

D. FITZGERALD.

Bier.

No. 38,575.

Patented May 19, 1863.

Fig. 2.

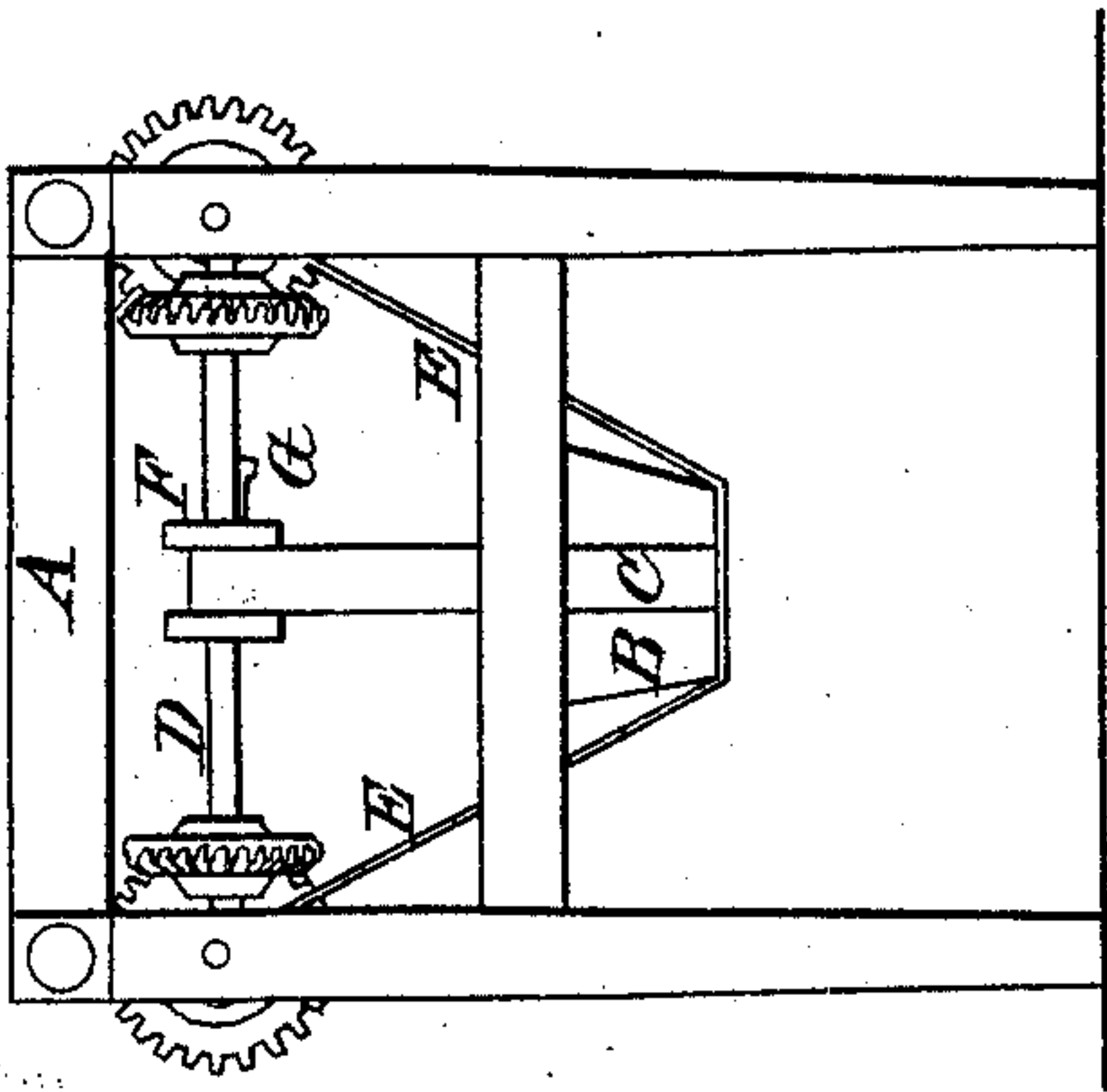


Fig. 1.

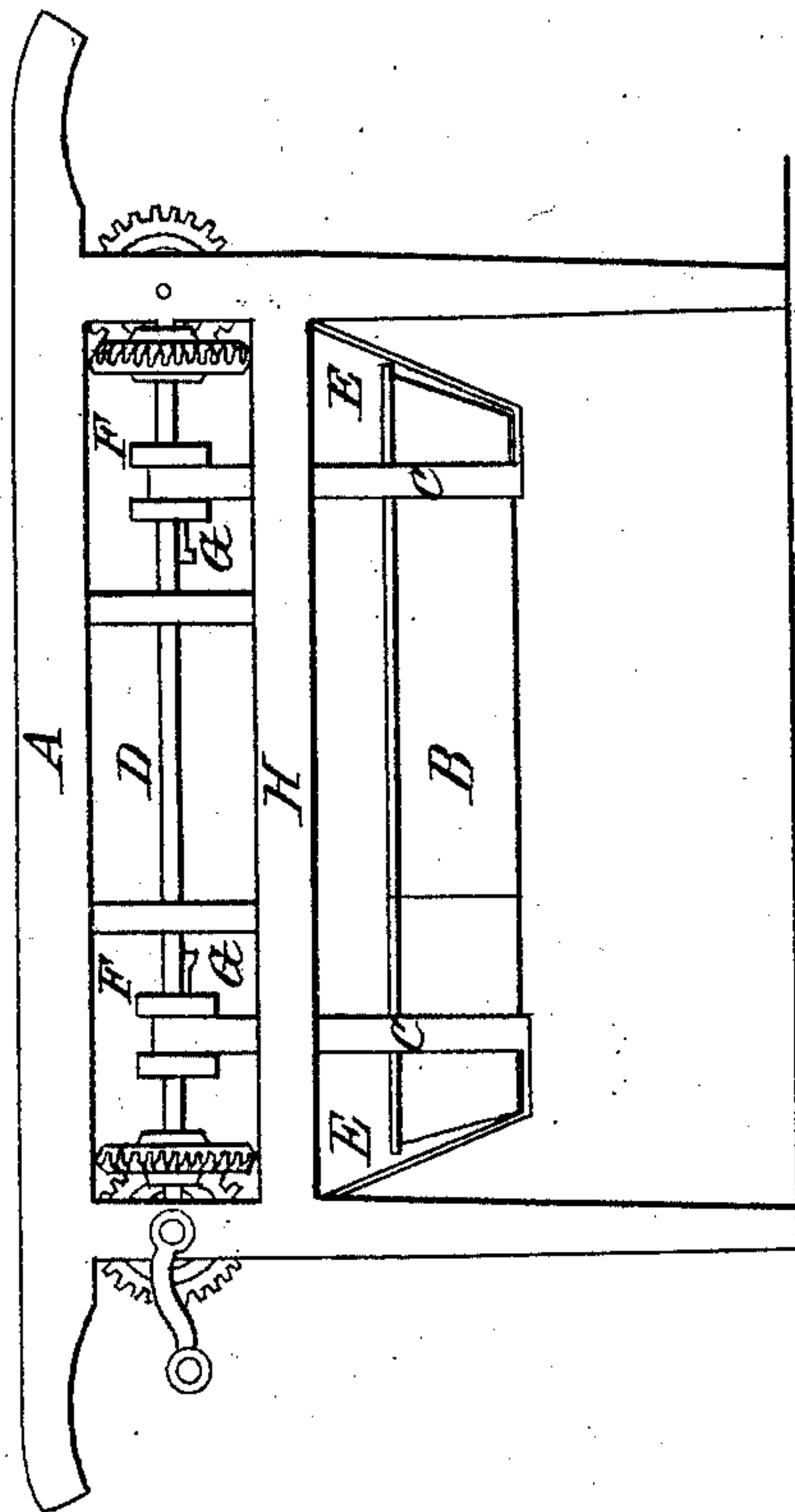
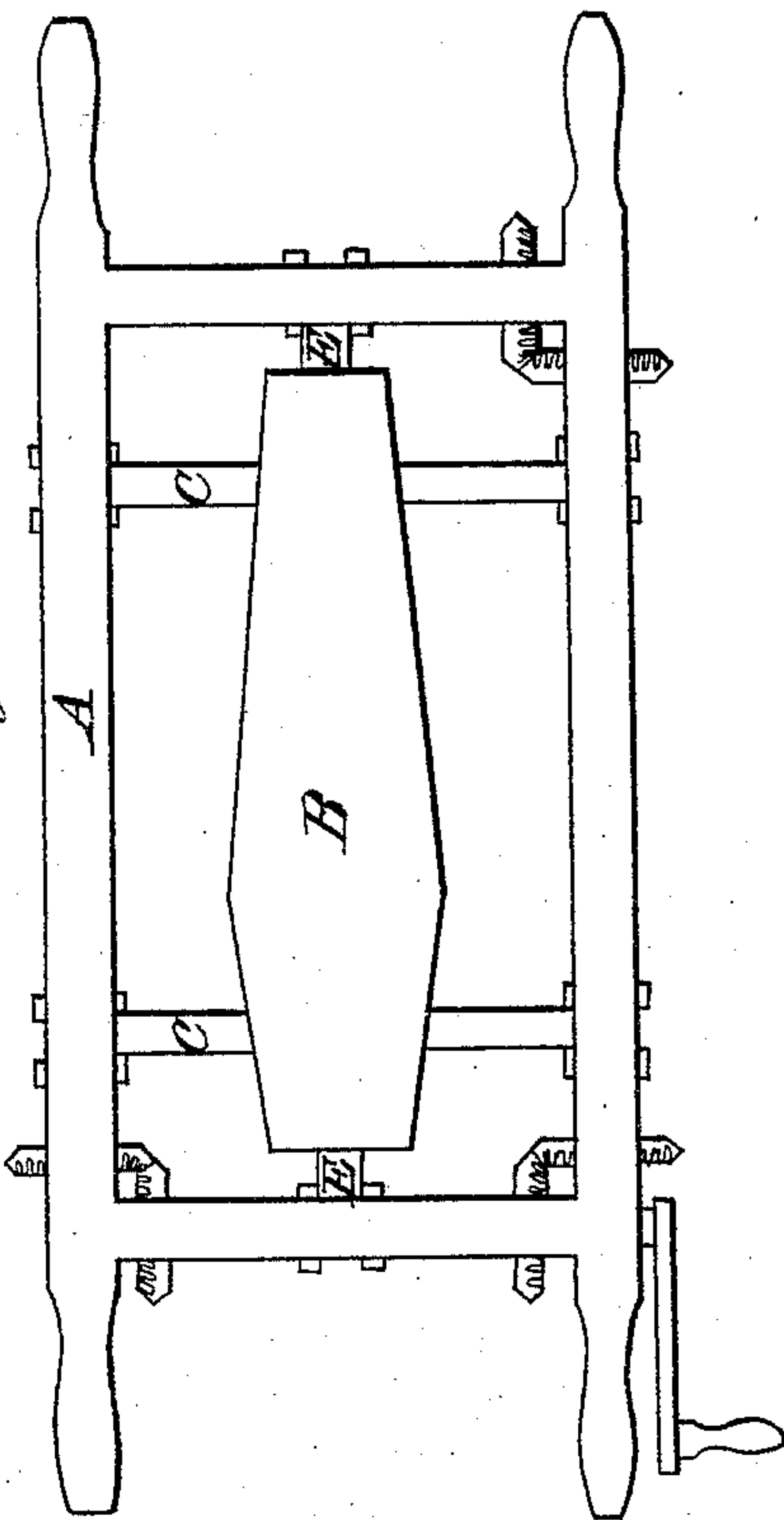


Fig. 3.



Witnesses:

Owen G. Warren  
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Inventor:

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# UNITED STATES PATENT OFFICE.

DANIEL FITZGERALD, OF NEW YORK, N. Y. \*

## IMPROVEMENT IN BIER.

Specification forming part of Letters Patent No. 38,575, dated May 19, 1863.

*To all whom it may concern:*

Be it known that I, DANIEL FITZGERALD, of the city, county, and State of New York, have invented a new and useful Improvement in Biers for the Burial or Exhumation of Bodies; and I do hereby declare that the following is a full and exact description thereof.

To enable others skilled in the business to make and use my invention, I proceed to describe its construction and operation, reference being had to the drawings hereunto annexed, and making part of this specification.

Figure 1 is a side elevation of the bier holding a coffin, partially lowered; Fig. 2, end elevation of the same; Fig. 3, top view of the same.

The same letters refer to the same things in all the figures.

A is the frame of the bier; B, the coffin in place to be lowered; C, the side straps on which the coffin is suspended; D, shaft from end to end and from side to side of the frame, geared together; E, straps for disengaging the side straps—that is, for drawing them out from under the ends of the coffin after it is let down in the grave; F, pulleys on which the straps are wound; G, keys for the pulleys, which are adapted to be readily loosened; H, the under side bar of the bier.

The purpose of this construction of bier is to enable a man to deposit a coffin safely and steadily in the grave by holding at a crank to ease it down, without the use of entangling ropes. The coffin being taken from the hearse and placed upon this bier, it is carried and set over the grave, and then one man can lower it safely into it. He then pulls with his hand upon the end straps, E, drawing out the straps C from under the coffin. The frame is constructed in the usual form, except that this has additional side bars set under the top bars of the side. It may be, nevertheless, made light as usual. Along the sides and at the ends there are rods or shafts D set directly under the side bars of the bier, midway between the two. These shafts D are geared together at three corners, so that one crank turns them all. Upon each side shaft are two pulleys, F, with a key, G, to be loose or tight. At the ends upon the shafts are pulleys—one to each—the pulley being intended to wind up the disengaging-straps E, or gather the slack and prevent entangling. No other use is made of the end pulleys. The supporting-straps C should be broad and firm, and have attached to them a

disengaging-strap, E. The pulleys on the side shafts, D, are made loose for several reasons. Their position on the shaft must be changed for a short or a long coffin. The pulleys for a short coffin are set along nearer the center; also, one side of the bier will sometimes be lower on side hills. The pulleys at the ends on which the slack of the disengaging-straps is kept wound up, either by hand, a clock-spring, or any known device, are kept partially loose, so that the disengaging-straps may be made longer or shorter, as required. These may be dispensed with altogether by unfastening one end of the side strap and drawing it out on the other side, and the connection between the side rollers or shafts be made by a chain-band. The extra bar at the side, sustained by two uprights, through which the shaft passes, is useful for strengthening the bier and giving additional journals to the shaft. When the disengaging-straps are dispensed with, the supporting-straps are only hooked onto the windlass at one side, and then when the coffin is down a continuation of the unwinding lets the supporting-straps be drawn up on one side from under the coffin, the ends being loosened or dropped from the pulleys.

I am aware that in Scarlett's patent bier a continuation of the turning of the windlass disengages the straps by pulling them out at the ends, and this device I do not claim. I disengage the supporting-straps by hand when they are to be drawn out at the ends of the coffin or boxes.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of the two side windlasses placed opposite, sustaining at each end one strap, C, and geared to move with perfect equality, so that the coffin may not turn over, but be lowered safely into the grave, in the manner substantially as above described.

2. Disengaging the two cross-straps at one side by unfastening them and drawing them up on the other side by continued turning of the crank in the manner described.

3. The adjustable pulleys F on the shaft, adapting the bier to a long or a short coffin, constructed substantially as above described.

DANIEL FITZGERALD.

Witnesses:

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