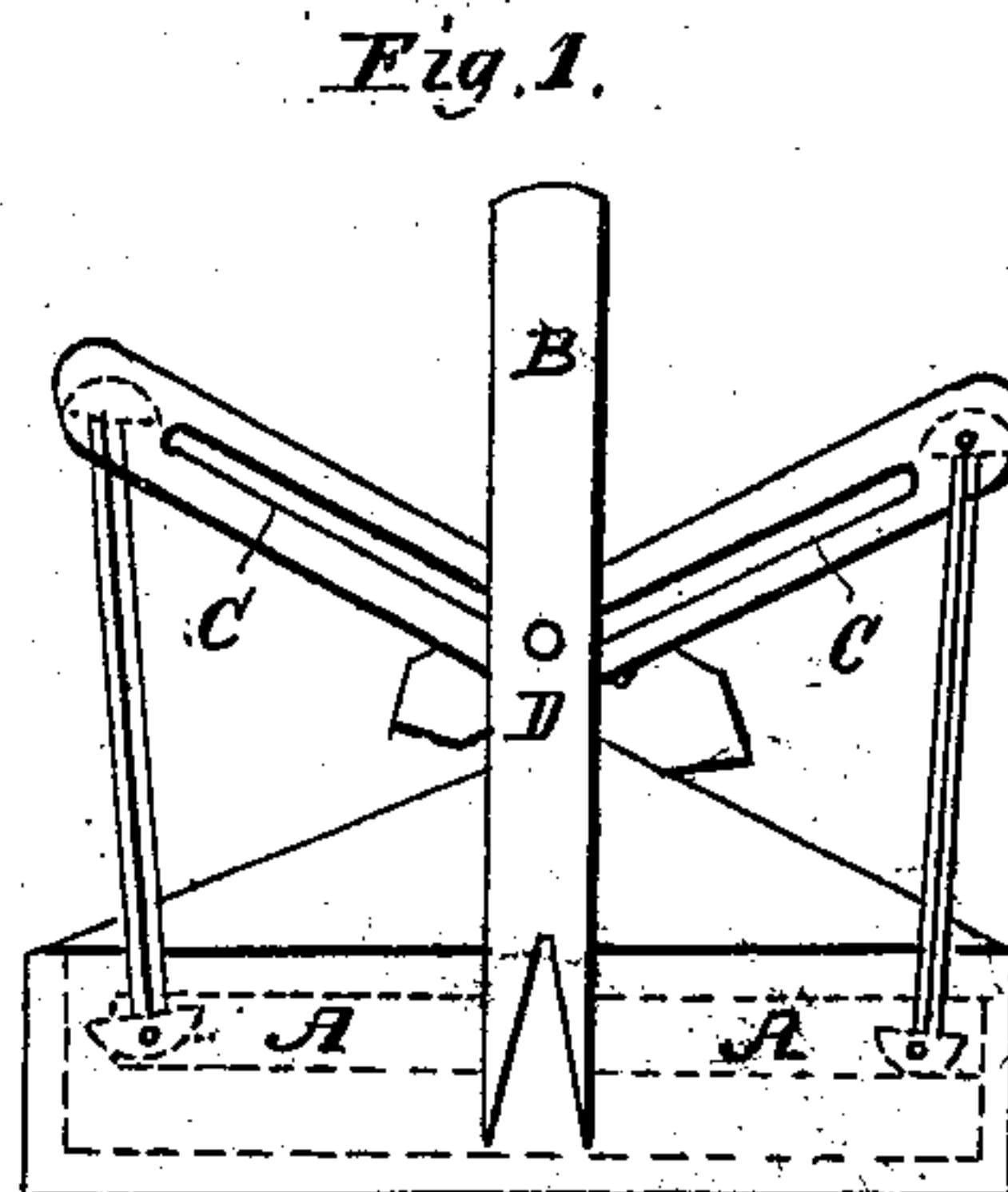
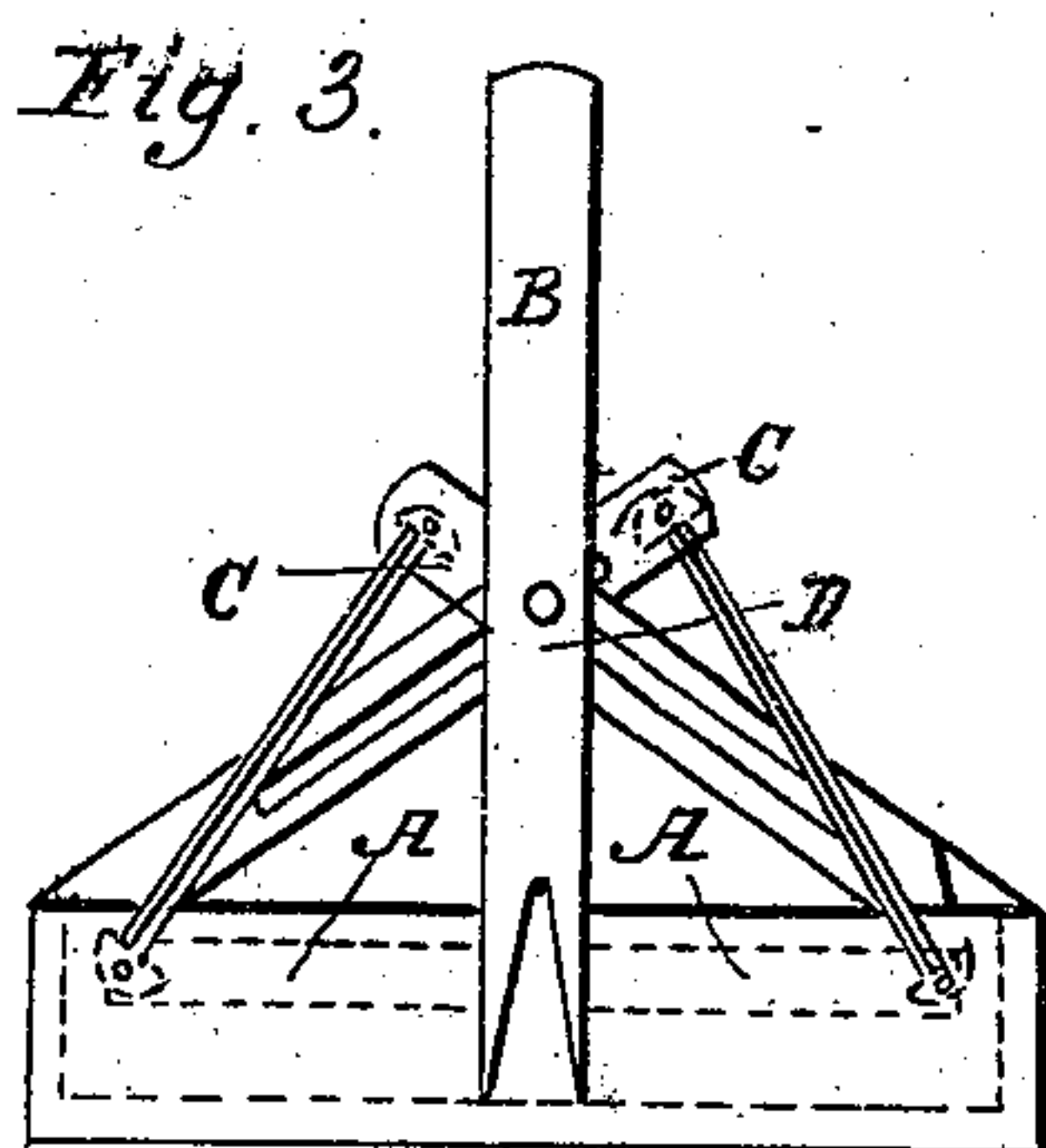
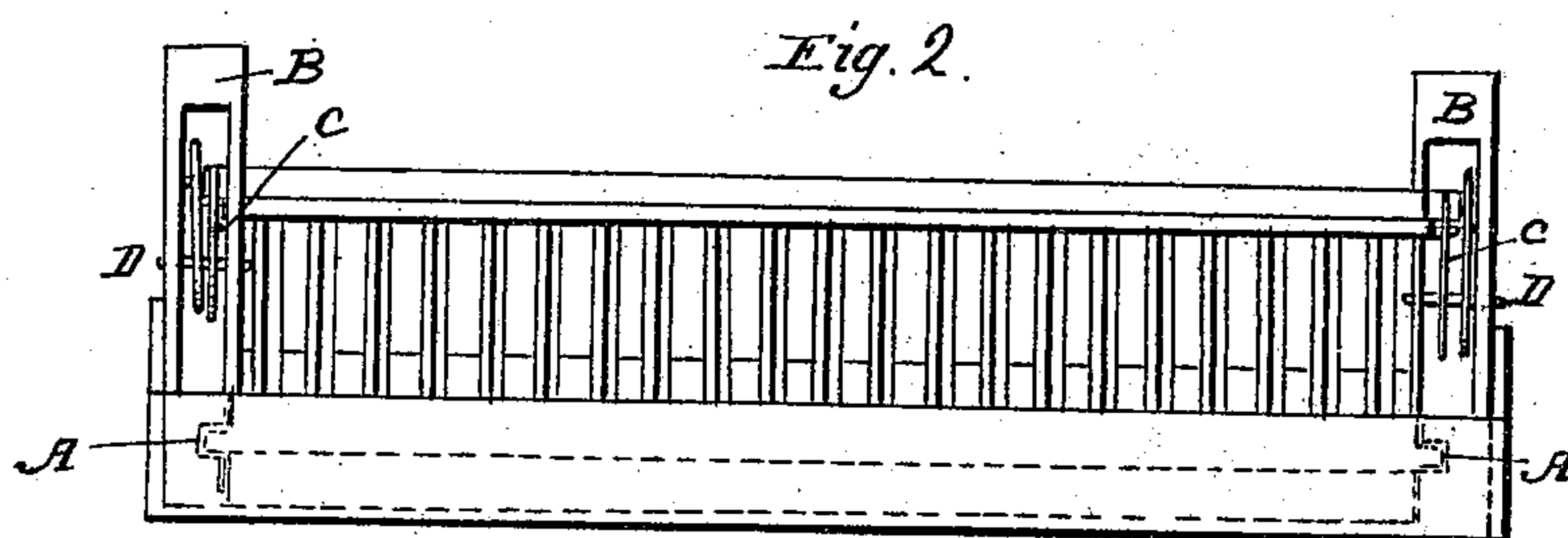
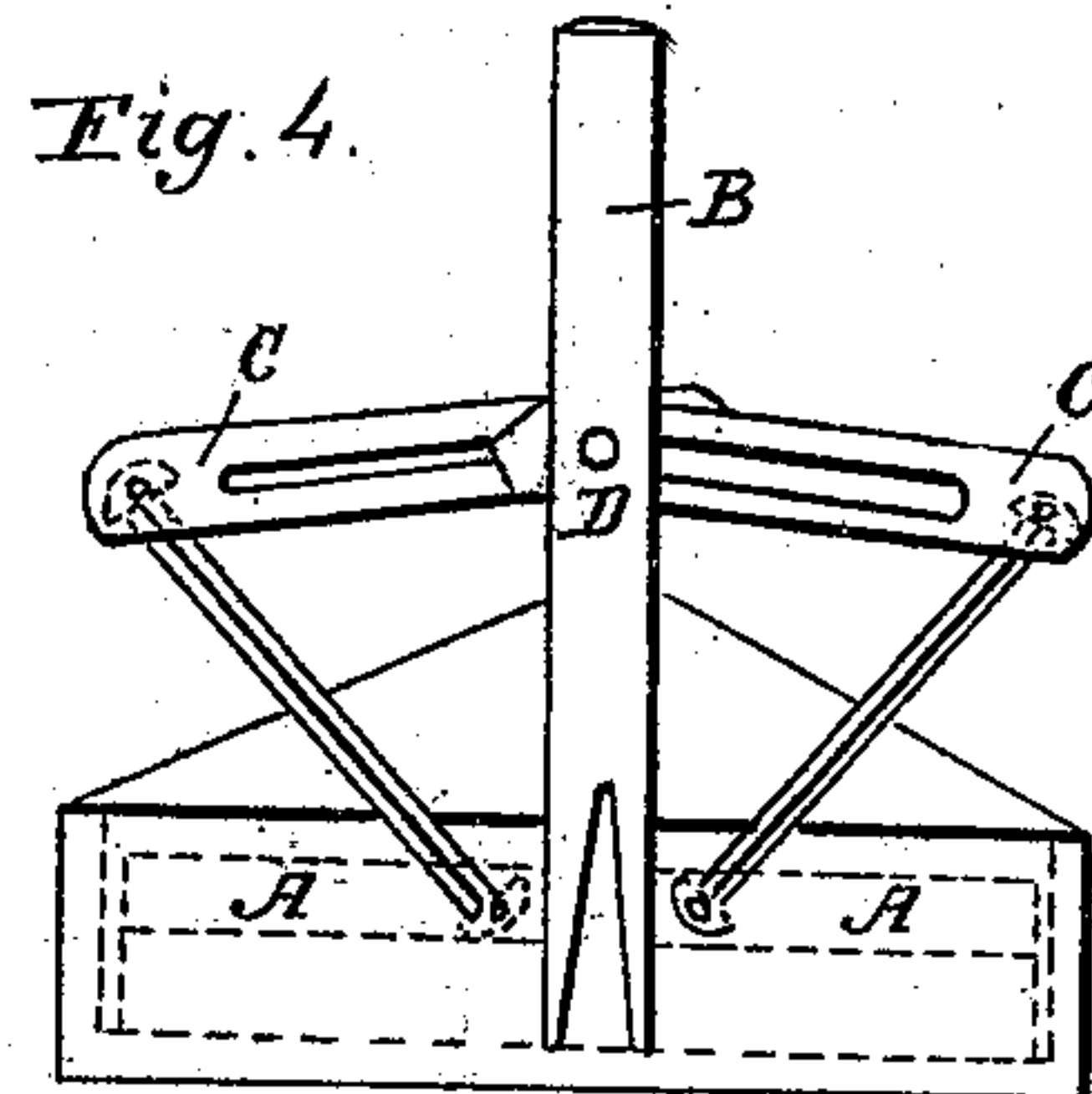
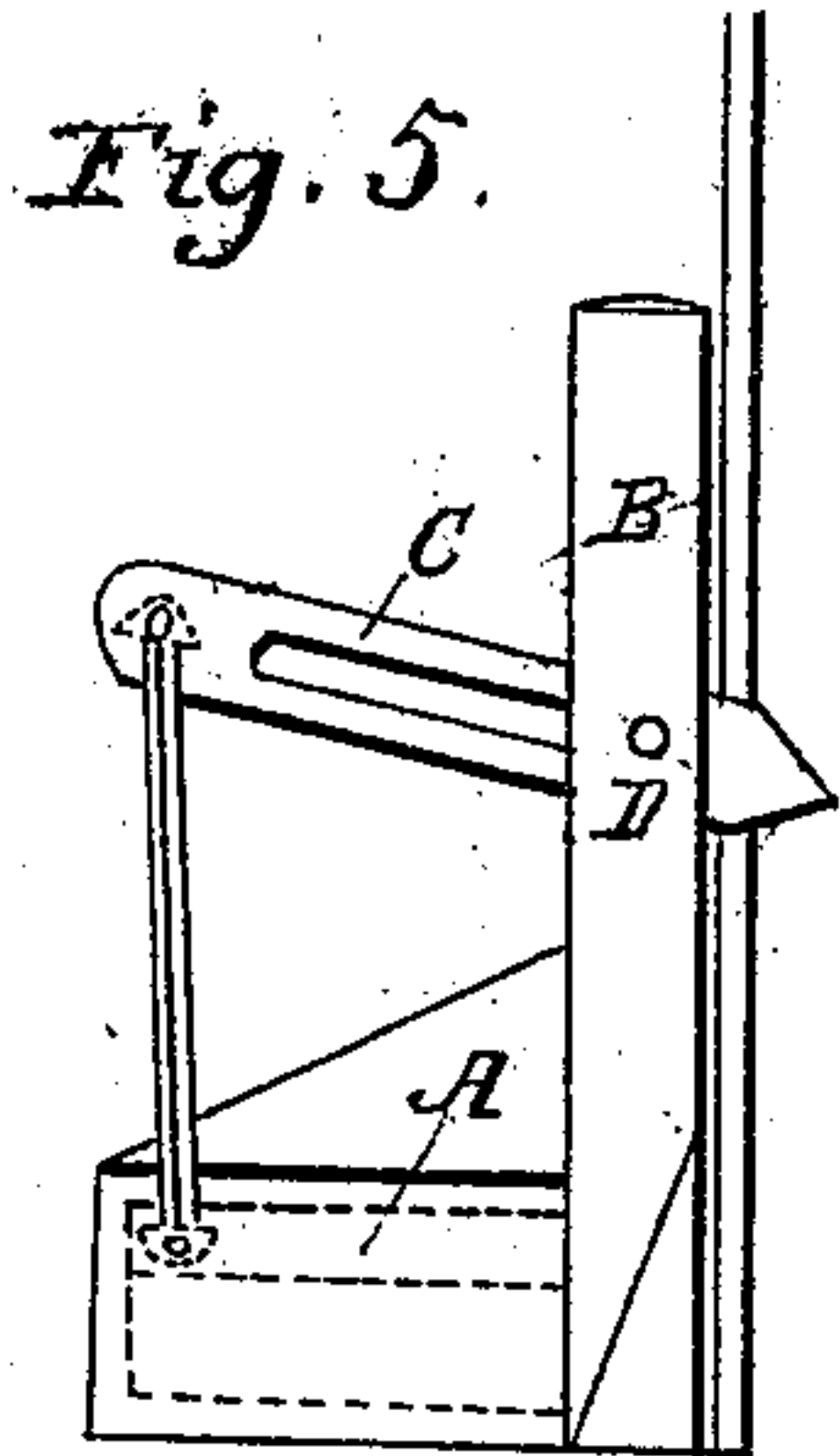


W. & H. SIAS.

Feed Rack.

No. 43,609.

Patented July 19, 1864.



Witnesses:
George Stevens
Christopher Stevens.

Inventors:
William Sias
Holland Sias

UNITED STATES PATENT OFFICE.

WILLIAM SIAS AND HOLLAND SIAS, OF HENDERSON, NEW YORK.

FEED-RACK.

Specification forming part of Letters Patent No. **43,609**, dated July 19, 1864.

To all whom it may concern:

Be it known that we, WILLIAM SIAS and HOLLAND SIAS, of the town of Henderson, in the county of Jefferson and State of New York, have invented a new and useful Improvement in Feed-Racks, by which they are better secured from the liabilities of damage by the elements of snow, and ice, and wind, and the animals of the farm-yard, and may be used with greater ease and less labor and inconvenience than others now in use; and we do hereby declare that the following is a full and exact description thereof.

The nature of our invention consists in affixing in the ends of the mangers a grooved bed-piece, (marked A in Diagram No. 2,) of sufficient size to raise the bottom rails of the racks a suitable distance from the bottom of the mangers. Into these grooves the ends of the bottom rails of the racks are entered, being so fitted as to allow them to roll and be moved from side to side in the mangers. Into the center of these bed-pieces is framed the perpendicular mortised post marked B in diagrams. Through the mortises in the post is passed the mortised sliding bars marked C in the diagrams, and connect with the top rails of the racks and resting on the pin marked D, as seen in Diagram No. 1, so fitted as to allow the top of the racks to be moved into all of those positions, and substantially held, as seen in Diagrams 1, 2, 3, 4, 5.

To enable others to make and use our invention, we will proceed to describe its construction and operation.

We construct our mangers and racks in any of the known forms now in use, excepting in what the addition of our invention changes the mode of construction.

To construct our double racks, we extend across the ends of both mangers our grooved bed-pieces. In the center of these we frame the perpendicular posts marked B in the diagrams. We groove these bed-pieces from the posts to within three inches of their ends, as seen in Diagram No. 2, and marked A. Into these grooves we insert the ends of the bottom rails of the racks, the ends being so fitted as to allow them to roll and be moved from side to side in the mangers. We make a mortise through the posts B, extending from three inches above the top of the racks, when standing in perpendicular form, down to the

ends of the posts. Through these mortises we pass our mortised sliding bars, made of wood or iron, (marked C in diagrams.) These we attach to the top rails of the racks by means of a rolling loop-joint, resting them on a pin, (marked D,) that passes through the mortises in the bars, allowing the top of the racks to be moved to all of those positions seen in Diagrams Nos. 1, 2, 3, 4, 5.

In constructing single racks for the use of stable-mangers and sides of sheds and barns, we copy the same mode as may be seen in Diagram No. 5.

In operating the racks we stand at the side center and move the top and bottom out to extreme points, as seen in Diagram No. 1. To prepare the racks for feeding coarse feed that cannot be eaten by animals through the racks, we push the bottom rails to the back of the mangers, allowing the top rails to drop down and out, as seen in Diagram No. 4, making a rack-manger.

To prepare the rack to be filled with hay, we draw the bottom to the outside of the mangers, as seen in Diagram No. 1. When filled, we move the top rails back against the posts and hook them together, as seen in Diagram No. 3.

To use the mangers we move the top and bottom rails back against the posts, as seen in Diagram No. 2.

We disclaim all forms and modes existing now in feed racks, excepting so far as our invention adds to form and modes of operating and constructing racks and mangers used in husbanding the farm-yard.

What we claim as our invention, and desire to secure by Letters Patent, is—

The application to feed-racks of the grooved bed-pieces A, the mortised perpendicular posts B, the mortised sliding bars of wood or iron, C, connecting with the top rails of the racks, and the pivot-pin D, that passes through the posts and mortises in the sliding bars, and consequent mode of operation by which the superior qualities of durability and utility are added to the substantial manner in which our racks are constructed and the great ease secured to the mode of operating our racks.

WILLIAM SIAS.
HOLLAND SIAS.

Witnesses:

A. E. BURNHAM,
A. A. DAVIS.