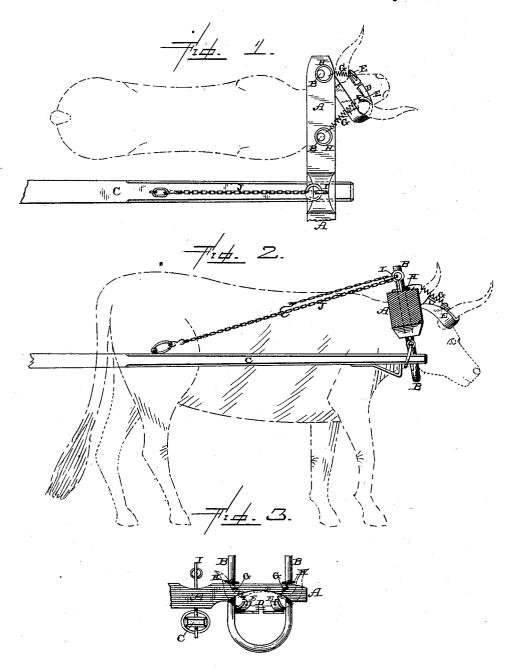
(No Model.)

## W. H. WILLIAMS.

ATTACHMENT FOR OX YOKES.

No. 366,906.

Patented July 19, 1887.



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W. H. Williams!

J. O. Lehmann!

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## UNITED STATES PATENT OFFICE.

WILLIAM HENRY WILLIAMS, OF WEST CONCORD, NEW HAMPSHIRE.

## ATTACHMENT FOR OX-YOKES.

SPECIFICATION forming part of Letters Patent No. 366,906, dated July 19, 1887.

Application filed January 5, 1887. Serial No. 223,463. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HENRY WIL-LIAMS, of West Concord, in the county of Merrimac and State of New Hampshire, have invented certain new and useful Improvements in Attachments for Ox-Yokes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it perto tains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in attachments for ox-yokes; and it consists in 15 the combination, with the yoke, of a suitable number of springs, which are connected thereto at one end and at the other end to the horns

or head of the animal.

The objects of my invention are to relieve 20 the neck of the animal of the weight and pressure of the yoke by means of springs which are fastened both to the animal's head and to the bow, and which springs serve to draw the yoke forward away from the shoulders, and to con-25 nect the top of the yoke to the tongue by means of a suitable connection in such a manner as to prevent the bow from canting forward, as it is liable to do, and thus force the bows against the windpipes of the animals.

Figure 1 is a plan view of a yoke embodying my invention. Fig. 2 is a vertical section of the yoke taken through to one side of its center. Fig. 3 is a front view of the same.

A represents the yoke, B the bows, and C 35 the tongue. Passed around the top of the animal's head just at the base of the horns is a suitable strap or band, D, of any kind, and fastened to this band are the two shorter straps E, which pass down around the base of the 40 horns, and to which straps the front ends of the springs G are fastened. The rear ends of these springs are preferably connected to rings H, which are passed down over the upper ends of the bows, where they project above the top of 45 theyoke. These springs may be made of rubber, metal, or any other suitable material, and may either have their tension made adjustable by means of a strap or other suitable fastening devices, or springs of different tensions may 50 be used, just as may be preferred. These

springs, being fastened to the upper ends of the bows, serve to draw the yoke forward from the shoulders of the animal, and thus relieve the shoulders of a portion of the weight of the load. Straps are here shown for connecting 55 these springs to the animals' heads; but I do not limit or restrict my invention to any particular construction in this respect, for other means than straps may be employed for this purpose. Two springs are shown in connec- 60 tion with each animal; but it is evident that only a single spring or a greater number of springs than two may be used,

Projecting from the top of the bow at or near its center is a suitable bolt, stud, or pro- 65 jection, I, to which is fastened the front end of a rod or chain, J, which has its rear end fastened to the top of the tongue. This rod or chain may be made adjustable in length, so that when the animals are pulling the rod or  $_{7\mathrm{C}}$ chain exercises just a sufficient tension or pull upon the bow to prevent it from canting forward upon the necks of the animals, and thus causing the lower parts of the bows to press against their windpipes and thus interfere 75 with their action. As here shown, an ordinary chain is used, which is attached to a bolt which projects above the top of the bow, and then the end of the chain is made adjustable by means of a hook which is secured to 80 it. While the animals are drawing a load this chain is stretched just sufficiently to prevent the bow from canting or tilting forward, and no more. As long as the yokes are held snugly in position upon the shoulders of the 85 animals the bows will not be turned inward

so as to interfere with their wind. Having thus described my invention, I

The combination, with the ox-yoke, of a go spring or springs which are connected thereto at one end, and which have their other ends attached to the animal's head, substantially as shown.

In testimony whereof I affix my signature 95 in presence of two witnesses.

WILLIAM HENRY WILLIAMS.

Witnesses:

GEO. H. DAVIS. W. F. THAYER.