

T. W. Porter,

Ox Yoke.

N<sup>o</sup> 32,646

Patented June 12, 1861.

Fig: 2.

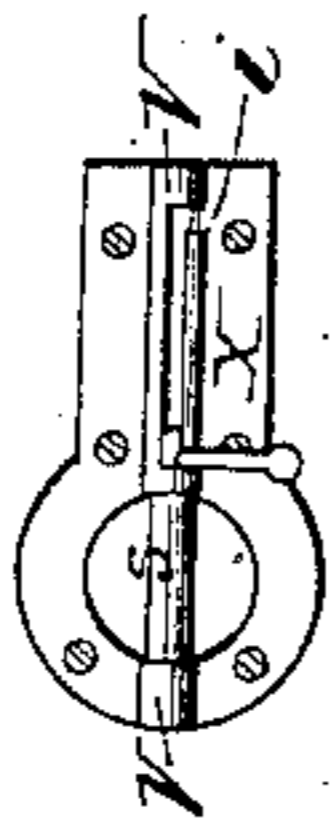
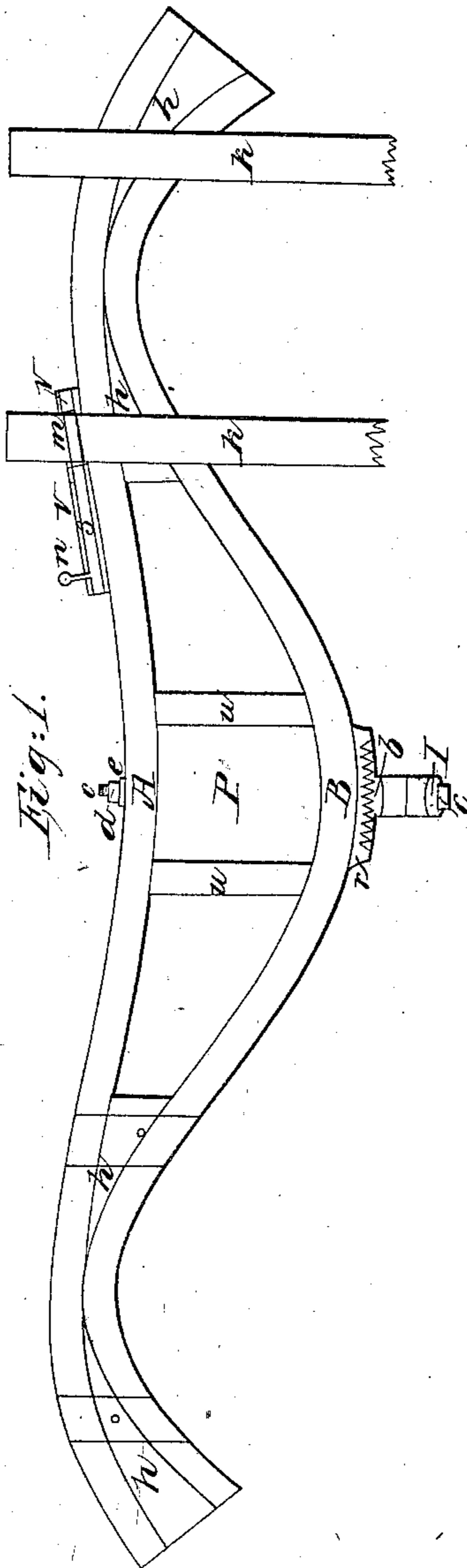


Fig: 1.



Witnesses:  
A. S. Simpson  
George Fuller

Inventor:  
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# UNITED STATES PATENT OFFICE.

THOMAS W. PORTER, OF BANGOR, MAINE.

## OX-YOKE.

Specification of Letters Patent No. 32,646, dated June 25, 1861.

*To all whom it may concern:*

Be it known that I, THOMAS W. PORTER, of Bangor, in the county of Penobscot and State of Maine, have invented a new and useful or Improved Ox-Yoke and Bow-Holder; 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.

Figure 1 is a longitudinal vertical section of the yoke, and Fig. 2 is a perspective view of the bow holder.

The nature of my invention consists in the peculiar form and arrangement of the constituent parts of the yoke, in a peculiar device for adjusting the point of draft, and a bow holder which serves both as a bow pin and protection plate around the bow hole.

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

In the drawings A, Fig. 1, is a thin piece of wood, of the width required for the yoke, bent in the form desired for the back of the yoke. B is a similar piece bent in the desired form of the breast and ends of the yoke. *h, h*, are pieces of wood placed transversely in respect to the grain or fiber to the pieces A and B, the whole being firmly fastened by bolts and rivets. *o, o*, are the bow holes. *u, u*, are parts of the stay or prop placed between A and B. *c* is the staple or clasp which embraces the center of the yoke. *l* and *b* are throat pieces of metal held in the curve of the staple *c*. *r* is a metallic plate secured to the breast of the yoke. This plate is serrated along its center and the corresponding teeth upon the throat piece *b* matching into it serves to hold the staple and throat pieces in position, and by turning back the nuts *a* upon the staple, the position of the throat pieces and staple may be changed relatively to the plate *r*, thereby changing the point of draft as is often absolutely necessary owing to the unequal strength of the oxen.

Fig. 2 is the bow holder or pin, which is also shown in Fig. 1. X is a bed plate formed with a circular aperture near one end for the reception of the bow. *s* is the bolt or pin which slides in the case *v*. The

bolt is actuated by the knob or pin *n*. *k, k*, represent the ends of one of the bows. *m* is the bow pin hole through which the pin or bolt *s* passes, and P is a part of the stay or prop placed between A and B, the piece P in the drawing is placed transversely—in respect to the grain—to the pieces *u, u*, as shown in the drawing, and the pieces P, P, of which there are of course two, are riveted firmly together by rivets passing through both and also pieces *u, u*. This stay may be formed in various ways and of different lengths according as it is desirable that the yoke shall be elastic or stiff and unyielding.

Among the advantages of my yoke are its lightness and elasticity as well as its cheapness, less than one fourth the timber being required for its construction than the common yoke and while the latter requires large timber for their construction this may be formed of boards of only seven inches in width. And by forming the ends of several layers of wood a part being transverse in the direction of the fiber or grain to the other all danger of rending or splitting is avoided. While by bending the main pieces A and B many advantages are gained among which are its strength over those cut from straight wood, the breast may be made sufficiently deep—one of the most important points in a yoke—without a comparative increase of weight, and size of timber from which to make the yoke, and lastly by bending the wood to the curvature of the parts which bear upon the necks of the oxen a smoother surface can be obtained and all danger of the wood rending and splitting away at the bow holes is avoided.

The advantages of the pin or holder are its compactness, its security, its cheapness, and its being always in the right place when wanted while it not only secures the bow in place but effectually protects the yoke at the hole from wear by the pin or otherwise.

What I claim is—

1. The pieces A and B in the construction of ox yokes when arranged substantially as described.

2. Forming the ends of yokes of two or more layers of wood the grain or fiber of one or more layer or layers being placed

transversely to that of the other or others substantially as described.

3. Forming that part of the yoke which bears upon the neck of the ox, by bending  
5 the wood so that the direction or curvature of the grain or fiber shall conform to the curvature of said part of the yoke.

4. The bow holder or pin when used in combination with the yoke substantially as described and for the purposes specified.

T. W. PORTER.

Witnesses:

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