

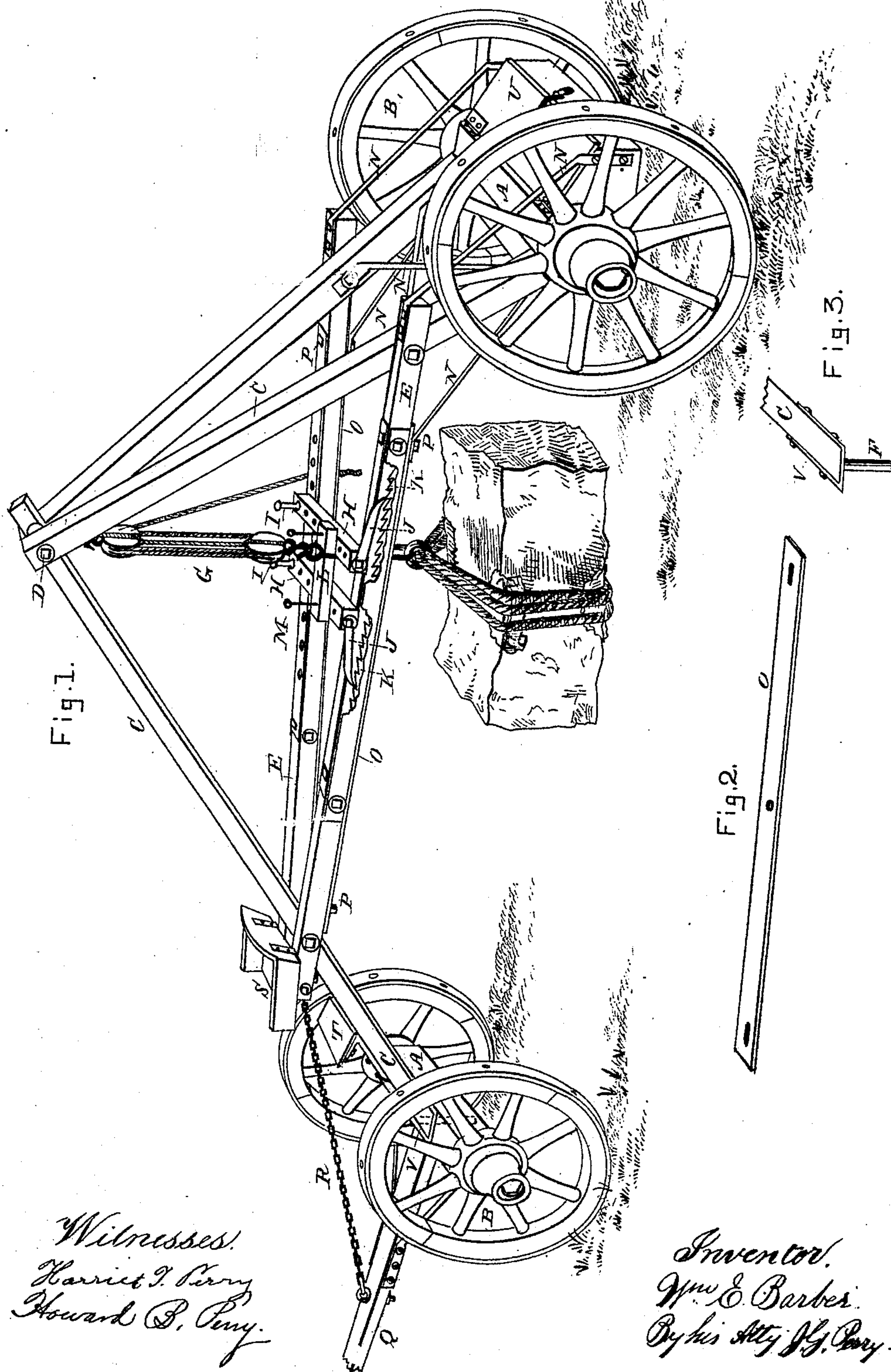
(No Model.)

W. E. BARBER.

STONE LIFTING AND CARRYING MACHINE.

No. 327,989.

Patented Oct. 13, 1885.



Witnesses:
Harriet T. Perry
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UNITED STATES PATENT OFFICE.

WILLIAM E. BARBER, OF WYOMING, RHODE ISLAND.

STONE LIFTING AND CARRYING MACHINE.

SPECIFICATION forming part of Letters Patent No. 327,989, dated October 13, 1885.

Application filed July 30, 1885. Serial No. 173,107. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. BARBER, of Wyoming, Washington county, Rhode Island, have invented certain new and useful
5 Improvements in Stone Lifting and Carrying Machines, of which the following is a specification, reference being had to the accompanying drawings, making part hereof.

This improvement is designed to furnish a
10 strong and convenient portable lifting and carrying machine, adapted especially for raising and removing large stones from farming lands.

My invention includes several novel features
15 tending to the greater efficiency of the apparatus, which features are hereinafter described, and especially referred to in the appended claims.

In the drawings, Figure 1 is a perspective
20 view of the machine, showing its prominent points, and Figs. 2 and 3 are details.

The apparatus has two axles, A, mounted on four wheels, B, and a pyramidal frame composed of three struts, C, joined at the top
25 by a heavy bolt, D, and connected about horizontally by two reaches, E. Two of said struts are secured permanently, by bolts or otherwise, to the hind axle, and the third is, at its
30 foot, pivoted loosely on the forward axle by a king-bolt, F. The foot of this strut has an iron shoe, V, through the bottom of which the king-bolt passes. (See Fig. 3.)

The reaches E are both secured to the forward strut and diverge rearwardly to their
35 points of attachment to the other struts, so as to leave an open space for the hoisting-tackle G. A feature of novelty is shown in the cross-beams H H, which extend across from one reach to the other each side of the hoisting-
40 chains. These beams, either one or both, are pivoted at one end by pins I to one of the reaches having holes formed to receive said pins, and at their other ends the beams have pivoted pawls J, which engage with ratchets
45 K on the other reach, or are otherwise adjustably secured. A flange or plain strip outside of the ratchet keeps the pawls in position. The hoisting-chain has a cross-bar, L, long
50 enough to rest upon the beams H when swung toward each other. By these devices the weight may be supported from the reaches

instead of from the top of the frame, and thus carried more readily with less swaying on rough ground. The center of gravity being materially lowered, the line of tension greatly
55 shortened, and strain on the tackle-blocks relieved, the load is handled with much greater ease and far less strain on the frame than heretofore. The beams H may be perforated to receive pins M, arranged to hold the cross-bar
60 L at either side or centrally, according to the nature of the ground to be passed over. Any desired kind of hoisting apparatus may be substituted for the simple form illustrated. It is
65 obvious that the cross-bar may be dispensed with by hoisting the stone sufficiently to rest upon and be supported by the beams H direct.

The reaches E are strengthened and stiffened by oblique braces N from the rear axle
70 or struts, and also by spring-bars O, of iron or steel, running beneath the reaches and secured by bolts P, passing through short slots near the ends of said bars. The purpose of the slotted bars is, while allowing a considerable
75 elasticity to the reaches, to form an ultimate check upon or limit to their downward yielding to prevent their being overstrained and broken. One of the bars, detached, is shown in Fig. 2.

I dispense with the usual hounds and sway-
80 blocks at the forward axle, and support the tongue Q by a chain, R, secured at its upper end between the front ends of the reaches, beneath the seat S. This construction reduces
85 the cost, and enables the forward truck to swing entirely around on the king-bolt F without the usual projecting hounds. A foot-board, T, is placed below the seat, and a covered
90 tool-box, U, is provided behind the rear axle.

Having thus described my improved stone
95 lifting and carrying machine, I claim as my invention—

1. In a portable stone-lifter having suitable hoisting mechanism, the reaches E and the beams H, pivoted at one end thereon, and pro-
95 vided at the other end with a pawl and ratchet or equivalent fastenings, substantially as set forth.

2. The pyramidal frame consisting of the struts C, joined at the apex, connected by the
100 reaches E, and mounted on the wheels and axles B A, in combination with the adjustable

beams H and cross-bar L, substantially as set forth.

3. The pyramidal frame mounted on trucks carrying suitable hoisting means and having the reaches E, in combination with pivoted beams H, suitably secured at their free ends, and with the cross-bar L and means for adjusting it laterally on said beams, substantially as set forth.

10 4. In a portable stone-lifter, the reaches E, provided with the slotted spring-bars O, and with bolts P, serving as stops therefor, substantially as set forth.

5. The pyramidal frame having its forward strut mounted on the front axle, and provided with a shoe, V, and king-bolt F, in combination with the tongue Q and its supporting-chain R, whereby the tongue is supported and may, with the forward truck, be reversed beneath the reaches on the pivot F, substantially as set forth. 15 20

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Witnesses:

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