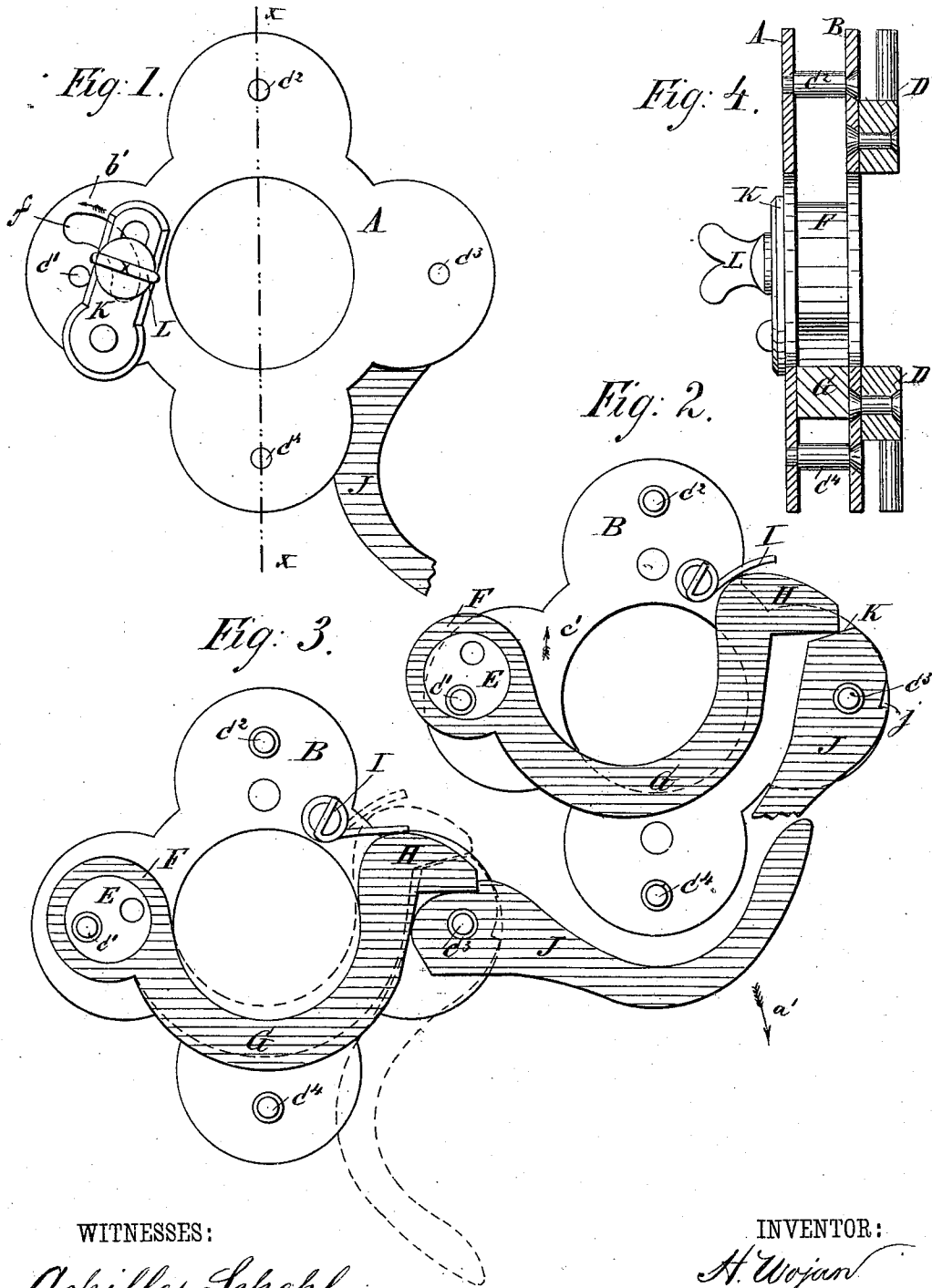


H. WOJAN.  
Ox-Bow Fastener.

No. 227,399.

Patented May 11, 1880.



WITNESSES:

*Achilles Seckel.*  
*C. Sedgwick*

INVENTOR:

*H. Wojan*

BY

*Munn & Co.*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

HERRMANN WOJAN, OF GOLDEN'S BRIDGE, NEW YORK.

## OX-BOW FASTENER.

SPECIFICATION forming part of Letters Patent No. 227,399, dated May 11, 1880.

Application filed October 15, 1879.

To all whom it may concern:

Be it known that I, HERRMANN WOJAN, of Golden's Bridge, in the county of Westchester and State of New York, have invented a new and Improved Ox-Bow Fastener, of which the following is a specification.

The object of my invention is to provide a new and improved ox-bow fastener which is simple in construction and convenient in use.

The invention consists in an ox-bow fastener formed of two annular plates, between which an adjustable lever is pivoted eccentrically, and is acted upon by a cam-lever, also pivoted between the two plates.

In the accompanying drawings, Figure 1 is a plan view of my improved ox-bow fastener. Fig. 2 is a plan view, showing the apparatus closed and having the top plate removed. Fig. 3 is a plan view, showing the apparatus opened and having the top plate removed. Fig. 4 is a vertical cross-sectional elevation on the line *x x* of Fig. 1.

Similar letters of reference indicate corresponding parts.

Two annular plates, A and B, are connected with each other by means of four posts, C', C<sup>2</sup>, C<sup>3</sup>, and C<sup>4</sup>, so that there is sufficient space between the plates to receive the mechanism of the apparatus, as is shown in Fig. 4.

The lower plate, B, resting upon the yoke, is provided with two or more angular lugs or hooks, D D, for fastening the apparatus to the yoke, which is provided with a slotted plate or some other suitable device, into which the lugs D D can pass.

A small flat cylindrical piece, E, is eccentrically pivoted on the pin C', and is embraced by the eye F of a curved lever, G, the other end of which terminates in an angular projection, H, against which a spiral spring, I, fastened to the plates in some suitable manner, presses to keep the lever G back when the apparatus is open.

A cam-lever, J, provided with a small notch, *j*, is pivoted on the post C<sup>3</sup> in such a manner that the projection H of the lever G rests against the cam, as is shown in Figs. 2 and 3.

A slotted plate, K, is pivoted to the top plate, A, and a thumb-screw, L, passes through the slot in K and through the slot *f* in the top plate, A, and takes in a screw-hole in E.

The operation is as follows: The apparatus is fastened to the yoke over one of the apertures for each bow, so that when the bow is passed into the yoke one of the ends of the bow will pass through the opening of the apparatus, the same being opened, as shown in Fig. 3. The cam-lever J is drawn in the direction of the arrow *a'*, and will press the curved lever G against the bow until the point of the projection H rests against the straight edge *k* of the cam-lever, and the lever G is thus locked in this position.

As ox-bows of various sizes are used the apparatus must be adjusted accordingly. This is done by moving the thumb-screw L in the direction of *b'* in case a thin bow is used, for then the center around which G turns will have moved forward in the direction of *c'*, and consequently G will cover a corresponding greater part of the opening in the plates. If the screw L is moved in the direction opposite to *b'*, the center around which G turns will also move back, and G will cover a smaller part of the opening in the plates. By screwing the thumb-screw up tight the center of G can be maintained in any desired position.

If the improved fastening is used, the bows need not be weakened by holes, notches, &c., which were required for the fastenings in use heretofore.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. As an improved article of manufacture, the within-described ox-bow fastener, consisting of two annular plates, between which an adjustable curved lever, G, acted upon by a spring, I, and turning upon an eccentric, E, and a cam-lever, J, are pivoted, substantially as shown, and for the purpose set forth.

2. The combination of the curved lever, G, with the slotted piece K, thumb-screw L, and eccentric E, substantially as herein shown and described, and for the purpose of adjusting the lever G to suit the different sizes of the bows.

HERRMANN WOJAN.

Witnesses:

ARTHUR BRADY,  
MARTIN TODD.