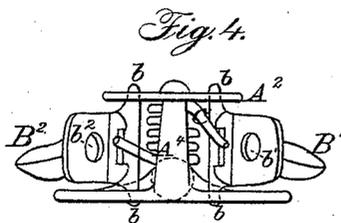
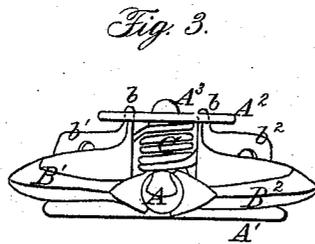
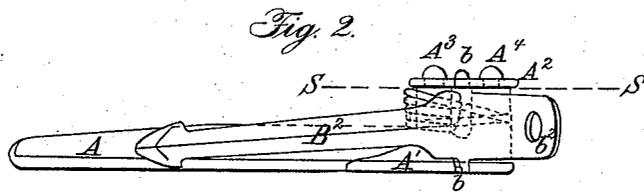
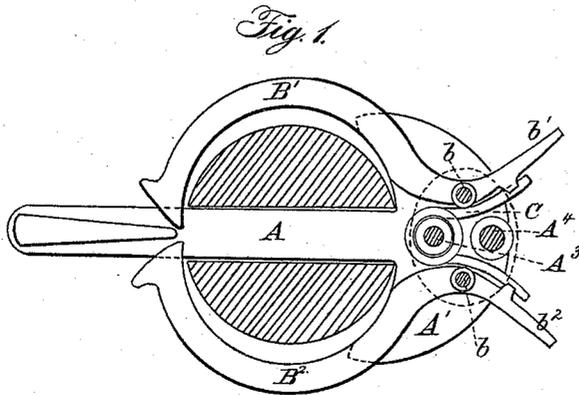


B. B. HOTCHKISS.

Ox-Bow Pin.

No. 63,894.

Patented Apr. 16, 1867.



Witnesses:

*W. C. Dey.*

*F. A. Hadicke*

Inventor:

*B. B. Hotchkiss.*

# United States Patent Office.

B. B. HOTCHKISS, OF NEW YORK, N. Y.

Letters Patent No. 63,894, dated April 16, 1867.

## IMPROVEMENT IN OX-BOW PINS.

The Schedule referred to in these Letters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, B. B. HOTCHKISS, of the city and county of New York, and State of New York, have invented certain new and useful improvements in Ox-Bow Pins; and I do hereby declare that the following is a full and exact description thereof.

My bow-pin is an improvement on that patented by my brother, Andrew Hotchkiss, patent dated July 17, 1849. It is adapted to apply to securing the bows of ox-yokes of any ordinary form and material, and to allow of the ready liberation of the bow with very little labor or difficulty. The importance of strength with ease and certainty in the operation is very well understood. The latter qualities are especially important in the frequently recurring cases where one or both of the oxen fall, and the yoke becomes partially or entirely turned so as to choke the animal.

I will first describe what I consider the best means of carrying out my invention, and afterwards designate the points which I believe to be new. The accompanying drawings form a part of this specification.

Figure 1 is a cross-section on the line S S in fig. 2.

Figure 2 is an edge view.

Figure 3 is a front view, and

Figure 4 is a back view, each representing the pin complete.

Figure 1 further represents a cross-section of the ox-bow to which the pin is applied, the ox-bow being represented in red lines.

Similar letters of reference indicate like parts in all the figures.

A is the pin proper, and A<sup>1</sup> is a broad flange at the head, which, with a corresponding and smaller flange mounted above, as indicated by A<sup>2</sup>, form the cheeks or framing on which the arms are mounted. B<sup>1</sup> B<sup>2</sup> are the arms which lock the pin upon the bow; they turn on the trunnions b, which are supported in the cheeks A<sup>1</sup> and A<sup>2</sup>, so that they are free to turn. The arms B<sup>1</sup> B<sup>2</sup> are opened by the action of the thumb and finger upon the extensions b<sup>1</sup> and b<sup>2</sup>, as indicated. C is a coiled spring, of brass wire or other suitable material, with the ends extended as represented; it tends to press the arms B<sup>1</sup> B<sup>2</sup> together by forcing the opposite short arms b<sup>1</sup> b<sup>2</sup> apart.

The stud A<sup>3</sup>, around which the spring C is coiled, as also a corresponding stud, A<sup>4</sup>, a little further back, aids in connecting the parts A<sup>1</sup> and A<sup>2</sup> firmly and rigidly together by riveting. The ends of the arms B<sup>1</sup> B<sup>2</sup> are hollowed and adapted to apply each half around or nearly around the main pin A. This mode of fitting to the pin unites the arms B<sup>1</sup> B<sup>2</sup> and supports them laterally, so that the entire structure is not liable to become strained and displaced by any ordinary force. My spring, C, by reason of its peculiar construction and adaptation to the work required, exerts a nearly equal force, whether the arms B<sup>1</sup> B<sup>2</sup> be closed together, as represented, or be widely extended.

Having now fully described my invention, what I claim as new, in a bow-pin adapted to lock itself by clasp-  
ing, and desire to secure by Letters Patent, is as follows:

1. I claim the hollow ends of the arms B<sup>1</sup> B<sup>2</sup>, arranged relatively to the main body A and to the trunnions b, substantially in the manner and for the purpose herein set forth.

2. I claim the coiled spring C, with extended ends operating on the arms B<sup>1</sup> B<sup>2</sup> b<sup>1</sup> b<sup>2</sup>, substantially in the manner and for the purposes herein set forth.

3. I claim the studs A<sup>3</sup> A<sup>4</sup>, in combination with the spring C and arms B<sup>1</sup> B<sup>2</sup> b<sup>1</sup> b<sup>2</sup> and the cheeks A<sup>1</sup> A<sup>2</sup> and body A, substantially in the manner and for the purposes herein set forth.

B. B. HOTCHKISS.

Witnesses:

W. C. DEY,

F. A. HADICKE.