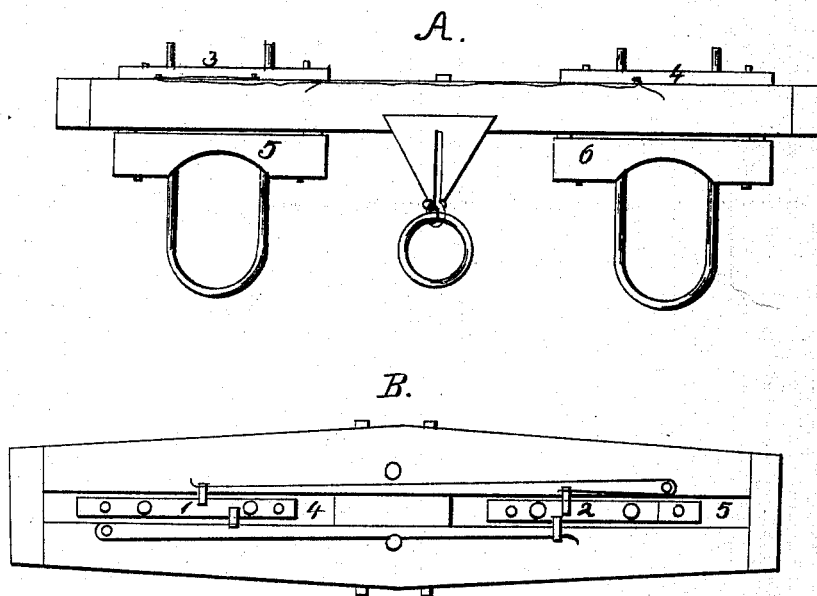


E. S. WOODFORD.

Ox-Yoke.

No. 47 263.

Patented Apr. 11, 1865.



Witnesses.

*C. A. Heath*  
*Caleb P. Neumann*

Inventor.

*E. S. Woodford*

# UNITED STATES PATENT OFFICE.

ERASTUS S. WOODFORD, OF WINCHESTER, CONNECTICUT.

## IMPROVED OX-YOKE.

Specification forming part of Letters Patent No. 47,263, dated April 11, 1865.

*To all whom it may concern:*

Be it known that I, ERASTUS S. WOODFORD, of Winchester, Litchfield county, and State of Connecticut, have invented a new and useful Improvement in the Construction of Ox-Yokes; 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.

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

The nature of my invention consists in constructing and arranging the cords, and staples to which the cords are attached, for the purpose of maintaining the desired length of lever by which each ox works, in such a manner that one cord can be shortened and the other cord lengthened so as to give one ox the advantage in the length of lever by which he works by turning the staples to which the ropes are attached—the one staple to shorten, the other staple to lengthen, the rope. These staples may be drawn out of the cap and turned the desired way to lengthen and shorten the cords as desired, or they may reach through the caps No. 3 and No. 4, with a nut screwed onto the end to hold the staple in its desired position, for maintaining the length of lever desired for each ox, and changing the same.

As the blocks 1 and 2 move in the slot of the yoke, any desired relation between the arms of the lever is maintained for every position of the bow-slides.

The neck-blocks are controlled so they may approach and recede from the center of the yoke as the oxen incline to crowd or haul toward or from each other, by means of a

cord running from a bolt or staple in the side of cap No. 3, over a swivel attached to the upper surface of the beam, to a staple in the side of cap No. 4, and a like arrangement on the other side of the caps, the staple being fastened to the side of cap No. 4, over a swivel attached to the beam, to a staple in the side of cap No. 3. By shortening the cord running from block No. 1, cap No. 3, and lengthening the cord running from block No. 2, cap No. 4, the arm of the lever with which the ox under cap No. 4 will be increased, and the arm of the lever by which the other ox acts will be correspondingly diminished; and, as the blocks 1 and 2 move in the slot 4 and 5, this relation between the arms of the lever is maintained for every position of the bow slides or blocks.

Letter A is a perspective view of the yoke. Letter B is a surface view of the yoke.

Figures 1 and 2 are movable blocks through which the bows pass, and to which are bolted the caps 3 and 4 on the upper side, and neck-blocks 5 and 6 on the under side. Figs. 3 and 4 are caps through which the bows pass and to which the cords are attached that regulate the lever by which each ox acts.

What I claim as my invention, and desire sired to secure by Letters Patent, is—

The manner of arranging the staples and cords in combination with the bow-blocks 5 and 6, the center blocks, 1 and 2, and the caps Nos. 3 and 4, as and for the purposes herein set forth.

I do not claim devices for the simultaneous movement of the bow-blocks, as such are not new.

ERASTUS S. WOODFORD.

Witnesses:

ROLAND HITCHCOCK,  
J. D. HOWE.