I. CUMMINS.

Operating Shakers of Thrashing Machines.

No. 36,443. Patented Sept. 9, 1862.

Fig. 1.

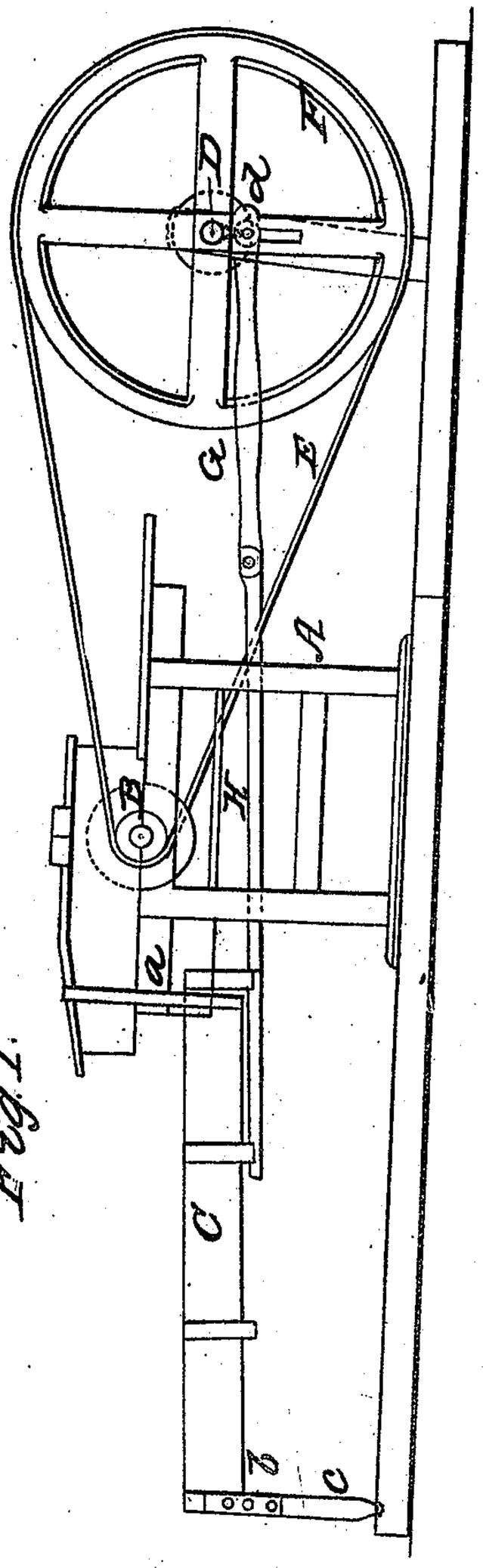
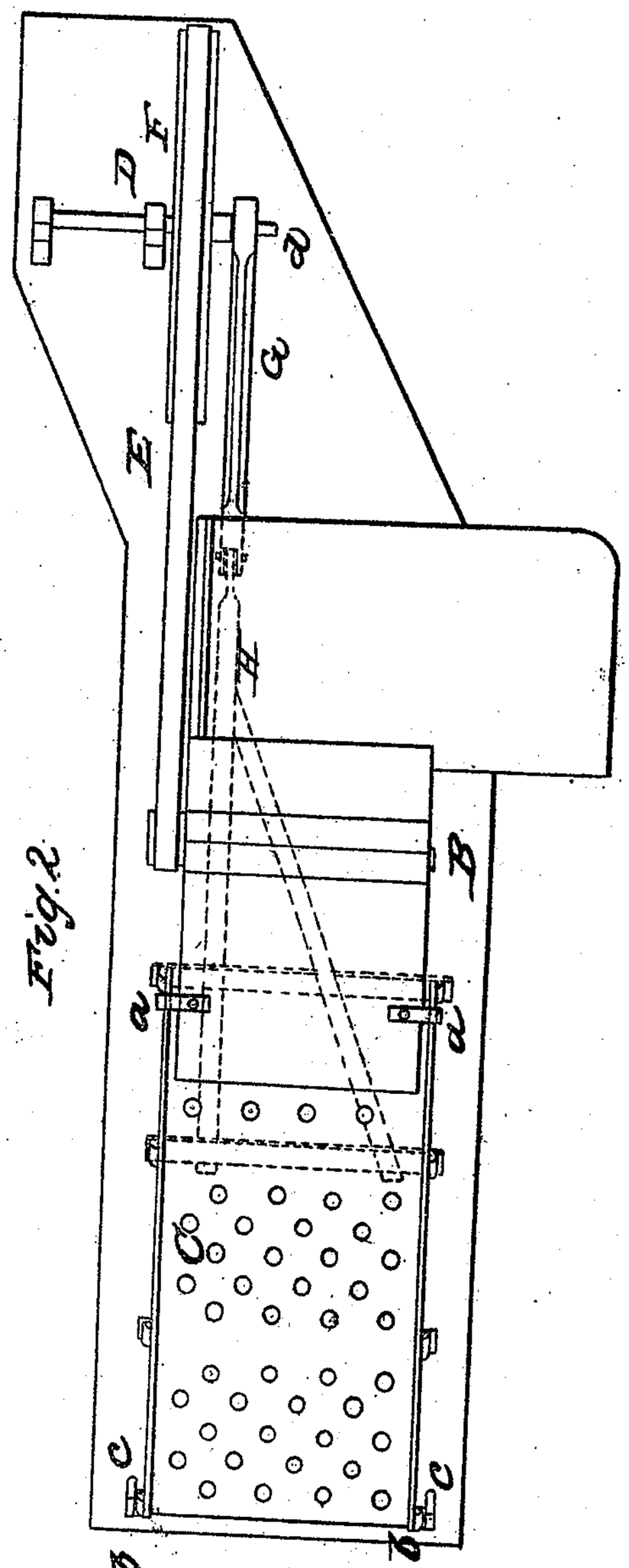


Fig. 2.



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UNITED STATES PATENT OFFICE.

JOHN SUTTON, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND JAMES GREGORY.

IMPROVED COMBINATION OF SOFA AND VESSEL'S BERTH.

Specification forming part of Letters Patent No. **36,442**, dated September 9, 1862.

To all whom it may concern:

Be it known that I, JOHN SUTTON, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Combined Sofa and Berths; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Said improvements consist in, first, the combination, with the fixed frame, of the vertically-sliding seat and berth frame and seats and berth-bottoms, as hereinafter described, by which the seat is made capable of being converted into berths or the berths into a seat, in the manner hereinafter set forth; second, the combination, with the sofa-box so constructed as to allow the cushion to sink into it, so as to allow the box to form berth sides and ends, of the seat-elevating doors or supports hereinafter described, or their equivalent, by which the cushion or seat is supported when in use for a seat in a higher position than it is necessary to support it when it is used for a berth, as set forth; third, the arrangement at the back of the seat, as described, and in combination therewith, of hoisting-gear—that is to say, in such a manner that the hoisting-gear shall be chiefly placed behind the seat-frame and take hold of said frame from the back side, said hoisting-gear having a shaft or other medium of communication extended to a convenient position for operating, as set forth.

Like letters refer to like parts in each drawing.

Figure 1 represents a front elevation when in use as a sofa or settee. Fig. 2 is a cross-section of the same on a line transversely through the center. Fig. 3 is a longitudinal section when the sofa is converted into berths. Fig. 4 is a central cross-section of same.

The improvements in the combined sofa and berths are intended to economize room where limited space will not admit of sufficient sleeping accommodations. In the case of hotels, boarding-houses, ships, river-boats, and when placed longitudinally in railroad-cars, where the number of guests or passengers exceeds the facilities, their utility is obvious. Curtains may be attached to the under part of the upper berth, which will inclose the lower berth, and when using the entire as a sofa they can be folded underneath the upper berth and secured by elastic straps or other device. In like manner a curtain suspended by rods or wire frame from the ceiling or top of the sofa may inclose the whole, where persons may divest themselves and retire free from observation.

A is the framed back of the sofa, for which may be substituted the walls or partition-walls of a house or the sides, dividing-partitions, or bulk-heads of ships. B B are its ends.

C is the front of the sofa or settee box, of any suitable dimensions.

D is a horizontal frame underneath the whole, the entire firmly secured and forming one compact piece.

E is a loose frame on which a cushion is made, and is used for the back of the sofa, said cushion being held in its position by the pins *a a*, the lower edge of the cushion resting on the seat of the sofa. When worked by mechanism, *b* is the end of a shaft of iron, to which may be applied a crank for elevating or lowering the upper berth.

c c' are doors, one at each end of the sofa, for inclosing crank, boots, &c., the sliding box or upper berth fitting in the sofa-box C. The position of the doors *d d'* is shown in Fig. 2, when the entire is used as a sofa, to elevate the loose cushion F inside the sliding box G, said sliding box having neither bottom nor top, but projecting inside cleats *k k'* to support the loose cushion F when used as a berth.

In Fig. 3 the doors *d d'* are shown depressed when the sofa is converted into berths.

H H are the vertical rods or guides, on which, supported by the guide-brackets *f f'*, the box G slides. The ends of the guides H H are secured to and near the top edge of the back-frame A, said guides running down to and are secured to the top side of the frame D, near each end of the sofa, and are parallel.

E is the cushioned back of the sofa, placed horizontally on the cross-pieces *g g'*, midway of the depth and within the sofa-box C, when used as and forming the bottom of the lower berth.

h h' are spaces for pillows, blankets, sheets, &c.

The hoisting mechanism consists of a shaft,

[redacted]