

H. LITTLE.

DEVICE FOR ELEVATING ICE.

No. 64,886.

Patented May 21, 1867.

Fig. 1.

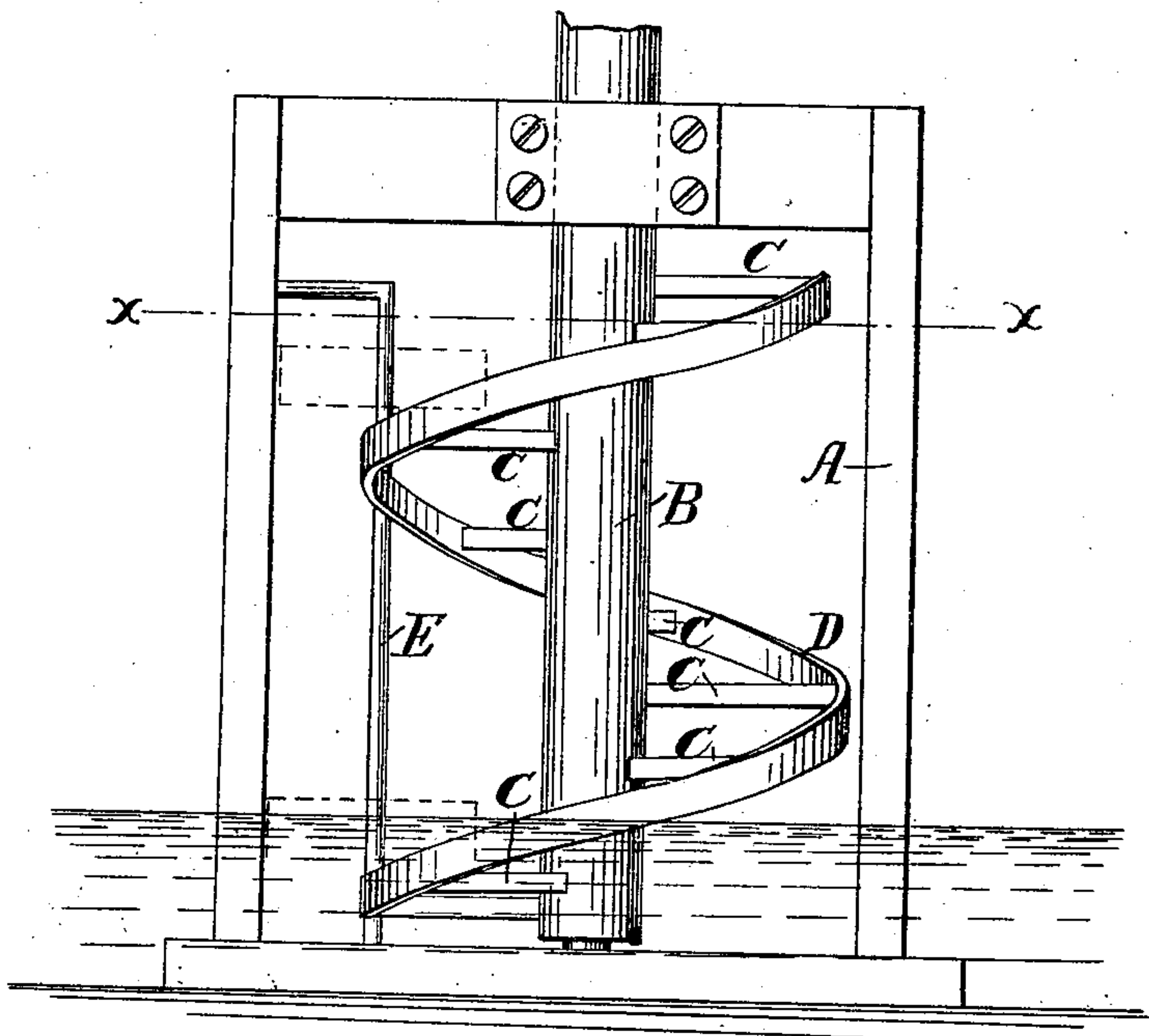
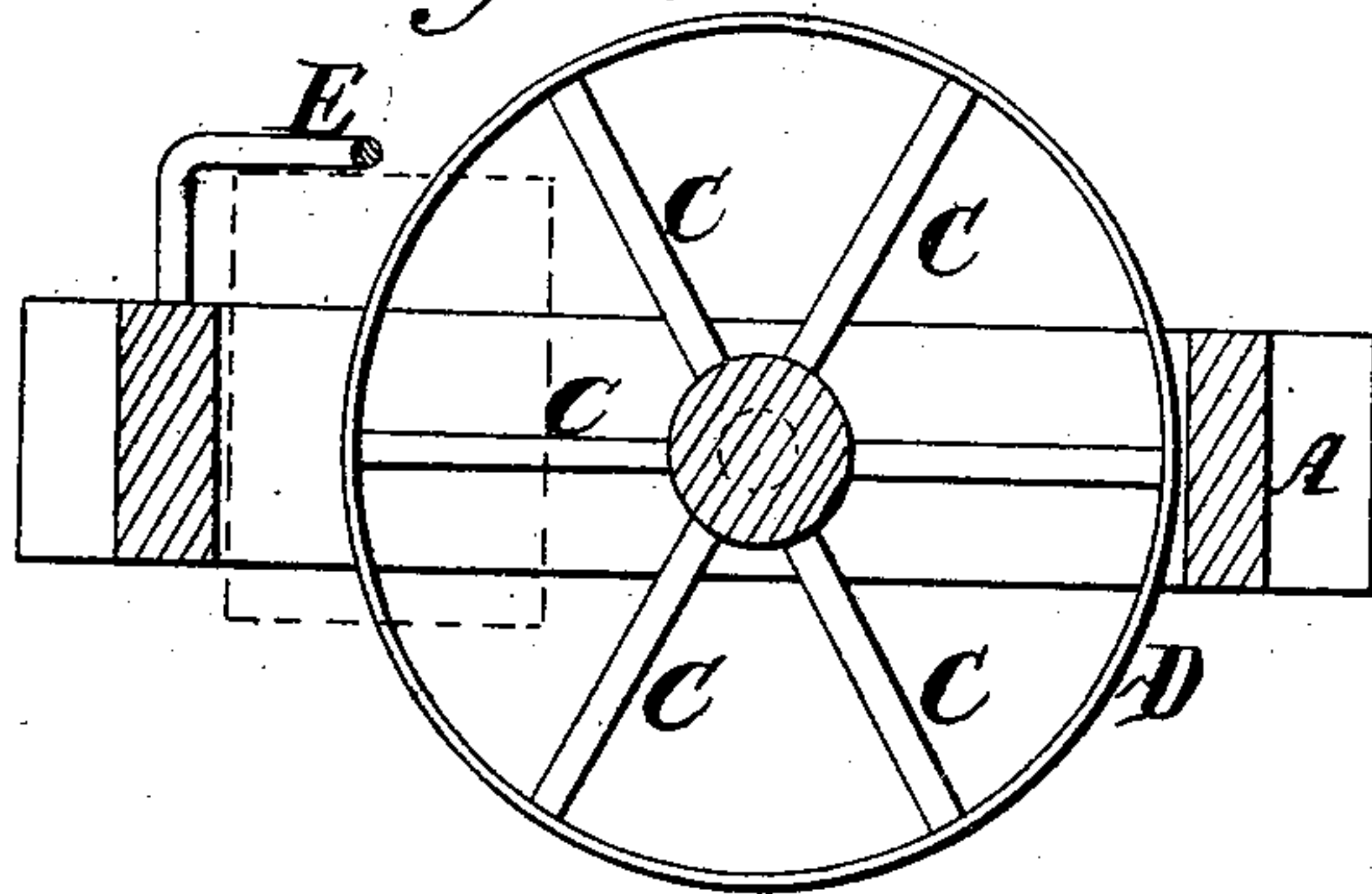


Fig. 2.



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United States Patent Office.

HENRY LITTLE, OF MIDDLETOWN, NEW YORK.

Letters Patent No. 64,886, dated May 21, 1867.

IMPROVEMENT IN DEVICE FOR ELEVATING ICE.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, HENRY LITTLE, of Middletown, in the county of Orange, and State of New York, have invented a new and improved Device for Elevating Ice; and that the following description, taken in connection with the accompanying drawings hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature and principles of my said improvements, by which my invention may be distinguished from all others of a similar class, together with such parts as I claim, and desire to have secured to me by Letters Patent.

This invention relates to a new and improved contrivance for elevating ice from the river, pond, or lake where it is cut, into the ice-house contiguous thereto.

The invention consists of a rotating vertical screw elevator and a stationary or fixed bearing, arranged to operate in the manner substantially as hereinafter fully shown and described. In the accompanying sheet of drawings—

Figure 1 is an elevation of my invention.

Figure 2, a horizontal section of the same, taken in the line *x x*, fig. 1.

Similar letters of reference indicate like parts.

A represents an upright frame, constructed in any suitable manner to support a vertical shaft, B, which has horizontal radial arms, C, attached in a spiral line. To the outer ends of these arms there is attached a rim, D, which forms a spiral way or track all around the shaft B, extending from its lower to its upper end, the spiral form of the rim or way being of course due to the spiral position of the arms C. If necessary or desired, two rims or ways D may be attached to the arms C, one being within the other, that is to say, the second one attached to the arms C at a short distance from their ends. E represents a bearing composed of an upright rod or bar in the framing A a short distance from the rim or way D.

This device is put up in such a manner that the lower end of the way D will be in the water, a space being kept free of ice to admit of the lower part of the screw rotating therein. The blocks of ice as they are cut are placed on the rim or way D behind the bearing E, and, as the shaft B is rotated, the ice will be elevated by the spiral rim, the bearing E preventing the ice from turning with the rim or way. As the blocks of ice are raised above the bearing E they pass into a chute, which conducts them into the ice-house. The lower end of the spiral rim or way is placed in the water, or as low as possible, in order to facilitate the placing of the blocks of ice on the rim or way. In practice, I design to have the bearing E constructed in sections, so that its height may be varied to suit the height the blocks of ice are to be raised, for it will be understood that ice-houses are provided with a series of doors, one above the other, the chute being adjusted to different doors as the filling of the house progresses, commencing with the lowermost one. This is necessary in order to prevent the blocks of ice being broken by falling from too great a height, which would be the case were the ice discharged into or through an uppermost door at the commencement of the operation. The elevator may be turned by horse-power, a single horse being sufficient for the purpose, and the power applied in any suitable manner; or it may be operated by steam or water-power.

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

The rotatory screw elevator, in combination with the bearing, arranged to operate in the manner substantially as and for the purpose set forth.

HENRY LITTLE.

Witnesses:

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