J. ERNHOUT.

Ox-Yokes.

No. 153,193. Patented July 21, 1874.

Fig. 1.

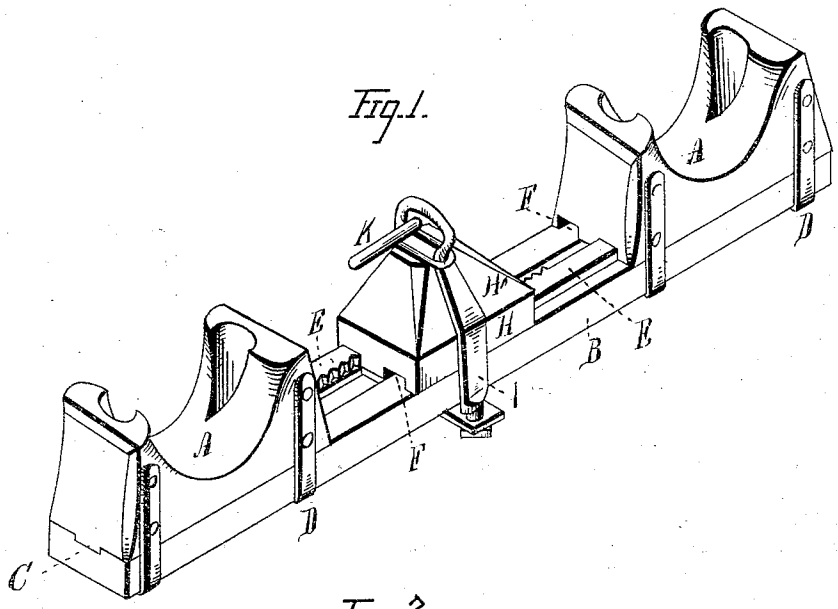
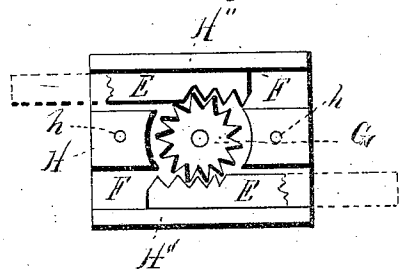


Fig. 2.



WITNESSES

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UNITED STATES PATENT OFFICE

JOHN ERNHOUT, OF WILCOX, PENNSYLVANIA.

IMPROVEMENT IN OX-YOKES.

Specification forming part of Letters Patent No. **153,193**, dated July 21, 1874; application filed April 16, 1873.

To all whom it may concern:

Be it known that I, JOHN ERNHOUT, of Wilcox, in the county of Elk and State of Pennsylvania, have invented certain new and useful Improvements in 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to yokes.

In the drawings, Figure 1 is an isometric projection of my yoke; and Fig. 2 a plan view, inverted, of the tongue-block H, showing the arrangement and operation of the pinion and toothed bar.

My invention consists as follows: A A are yoke-blocks, sliding into the bed B by the tongue-and-groove arrangement C, and supported by the sliding hangers D D. To the yoke-blocks A are attached the toothed bars E, sliding in the grooves F, and engaging with the pinion G. By this provision the blocks A may be so set and adjusted as to give equal or unequal advantage of draft. H H′ is the tongue-block, composed of two parts.

Fig. 2 is an inverted plan view of the piece H, wherein are shown the parts above set forth.

h h are two pins projecting from the part H, fitting into corresponding holes in the part H′, serving the purpose of preventing the movement upon each other of the said parts H H′. The part H′ I construct of wood, and the part H of hard metal.

I am not aware of this construction having been heretofore adopted. To my knowledge the entire tongue-block has been formed from wood alone, and the consequence has been that, after some use, the bars E wear out the parts H′, so that the grooves F are enlarged to a sufficient extent to admit of the toothed bars E becoming disengaged from the pinion G, thus destroying the peculiar function of the yoke, and necessitating the manufacture of an entire tongue-block.

By my provision—viz., constructing a portion, H, of the tongue-block of hard metal—the possibility of this objection is done away with.

The parts H H′ are bound together, and the entire tongue-block held in proper position, by the band I, which passes around the bed B and block H H′, to which band is hung the tongue-ring K.

Yokes of this general nature have been made heretofore; but the pinion and ratchets have been exposed, so that they were very liable to become disarranged or clogged by dust, leaves, &c.

In my device I so arrange them that they are all thoroughly braced by the block H H′, and the pinion resting between the block and the beam is entirely covered in by the block. In this position it is not liable to be injured, and the whole structure is rendered much more rigid.

I claim as my invention—

1. The tongue-block, consisting of the part H′ of wood, and the bearing part H of hard metal, the parts secured together and to the beam B by the inclosing-strap I, and provided with a tenon, C′, which fits into and slides in a corresponding groove in the beam, all combined substantially as and for the purposes described.

2. In combination with the ratchet-bars E, pinion G, and tongue-block H H′, the neck-blocks A, provided with a guide-tenon, C, which fits into a corresponding mortise in the beam B, and secured to the beam by straps D, all substantially as as and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand.

JOHN ERNHOUT.

Witnesses:

DANIEL SMITH,

J. B. WELLS.