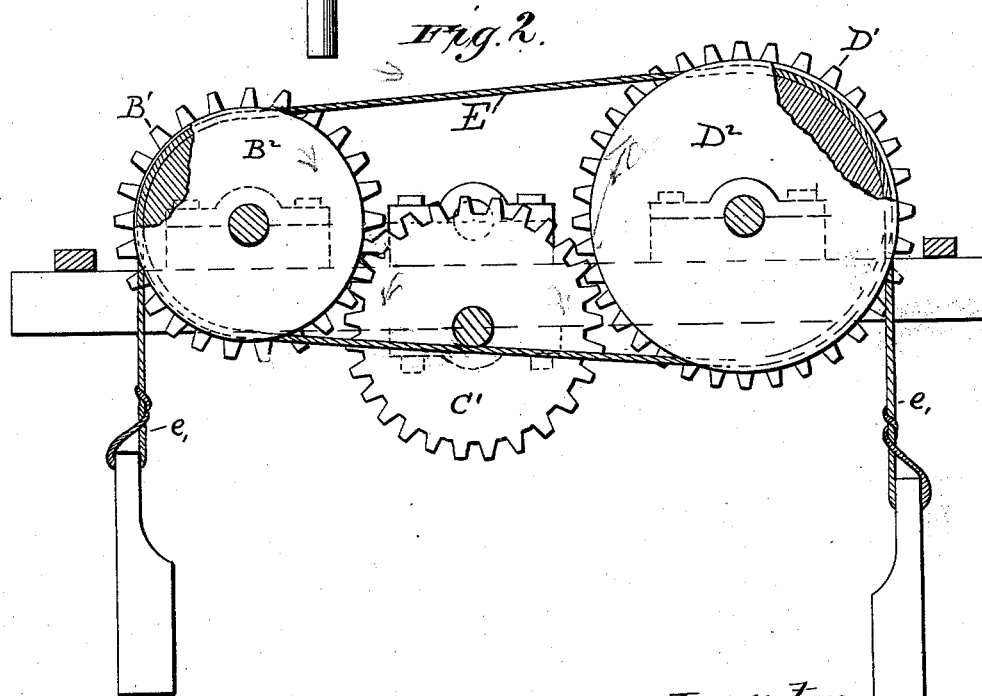
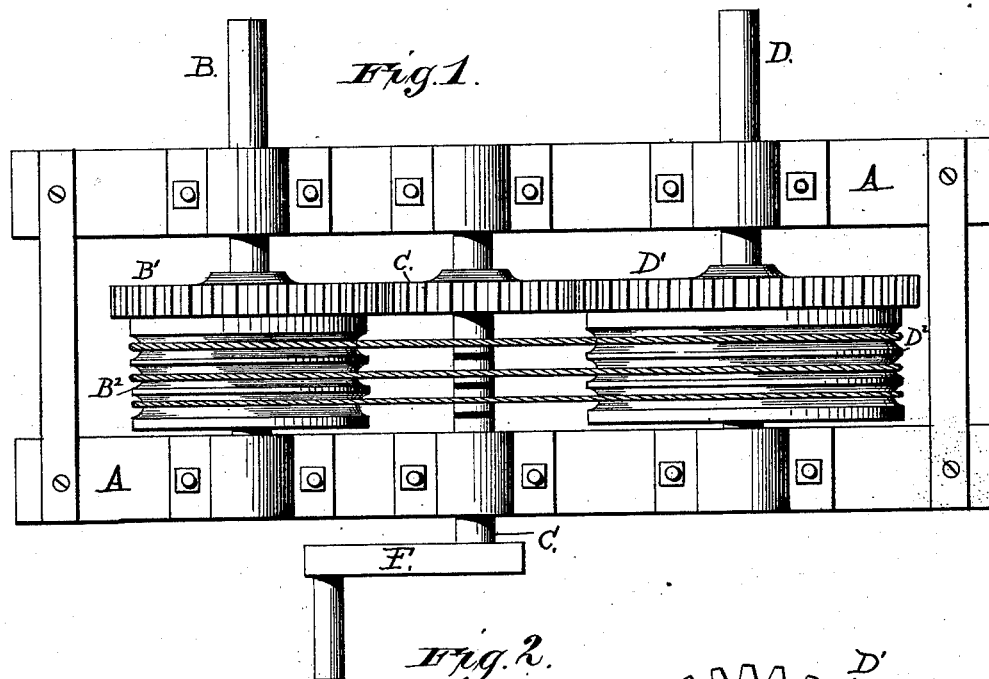


D. ABREY.
Hoisting Device.

No. 216,815.

Patented June 24, 1879.



Witnesses.
F. L. Ouraud
E. H. Bradford

Inventor.
Daniel Abrey
By *H. J. Ennis*
Attorney.

UNITED STATES PATENT OFFICE.

DANIEL ABREY, OF GREENVILLE, MICHIGAN.

IMPROVEMENT IN HOISTING DEVICES.

Specification forming part of Letters Patent No. **216,815**, dated June 24, 1879; application filed May 13, 1879.

To all whom it may concern:

Be it known that I, DANIEL ABREY, of Greenville, in the county of Montcalm and State of Michigan, have invented certain new and useful Improvements in Hoisting Devices; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 is a top-plan view of my improved hoisting device, and Fig. 2 is a side elevation with the front part of the frame removed.

This invention has relation to devices for hoisting hay, water, bricks, &c.; and it consists of certain improvements in the same, hereinafter more fully described, and particularly pointed out in the claim.

In the accompanying drawings similar letters of reference indicate like parts of the invention.

A is a rectangular frame, upon which are mounted the shafts B, C, and D. The shaft B is provided with a gear-wheel, B¹, and drum B². The shaft C is provided with a gear-wheel, C', and the shaft D also has a gear-wheel, D¹, and drum D², somewhat larger in diameter

than the gear and drum B¹ and B². The gear C' is located between the other two gears, and its teeth mesh with theirs.

A band, chain, or rope, E, passes several times around the drums B² and D², and its ends hang down, so that the ordinary hods, buckets, or carriers used in elevating material may be attached thereto.

The crank F may be attached to either of the shafts B, C, or D, as it is obvious that more power can be obtained by using it on the shaft B than if placed on the shaft D, while greater speed with less power will be the result if the crank is applied to D.

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

In a hoisting device, the rectangular frame A, provided with the drums B² and D², the diameter of one being greater than the other, in combination with the gears B¹, C', and D¹ and rope or chain E, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 24th day of April, 1879.

DANIEL ABREY.

Witnesses:

DAVID A. ELIOT,
A. M. LANG.