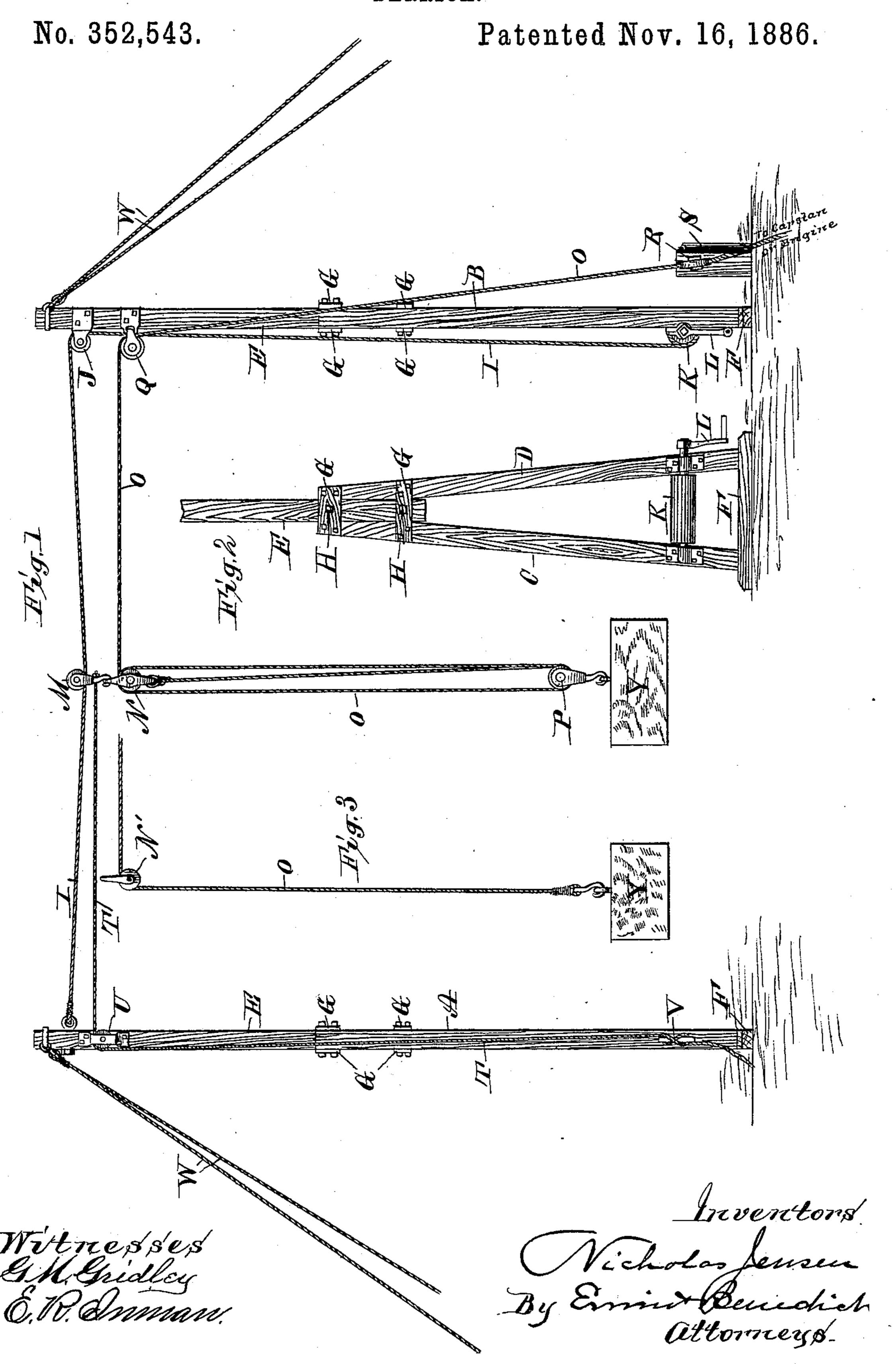
## N. JENSEN.

DERRICK.



## United States Patent Office.

NICHOLAS JENSEN, OF MILWAUKEE, WISCONSIN.

## DERRICK.

SPECIFICATION forming part of Letters Patent No. 352,543, dated November 16, 1886.

Application filed March 25, 1886. Serial No. 196,494. (No model.)

To all whom it may concern:

Be it known that I, Nicholas Jensen, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented new and useful Improvements in Derricks; and I do hereby declare the following to be a full, clear, and exact description of said invention, reference being had to the accompanying drawings, and to the letters or figures of reference marked to thereon, which form a part of this specification.

The object of my invention is to provide a simple, inexpensive, readily constructed, and efficient derrick for hoisting and carrying for short distances large stones or other heavy and bulky material. All these results are accomplished by the device hereinafter described and claimed.

Figure 1 is an elevation of my derrick. Fig. 2 is an end view of one of the set of posts. Fig.

2 is an end view of one of the set of posts. F
20 3 is a modified form of hoisting-tackle.

Two sets of posts. A and B coch set consists.

Two sets of posts, A and B, each set consisting of the stationary legs C and D and the adjustable leg E, are set up vertically, one, A, near to and just to rear of location of the material to be moved, and the other, B, near to and just beyond the point to which the material is to be carried. The legs C and D are fixed and made rigid at the bottom in the foot-piece F, and are connected together at the top by crosspieces G G, bolted to each leg, the top of the legs C D being separated sufficiently to take the leg E between them and permit of its adjustment up or down by means of bolts H H, passing through the cross-pieces and the leg E

35 or other equivalent means. A supporting or track rope, I, is attached to the post A, near its top, and extends from post A to post B and passes over pulley J, the block of which pulley is attached to the post B, near 40 its top, and runs down and winds upon the windlass K, which windlass rotates in bearings in the lower part of post B. The windlass K is provided with a bell-crank handle, L, or other equivalent device, whereby it 45 may be operated. A pulley, M, is supported and travels freely on the rope I, between posts A and B, and attached to and supported by pulley M is a double pulley, N, the blocks of which pulleys M and N are attached to each 50 other. A hoisting and draft rope, O, is attached at one end to the block of pulley N, and is I P and the pulley N, and thence runs over the pulley Q, the block of which is attached to the post B, and down to and under the pulley R, the block of which is attached to a post, S, fixed in the ground, the free end of this rope being adapted to take the power for hoisting and carrying the material to be elevated and moved. A retrieving rope, F, is attached at one end to 60 the block of pulley M, and passes over a pulley, U, the block of which is attached to the post A, and for securing its lower end may be tied to or wound upon the cleat V, rigid to the lower part of the post A.

W W are stay-ropes or guys, attached to the upper ends of the posts A and B, respectively, and at their lower outer ends to the ground or some fixed object, whereby the posts are stayed or held steadily in position against being pulled 70 inwardly by the weight of the material hoisted or carried.

Y represents a block of stone supported on the tackle P.

It will be seen that by loosening the rope O 75 at its free end, and at the same time pulling upon the retrieving rope T, the pulley M and its supported mechanism may be drawn back near to the post A; that upon further loosening the rope O the block P will be lowered to 80 the ground; and, being attached to a load, Y, by hauling on the rope O at its free outer end the weight will be raised, (the rope T being fastened at its lower end,) and thereupon by continuing to pull on the rope O, and gradually 85 releasing the retrieving-rope T, the pulley M and its supported mechanism and load will be carried forward on the supporting-rope I, toward the post B, and the load can be lowered and deposited at any point on the route be- 90 tween the two posts by releasing the rope O. The supporting-rope I can be let down or made taut by unwinding or winding it up on the windlass K.

So far as the post A is concerned, a single 95 upright standard, or even the wall of a building to which the rope I and pulley-block U can be attached, will serve as the equivalent for the post; and where the weight to be elevated is not too heavy a single pulley, N', Fig. 100 3, with the rope O running singly over it, may be used instead of the double pulley N, single

pulley P, and rope O, doubled between them. What I claim as new, and desire to secure

by Letters Patent, is—

1. The combination of the posts A B, the latter being provided with a pulley, J, and a windlass, K, the supporting-rope I, attached to the post A and passing over the pulley J on the post B, and winding upon a windlass, K, the traveling pulley M, provided with a retrieving-rope, T, the pulley-block N, and the hoisting-rope O, substantially as described.

2. The combination of two posts, A and B,

the supporting-rope I, affixed to post A and running over pulley J, attached to post B, and winding on windlass K, the traveling pulley 15 M, provided with retrieving-rope T and supporting the two pulleys N and P, and the hoisting-rope O, substantially as described.

In testimony whereof I affix my signature in

presence of two witnesses.

NICHOLAS JENSEN.

## Witnesses:

C. T. BENEDICT, G. M. GRIDLEY.