

A. RUSSELL.
Improvement in Windlasses.
No. 129,497. Patented July 16, 1872.

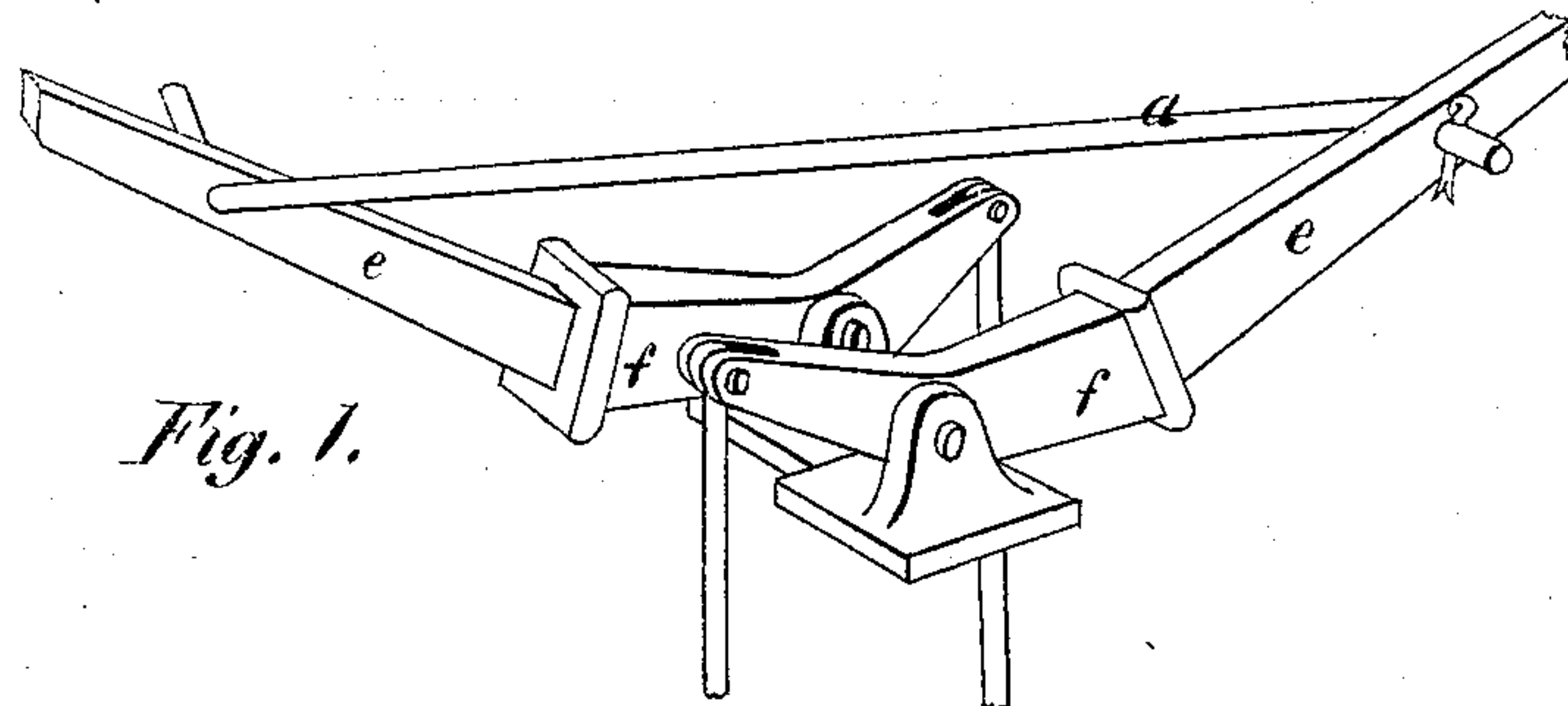


Fig. 1.

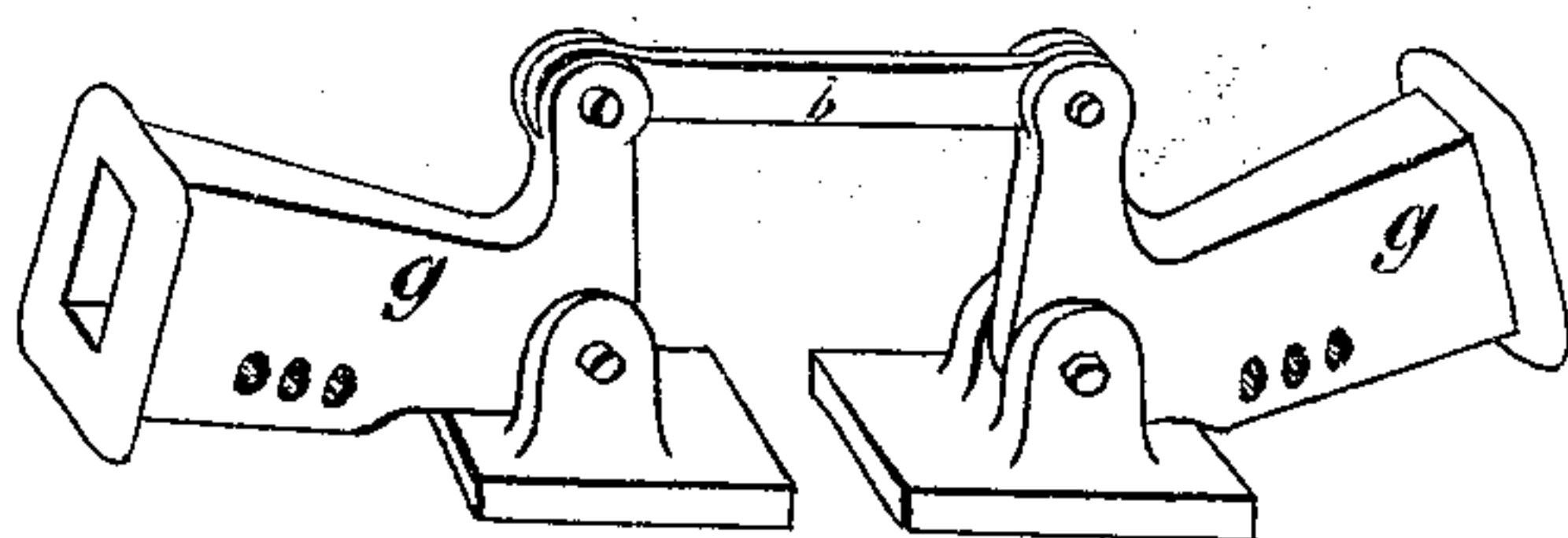


Fig. 2.

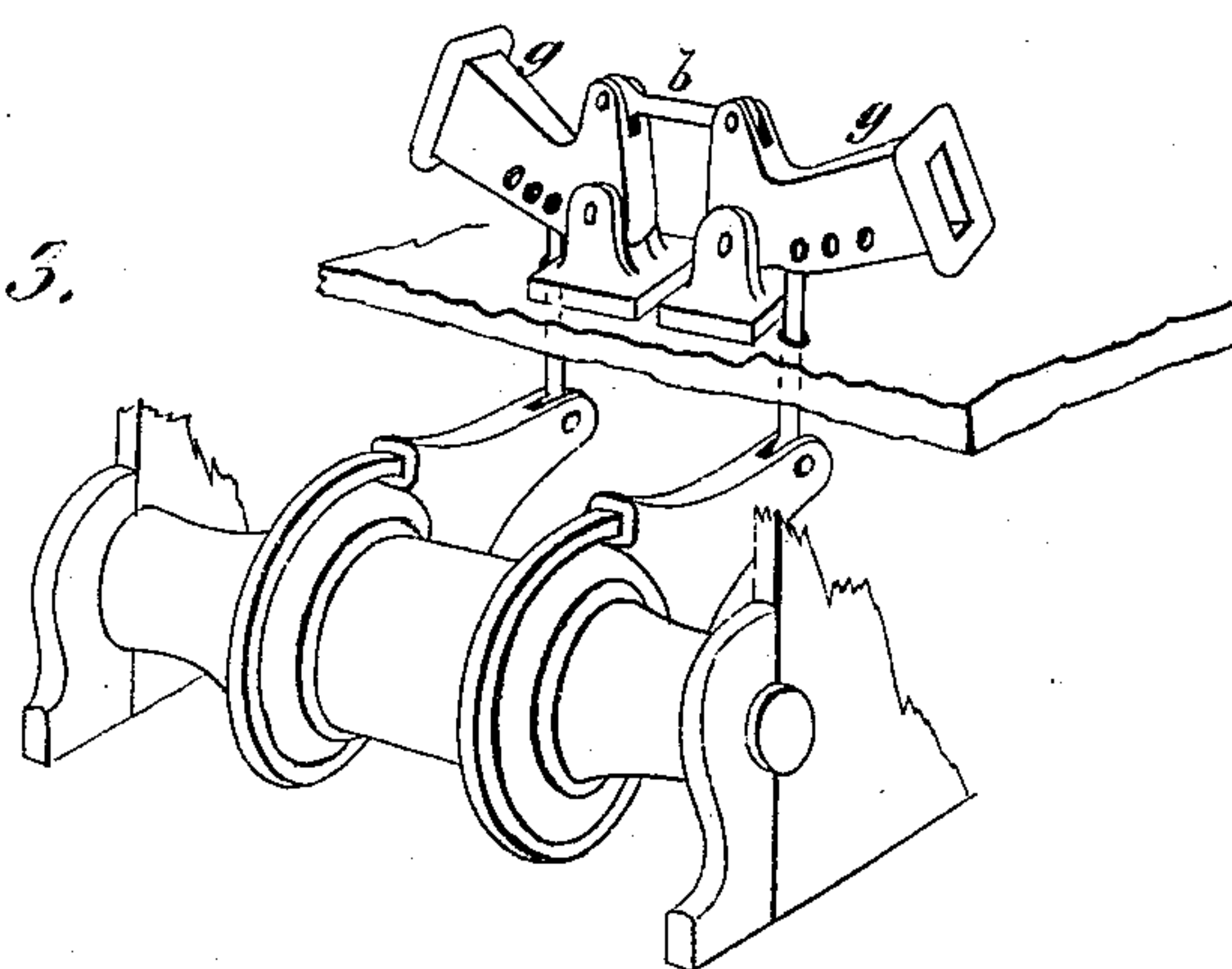


Fig. 3.

Witnesses.
F. D. Leonard
A. K. Richards

Inventor.
Albert Russell
By his Attorney *D. N. B. Coffin Jr.*

UNITED STATES PATENT OFFICE.

ALBERT RUSSELL, OF NEWBURYPORT, MASSACHUSETTS.

IMPROVEMENT IN WINDLASSES.

Specification forming part of Letters Patent No. 129,497, dated July 16, 1872.

Specification describing certain Improvements in Windlasses, invented by ALBERT RUSSELL, of Newburyport, in the county of Essex and State of Massachusetts.

My present invention is an improvement upon my former invention patented August 2, 1870, No. 105,982, and consists of such a construction as provides for the separately-journaled half-beams, and added detachable connection, as hereinafter more fully set forth.

While my former invention provides, by the construction of the beam in two parts or separately-journaled half-beams, for the closest desirable adjustment of the journal stand or fulcrum in relation to the rod connecting the beam to the pawl-cases of the windlass, and provides for working the men on both levers or half-beams simultaneously in one direction, thereby to secure at each stroke their greatest combined power, the present invention, retaining these advantages, provides the added facility for occasional use, or use whenever speed is of more consequence than the greatest degree of power, to connect in a novel manner the two separately-journaled or pivoted half-beams or levers and restore to them the compulsory alternating action incident to the ordinary or common single or whole beam.

Figure 1 is a perspective view, and shows my present improvement as applied to that previously patented August 2, 1870. Fig. 2 is a perspective view, illustrating a modification of the formerly-patented beam and the present-improved connection applied thereto. Fig. 3 is a perspective view of an ordinary windlass-barrel and pawl-cases, *c d*, with the modification of Fig. 2 applied thereto.

My present improvement is embraced in the construction and application of the connections, *a* and *b* to the separately-journaled half-beams.

The construction will be seen in the drawing, *a* being a rod furnished with a hook or wrist at each end. These hooks or wrists pass through holes in the brake-levers and are kept in place by means of a split pin, by removing which the rod may be detached at pleasure. It is used when facility of action and simple speed are required; but if the greatest united power of the men employed upon the windlass is required, the rod *a* is then detached, and the men can then all heave simultaneously in one direction until the anchor has broken ground, or other heavy work accomplished, after which the rod *a*, being connected as in Fig. 1, the regular alternating motion or action of the men is thereby made compulsory. The latter effect is also secured when the beams or half-beams are connected by the connecting rod *b* of Fig. 2.

Claim.

The two half-beams, each being provided with its own separate fulcrum or journal, in combination with a connecting-bar, whereby the half-beams may be operated simultaneously or alternately, at the will of the operator, as and for the purpose described.

ALBERT RUSSELL.

Witnesses:

C. O. MORSE,
GREENLEAF DODGE.