D. N. B. COFFIN, Jr.

Windlasses.

No. 134,517. Patented Jan. 7, 1873.

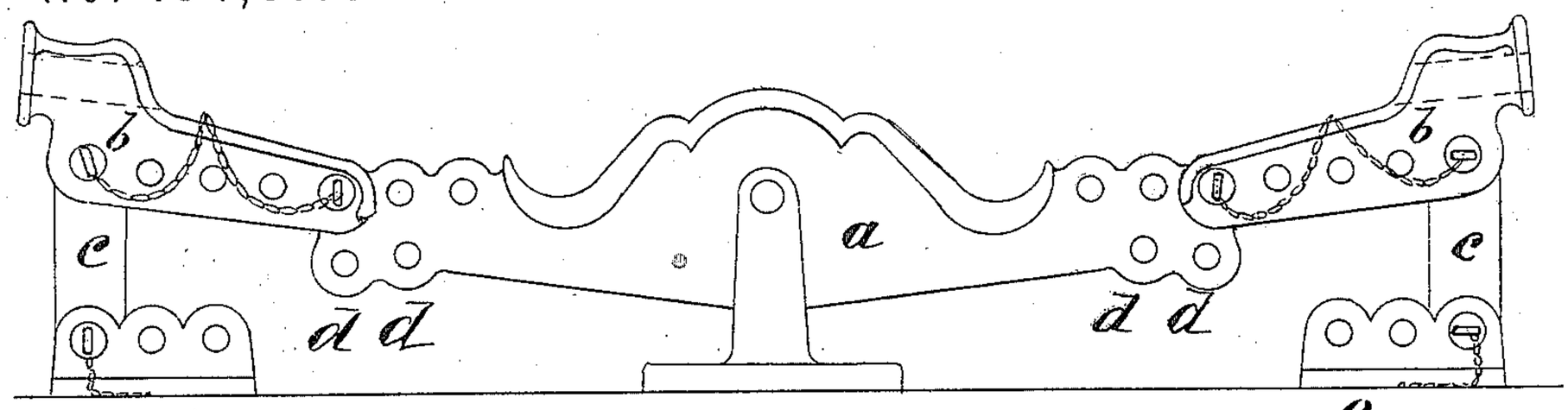

Fig. 1.

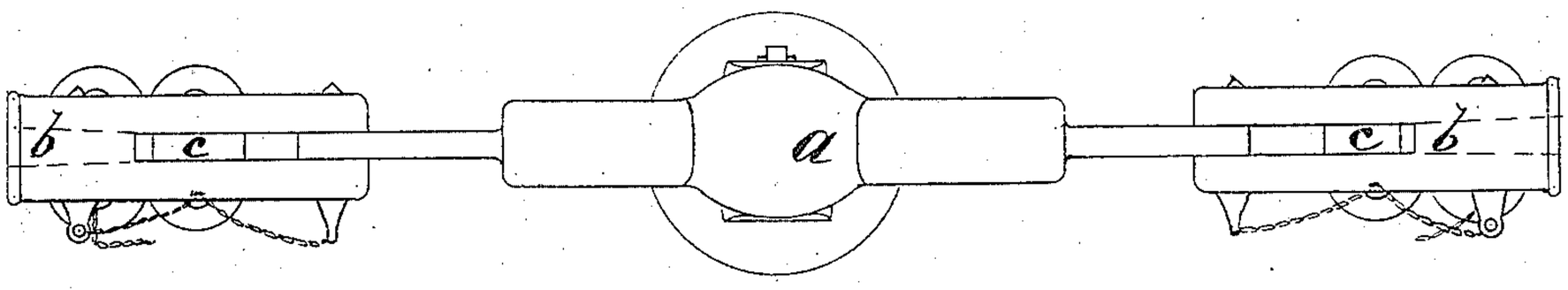

Fig. 2.

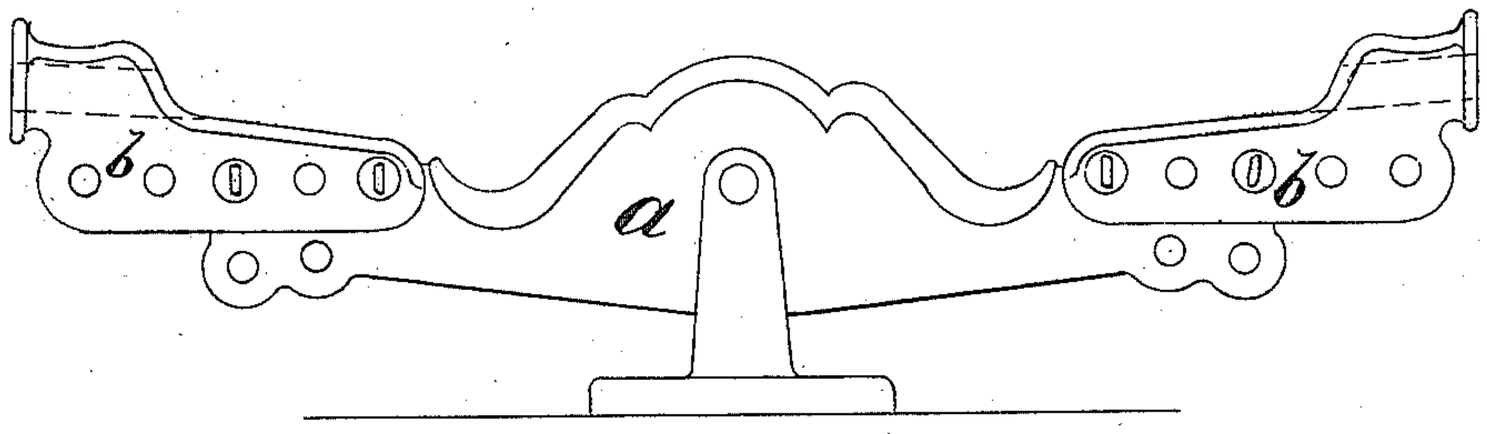

Fig. 3.

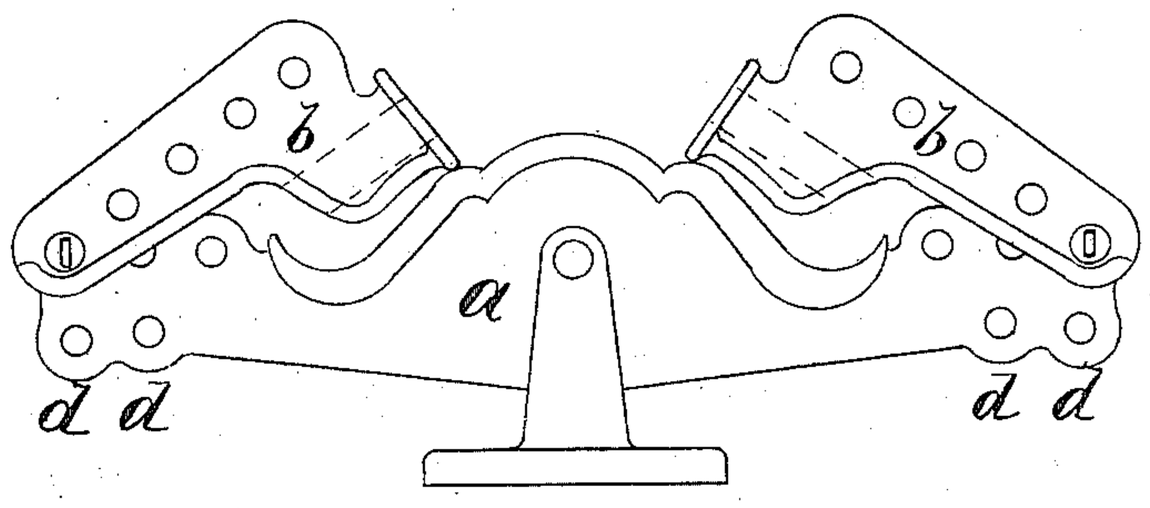

Fig. 4.

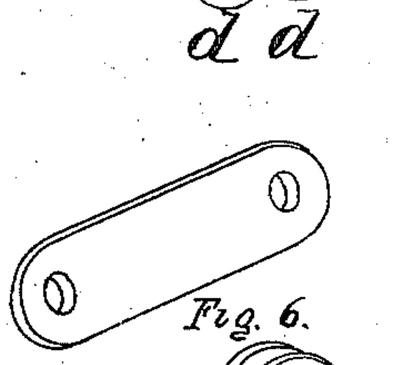

Fig. 6.

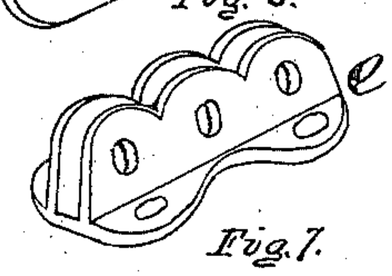

Fig. 7.

Fig. 5.

Witnesses.
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UNITED STATES PATENT OFFICE.

DAVID N. B. COFFIN, JR., OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN WINDLASSES.

Specification forming part of Letters Patent No. **134,517**, dated January 7, 1873.

To all whom it may concern:

Be it known that I, DAVID N. B. COFFIN, Jr., of Boston, Massachusetts, have invented certain Improvements in Windlasses, of which the following is a specification:

My invention relates to certain improvements upon the patent of Christopher Amazeen, No. 16,000, dated November 4, 1856; and consists in an improved construction of the parts, whereby a more direct and efficient action is obtained and facilities added.

Figure 1 is a side elevation of those parts of an "Amazeen" windlass, to which my improved construction is applied. Fig. 2 is a plan. Fig. 3 is a side elevation of the beam and lever-sockets as adjusted for use as a "simple beam," when nothing but an ordinary old-fashioned purchase is required. Fig. 4 shows a side elevation of the improved Amazeen beam when folded up and not in use. Fig. 5 is a perspective view of the lever-socket *b* with the lever *f* "shipped" in. Fig. 6 is a perspective view of one of the fulcrum-links. Fig. 7 is a perspective view of one of the improved steps *e*.

Like letters refer to like parts in all the figures.

The center beam *a* is pivoted in the middle as usual, but instead of a lever of one piece provided with pivotal holes in the same piece, a lever-socket piece, *b*, is furnished with the proper series of pivotal holes and a socket into which independent levers of varying lengths may all be fitted. The lever proper *f* may then be shipped or withdrawn at pleasure without interfering at all with the pivotal adjustment of the purchase. The levers are often required to be withdrawn hastily to clear the deck for other purposes, and when the pivotal pins are withdrawn for this purpose much care has to be exercised to replace them in the proper holes to give the required purchase, while with the socket-piece *b* fitted with all the necessary pivotal holes, the levers may be instantly withdrawn and as quickly re-shipped without interfering with or disturbing the pivotal adjustment, so that no delay for care in the readjustment is required, the pivotal adjustment all the while remaining the same. The usual fulcrum-link *c* connects the lever-socket *b* to the step with the usual pivotal pins. But the step *d* is furnished with a series of holes for the pivotal pin, corresponding to the similar series in the lever-socket, whereby, when I place the upper end of link *c* nearer the pivotal end of the lever-socket, I am not subjected to the disadvantage of working the link *c* in an inclined position, but can also adjust its lower end in a similar relative position to the lever-socket, and preserve the upright position of its center of oscillation without necessity of changing the pivotal pin in beam *a*. I can also fold the lever sockets, as shown in Fig. 4, (a very compact and convenient position when not in use,) without removing the end pivotal pin. The beam *a* is to be connected in the usual manner by shackles to the primary levers or "pawl-cases" of the windlass-barrel, for which purpose the holes *d* are provided.

The parts may be constructed of the usual materials—cast or wrought, as may be required.

Claim.

The short lever *b* when constructed with the lever-socket and the series of pivotal holes, and arranged in combination with the beam *a*, fulcrum-link *c*, and a step provided with one or more pivotal holes, substantially as and for the purpose set forth.

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Witnesses:

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