S. H. Downs,
Traveller.

No. 67,639. Patented Aug. 13, 1867.

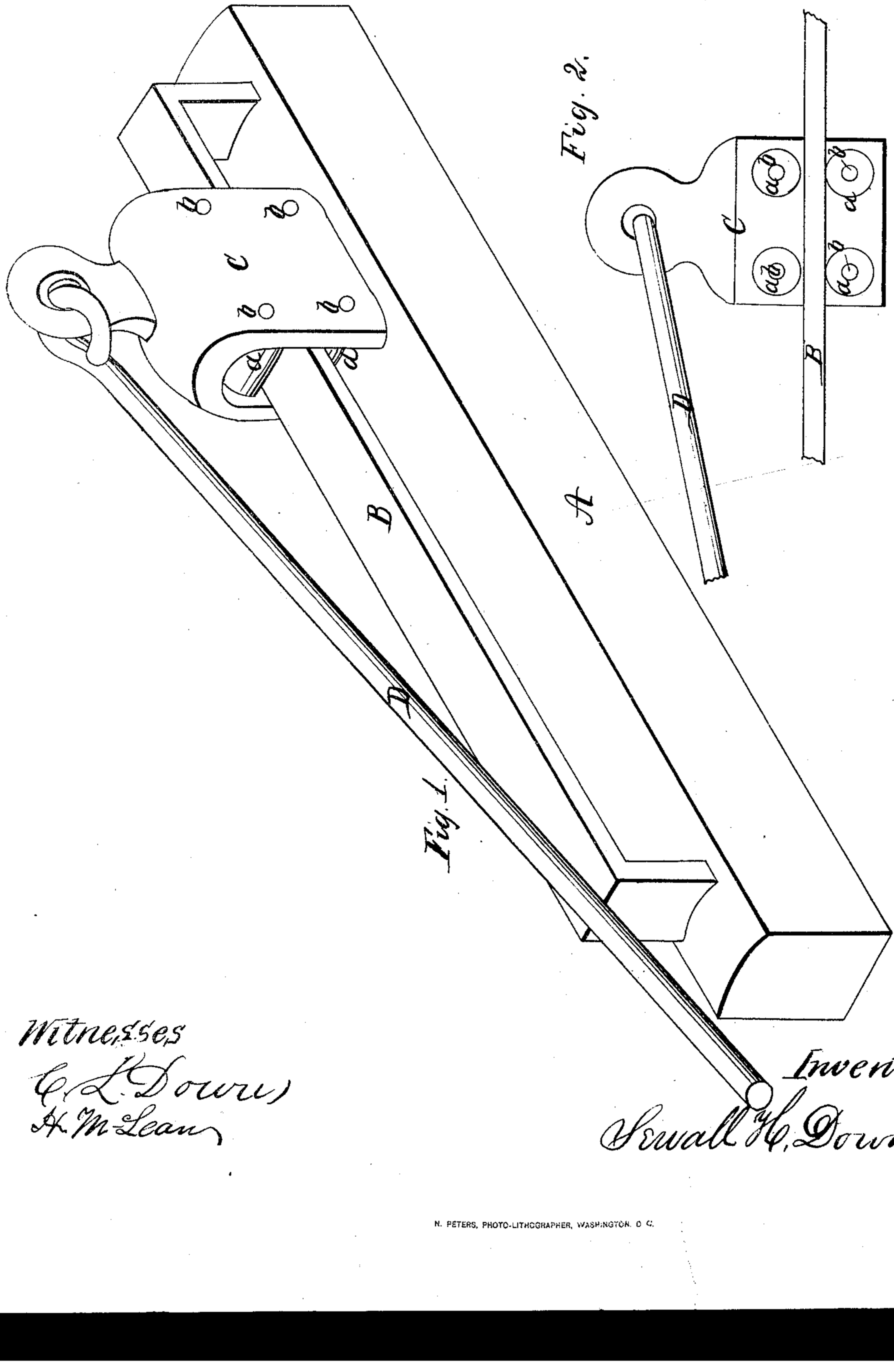

Fig. 1.

Fig. 2.

Witnesses
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SEWALL H. DOWNS, OF BANGOR, MAINE.

Letters Patent No. 67,639, *dated August* 13, 1867.

IMPROVEMENT IN TRAVELLERS FOR THE JIB'S BOOM OF VESSELS.

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, SEWALL H. DOWNS, of Bangor, in the county of Penobscot, and State of Maine, have invented a new and useful Improvement in Travellers for the Jib's Boom of Ships, Schooners, and other craft; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 is a perspective view of my invention, in which A designates a section of the jib-boom; B, the bar affixed to the jib-boom, and upon which the traveller moves; C, the cap or box of the traveller; D, the rod, or other contrivance, by which the traveller is connected with the jib's boom; *a a*, the rollers within the cap or box of the traveller, and *b b b b* the axles upon which the rollers revolve.

Figure 2 is a sectional view of my improvement, in which B designates the bar upon which the traveller moves; C, the cap or box of the traveller; *a a a a*, the rollers within the box or cap of the traveller, and *b b b b* the axles upon which the rollers revolve.

It may here be stated, in explanation, that a jib's boom, as contradistinguished herein from a jib-boom, is a spar or timber attached to the bottom of the main jib, and, at its forward extremity, generally connected with the jib-boom by a traveller or other similar contrivance.

The nature of my invention consists in providing the traveller with internal rollers, both above and below the bar upon which the traveller moves, in order to prevent the binding of the traveller, and to lessen the friction and consequent wear and tear of the several parts.

To enable others skilled in the art to make and use my improvement, I will now proceed to describe its construction and operation.

I construct the bar, upon which the traveller moves, of suitable metal, in a flat form, with right-angular edges, and affixed to the jib-boom in the usual manner, as shown at B in the accompanying drawings. I construct the cap or box of the traveller of suitable metal, and of such shape and size as to fit down over the bar, and to contain two or more rollers above, and two or more rollers below the bar, as shown at C in the accompanying drawings. I construct the rollers of suitable metal, perforated longitudinally through the centre to receive axles, and place them within the box or cap of the traveller, at right angles to the bar and to the cap or box of the traveller in a horizontal plane, as shown at *a a* and *a a a a* in the accompanying drawings. I construct the rollers so as not to bear tightly upon the bar, but so as to allow a very slight vertical and lateral movement of the traveller, as it moves backward and forward upon the bar. I construct the pins or axles of the rollers of suitable metal and pass them through the rollers, and through both sides of the cap or box of the traveller, as shown at *b b b b* in the accompanying drawings, and secure them firmly in their places, in such manner that they act as axles to the rollers, and, if need be, as bolts to prevent the box or cap of the traveller from spreading at its base.

In operation, the rollers *a a a a* revolve readily upon their axles *b b b b*, and allow the traveller to move surely, freely, evenly, and with very little friction along the bar, and the traveller is guided along the bar and held in a vertical position by the rollers *a a a a* and the sides of the cap or box C.

The advantages gained by my improvement are, firstly, that all danger of the "binding" of the traveller upon the bar, or between the bar and the jib-boom, is avoided, in whatever position the jib's boom may be, and in whatever direction the traveller may bear upon the bar or pull against it. This is of the greatest importance, for the binding or fouling of the traveller (a common occurrence with the travellers now in use) renders the jib unmanageable, and often occasions the loss or breakage of the traveller or of the jib's boom, even if it does not occasion more serious disaster; secondly, the traveller moves most readily along the bar, enabling the jib to adapt itself, with the greatest certainty and celerity, to every change in the force or direction of the wind; thirdly, the friction and consequent wear and tear upon the several parts are greatly lessened, and the durability of the traveller much increased; and, fourthly, the traveller, having very little play, cannot press down upon and gouge the jib-boom, as happens with the travellers now in use, especially when somewhat worn by the constant friction which they sustain.

I do not wish to be understood as claiming, as my invention, the particular shape, either of the bar B or of the cap or box C, or of the rod D, as shown in the accompanying drawings; but what I do claim as my invention and improvement, and desire to secure by Letters Patent, is—

Providing the interior of the cap or box of the traveller, for the jib's boom, with two or more rollers above and two or more rollers below the bar, and affixed substantially as set forth, to enable the traveller to move surely and easily along the bar without danger of binding, and to decrease the friction upon the several parts, for the purposes and in the manner substantially as set forth.

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Witnesses:

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