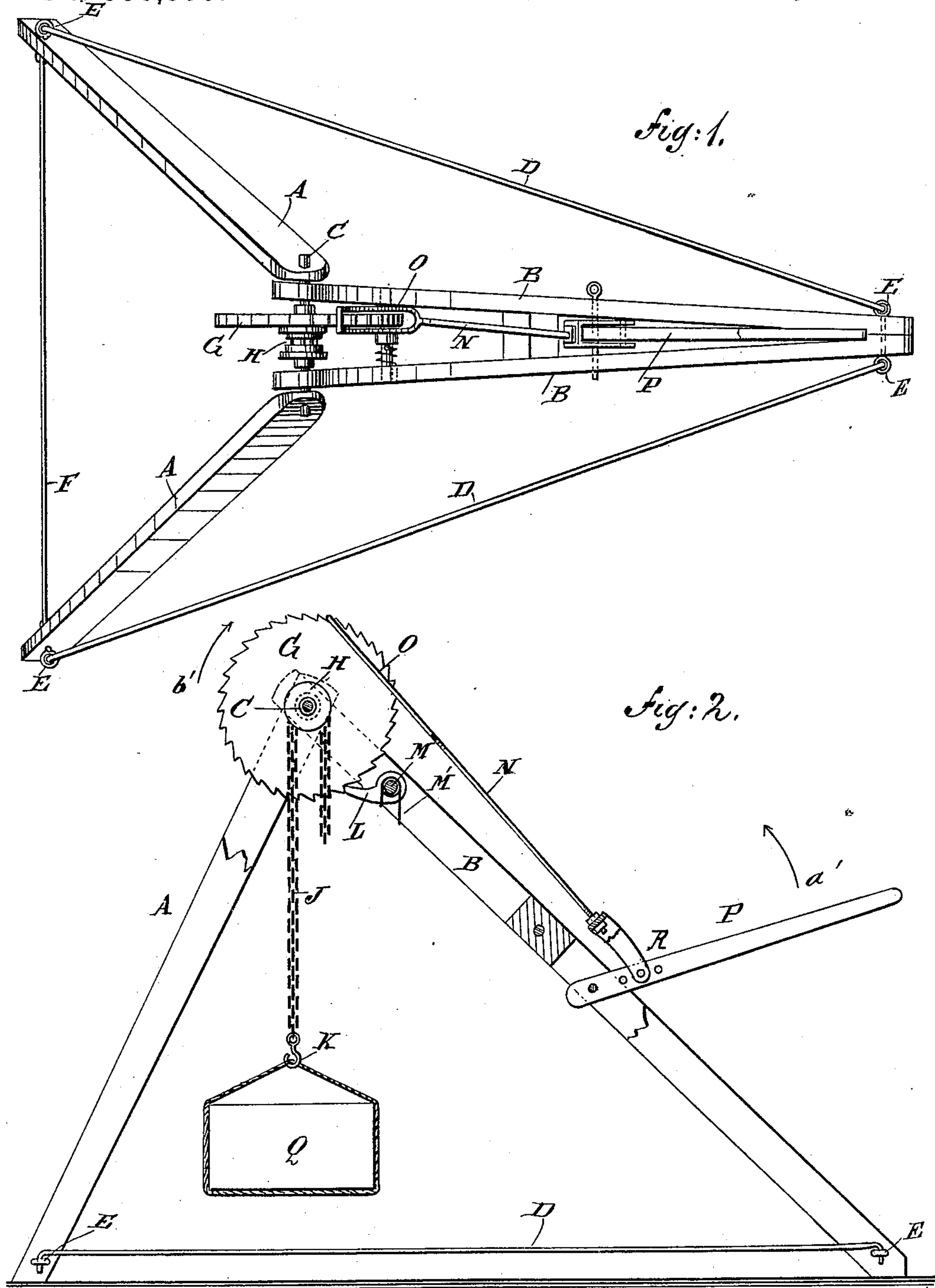


(No Model.)

B. F. NORTON.
LIFTING JACK.

No. 356,395.

Patented Jan. 18, 1887.



WITNESSES:

Chas. Nieta
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UNITED STATES PATENT OFFICE.

BENJAMIN F. NORTON, OF MANCHESTER, NEW HAMPSHIRE.

LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 356,395, dated January 18, 1887.

Application filed August 8, 1884. Renewed August 7, 1886. Serial No. 210,369. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN F. NORTON, of Manchester, in the county of Hillsborough and State of New Hampshire, have invented
5 a new and Improved Lifting-Jack, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved jack for lifting heavy bodies,
10 such as stones, stumps, &c.

The invention consists in the combination, with a frame formed of legs pivoted to each other by a shaft, of a ratchet-wheel and a sprocket-wheel on the bolt, and of a pawl-rod
15 connected with a lever pivoted to one of the legs.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate
20 corresponding parts in both the figures.

Figure 1 is a plan view of my improved lifting-jack. Fig. 2 is a side view of the same, parts being broken out and others shown in section.

25 The frame is formed of the two legs A and the forked or hollow leg B, which legs are pivoted to each other at the upper ends by a shaft, C, the leg B being between the legs A. Two brace-rods, D, are pivoted to the lower end of
30 the leg B, and the hooks on the free ends of the same are passed into staples or eyes E on the legs A. The lower ends of the legs A can also be united by a brace-rod, F.

On the shaft C a ratchet-wheel, G, and a
35 small toothed or sprocket wheel, H, connected with each other, are loosely mounted. Over the sprocket-wheel a chain, J, is passed, on the lower end of which a hook, K, is secured. A pawl, L, pivoted on a bolt, M, uniting the
40 two sections of the leg B, is pressed against the ratchet-wheel G by a spring, M'. A pawl-rod, N, having an elongated eye, O, at its upper end, has its lower end held by a fork or clasp, R, pivoted to a lever, P, which is piv-
45 oted in the leg B, the said clasp being slightly turned, so that the point at which the clasp and the rod N are united will be out of the right line connecting the clasp R and the end of the rod N, so that when the lever P is

swung down as far as possible it will be auto- 50 matically locked in place, as the strain on the said lever will be in the direction from the pivots of the clasp R to the pivot of the lever P.

The eye O is preferably made larger than the diameter of the wheel G, and rests on the 55 teeth of the said ratchet-wheel G, part of which passes through it. The lever P is provided with a series of apertures, to permit of pivoting the clasp R on the lever P a greater or less distance from the fulcrum of the said 60 lever P.

The load Q is suspended from the hook K, and the lever P is swung upward in the direction of the arrow α' , to get a fresh grip of the pawl-rod N on the wheel G, the end piece of 65 the eye O sliding over the teeth of the ratchet-wheel. The lever P is then pressed down in the inverse direction of the arrow α' , and thereby the ratchet-wheel G and the sprocket-wheel H are turned in the direction of the arrow β' , 70 whereby the chain J is drawn up and the weight or load Q raised, and so on.

The jack is very strong and powerful, can be operated easily, and can be folded very compactly when not in use. 75

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

1. In a lifting-jack, the combination, with legs pivoted to each other at their upper ends 80 by a shaft, of a ratchet-wheel and a sprocket-wheel on the shaft, and a pawl rod or arm connected with a lever pivoted on one of the legs, substantially as herein shown and described. 85

2. In a lifting-jack, the combination, with the legs A B, pivoted to each other by the shaft C, of the ratchet-wheel G and the sprocket-wheel H, mounted on the shaft C, the pawl L, the pawl-rod N, having an elongated eye, O, 90 and the lever P, pivoted to the leg B, with which lever P the rod N is connected, substantially as herein shown and described.

3. In a lifting-jack, the combination, with the legs A B, pivoted to each other by the 95 shaft C, of the brace-rods D F, the ratchet-wheel G and the sprocket-wheel H on the shaft C, the pawl-rod N, having an elongated eye,

O, and the lever P, substantially as herein shown and described.

4. In a lifting-jack, the combination, with the legs A B, pivoted to each other by the shaft
5 C, of the ratchet-wheel G and the sprocket-wheel H on the shaft C, the pawl-rod N, having an elongated eye, O, the curved clasp R, connected with the lower end of the rod N,

and the lever P, pivoted to the leg B, to which lever P the clasp R is pivoted, substantially as herein shown and described.

BENJAMIN F. NORTON.

Witnesses:

SHERMAN L. FLANDERS,
S. ANNA STEARNS.