(No Model.)

J. MARCH.

OX YOKE.

No. 306,501. Patented Oct. 14, 1884.

Fig. 1

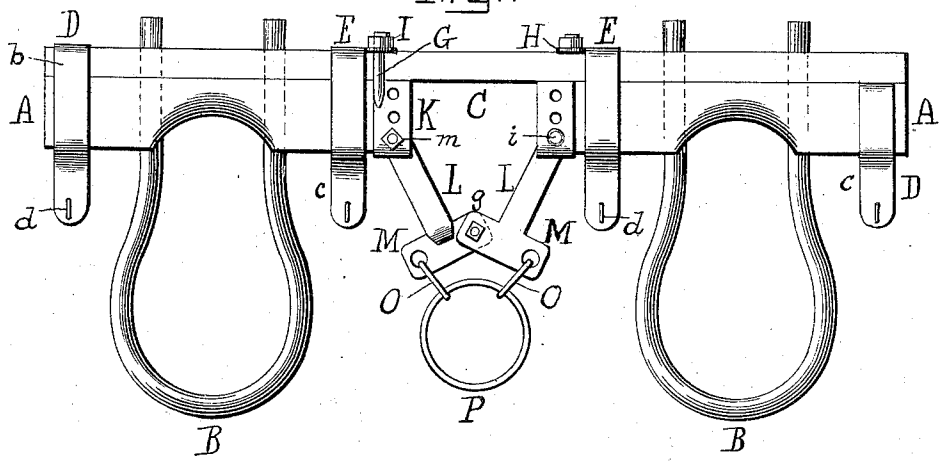


Fig. 2

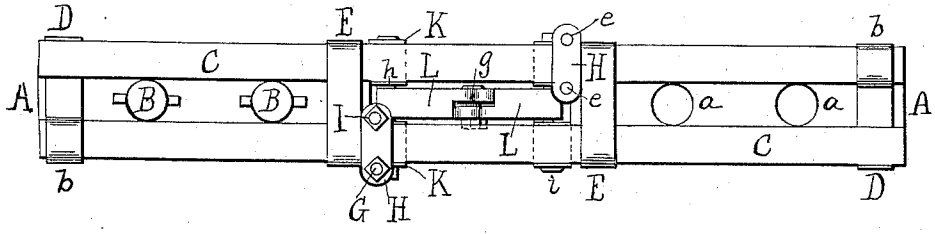
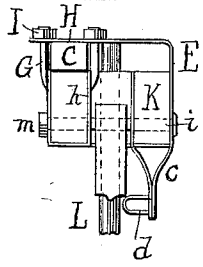


Fig. 3



WITNESSES

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UNITED STATES PATENT OFFICE.

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OX-YOKE.

SPECIFICATION forming part of Letters Patent No. 306,501, dated October 14, 1884.

Application filed April 14, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN MARCH, a citizen of the United States, residing at Baker's Mills, in the county of Warren and State of New York, have invented certain new and useful Improvements in Ox-Yokes; and I do 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

In the drawings, Figure 1 is a front view of my improved yoke. Fig. 2 is a top view, and Fig. 3 is a view of the inner end of one of the neck-pieces.

Like letters designate corresponding parts in all of the figures.

In the construction of my improved yoke I employ two separate and independent neck-pieces, A A, which are provided with holes *a a*, for the reception of the usual bows, B B. Each neck-piece is provided with a bar, C, which is removably secured thereto, and which is adapted to slide in suitable guides formed on the other neck-piece. To attain these objects I preferably adopt the following construction: Surrounding each neck-piece at or near its outer end is a metallic band, D, which is bent upward, as at *b*, to inclose and retain one end of one of the bars C. Surrounding each neck-piece at or near its inner end is a second metallic band, E, which extends upward so as to embrace and retain both the bar C which is fixed to the neck-piece and the bar C of the other neck-piece. Each bar C is thus retained by the bands D and E of its own neck-piece and by the band E of the other neck-piece. These bands D E are permanently secured to the neck-pieces, and preferably extend downward below the neck-pieces, as shown at *c*. To these extensions are secured eyes or rings *d d*, to which may be attached tugs or traces when it is desired to use the same.

For securing the bars C C to their respective neck-pieces, I prefer to provide screw-threaded pins G G on either side of each bar. A clamping-plate, H, provided with two holes, *e e*—one for each pin G—is clamped down upon the bar C by means of nuts I I, thus securely holding each bar to its own neck-piece. Each bar is free to slide to and fro on the other neck-piece, being guided by the band E and the upper ends of the bows. On the inner end of each neck-piece grooves of suitable dimensions are cut, forming two tenons, K K. Pivoted freely between these tenons on each neck-piece are depending arms L L. These arms at their lower ends are formed with cross-heads M M. The inner ends of these heads of the two arms L L are pivoted together, as shown at *g*, and at their outer ends are suspended so as to swing freely links O O, which hold a ring, P, which holds the tongue or pole of the vehicle. The inner sides of the tenons K K are preferably faced with metal, as shown at *h h*. The arms L L are pivoted to the tenons by means of a bolt, *i*, secured by a nut, *m*. The tenons are provided with a series of holes, *n n*, at different heights, through which the bolt *i* may be passed, and thus hold the pole or tongue of the vehicle at any desired height.

When drawing on a level, the bars C C are used; but when working on the side of a hill the bars C C are to be removed.

The described arrangement of the arms L L insures the equal bearing of the load at all times upon the oxen, and permits the bars C C to slide freely whether the load be heavy or light. An important advantage also results from the described method of suspending the pole-supporting ring P to the outer ends of the cross-heads M M by means of the links O O. As the yokes slide apart the tendency would be to raise the pole or tongue; but this is almost entirely compensated by suspending the pole, as shown, the pole having practically no vertical movement when the oxen separate or come together.

I claim as my invention—

1. In an ox-yoke, two separate and independent neck-pieces, A A, and two bars, C C, connecting said neck-pieces, each of said bars being removably secured to one of said neck-pieces and adapted to slide between suitable guides on the other neck-piece, in combination with said guides and means for removably securing said bars to their respective neck-pieces, substantially as and for the purpose set forth.

2. In an ox-yoke, two separate and inde-

pendent neck-pieces, A A, in combination with two arms, L L, pivoted respectively to said neck-pieces at their upper ends and pivoted together at their lower ends, and means whereby said arms are adapted to sustain the pole or tongue of a vehicle, substantially as and for the purpose herein specified.

3. In a sliding ox-yoke, the combination of two neck-pieces, A A, two arms, L L, pivoted respectively to said neck-pieces, two cross-heads, M M, located respectively on said arms L L, and pivoted together at their inner ends, and a ring or equivalent support for the pole or tongue of a vehicle, said ring being suspended from the outer ends of said cross-heads M M, substantially as and for the purpose herein specified.

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

JOHN MARCH.

Witnesses:
DAVID G. CHINTEN,
CHARLES B. WILCOX.