* in its rear end.

G is a derrick pivoted to and sustaining the overhanging end of the beam F', on which slides a sleeve, H, from which is suspended a block, I, through which,

and a companion block, I', is rove the rope J, the tail end of which is led over a sheave in the upper part of the adjoining standard, down over a sheave in the beam C, and secured to the winch F.

K are grapnel-hooks suspended from the block I.

L is a hoist-rope, one end of which is secured to the drum E, around which several turns are made with it, and thence led under a guide-pulley, M, secured to a sled-beam below, and terminating in a hook by which the team is attached to it.

To load a log from the ground onto a wagon, the device is drawn to the side of the log and the beam run out and supported by the derrick, so as to straddle the log, when the fall is dropped and the grapnels driven into it. The team is then hitched to the hoist-rope and started ahead, which will rotate the drum as the hoist-rope is unwound from it; the drum in turn winds up the rope J on the winch, and raises the log sufficiently high from the ground to permit a wagon to be backed or driven under it, the pawl in the mean time retaining the log suspended. By raising the pawl the log is lowered onto the wagon, easing its descent by the spokes shown on the winch, if necessary.

In piling up a log-heap under the beam for burning, the logs are drawn as close as practicable, when a similar plan is pursued.

The device is equally applicable to loading heavy stones on a stone-boat, and to other like purposes.

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

The combination of the sled A, standards B, beam C, shaft D, geared drum E, hoist-rope L, geared winch F, ratchet *a*, pawl *b*, derrick-beam F', derrick G, sleeve H, blocks I I', grapnels K, and rope J, arranged and operating as and for the purpose set forth.

JAMES G. BRADY.

Witnesses:

LEWIS RANDOLPH,
GEORGE BIGGS.