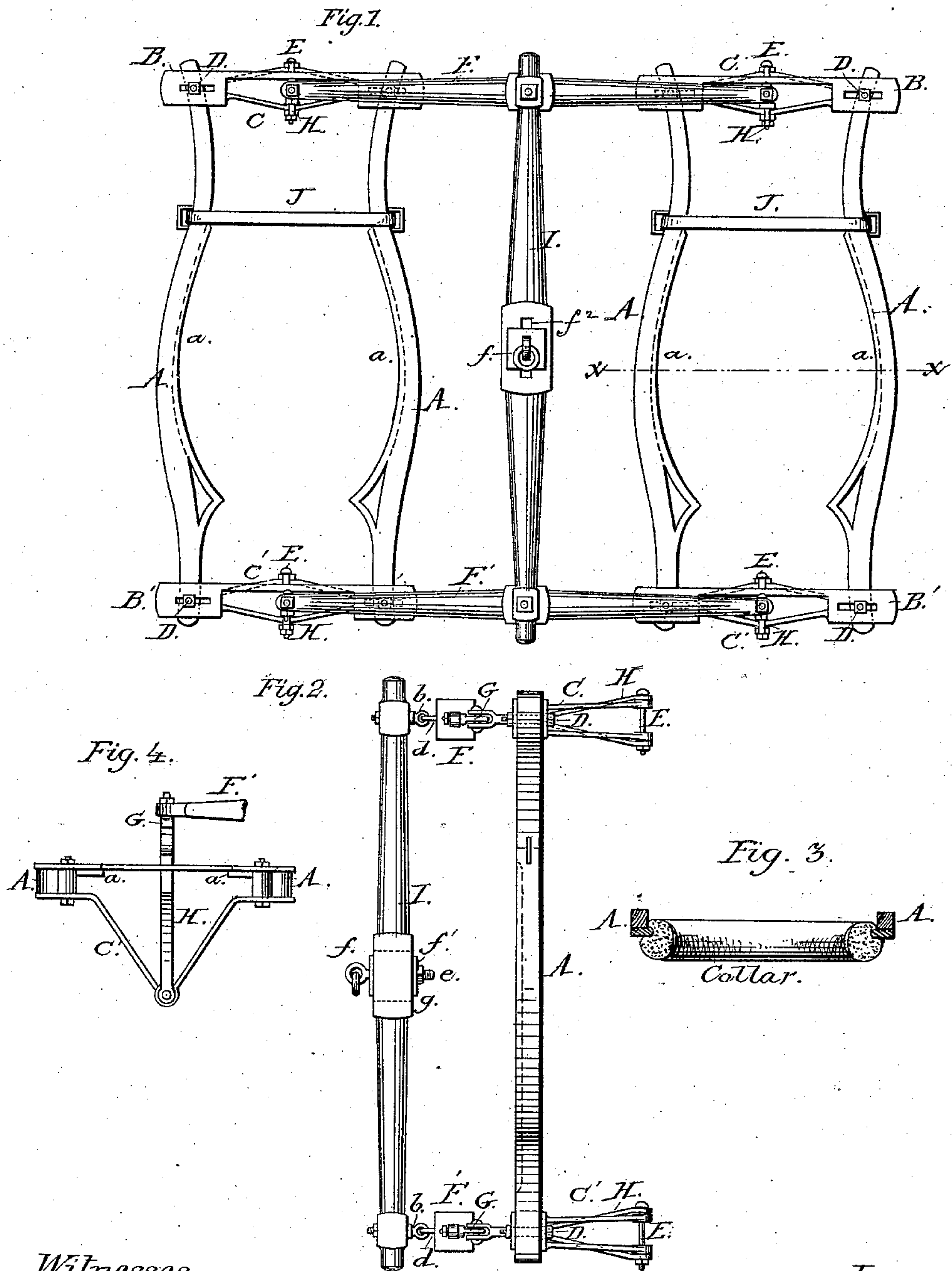


(No Model.)

E. L. JOHNSON.  
YOKE FOR DRAFT ANIMALS.

No. 287,682.

Patented Oct. 30, 1883.



Witnesses.  
J. N. Kalb  
C. C. Allen

Inventor:  
Edwin L. Johnson  
per Edw. M. Down & Co.  
Atty.



# UNITED STATES PATENT OFFICE.

EDWIN L. JOHNSON, OF SHUTESBURY, MASSACHUSETTS.

## YOKE FOR DRAFT-ANIMALS.

SPECIFICATION forming part of Letters Patent No. 287,682, dated October 30, 1883.

Application filed March 14, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, EDWIN L. JOHNSON, a citizen of the United States of America, residing at Shutesbury, in the county of Franklin and State of Massachusetts, have invented certain new and useful Improvements in Yokes for Draft-Animals, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to that class of hitching devices for draft-animals in which the latter are made to draw without the use of any harness other than collars and draft-tugs.

It consists of a set of uprights adjustably united together by metallic recessed bars to form hames, and of certain stiff yokes or beams which loosely unite said hames through the medium of certain V-shaped truss-bars and intermediate bifurcated clevised bars, said stiff yokes or beams being held together by a suitable draft-beam, all of which will be fully set forth hereinafter.

In my drawings, Figure 1 is a front elevation of the device. Fig. 2 is a side elevation of the same. Fig. 3 is a horizontal section on line *x x* of Fig. 1. Fig. 4 is an end elevation of one of the hames, showing more clearly the truss-bar C and the bifurcated and clevised bar H.

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

Referring to drawings, A represents the uprights which form the hames, which in the main are made of wood, preferably. These uprights are of double ogee form, somewhat similar in appearance to ordinary horse-hames, excepting that instead of narrowing at the bottoms they spread slightly. A short distance above the bottoms of these uprights are inwardly-projecting points, which are curved to conform to the bottoms of the collars to which the said uprights are to be applied. Shallow offsets *a* extend inward from the general contour of the uprights a portion of their vertical distance, which are intended to fit neatly into the grooves of the collars.

B B' are metallic recessed bars slotted at opposite ends, which, together with slotted V-shaped bars C C' and bolts D, unite and secure the upper and lower ends of the uprights

A. The V-shaped bars C C' are made open, for lightness of construction, and at their angles are provided with collars adapted to receive bolts E.

F F' are yokes formed of wood, and mounted at their ends with metallic mountings pierced with eyes to receive suitable bolts, to be mentioned.

G are pieces of metal terminating with threaded bolts, which are secured loosely in place in the mountings of the yokes by suitable bolt-nuts.

Bifurcated and clevised bars H are loosely united, respectively, to bolts D of the V-shaped bars C C' and hinged pieces G.

I is a beam provided with loops *b*, which engage corresponding loops, *d*, fixed centrally in the yokes F. Said beam I is provided also with a bolt, *e*, which may be adjusted vertically in a slot, *f*<sup>2</sup>, and clamped to position on said beam between washers *f f'* by nut *g*.

It will be observed that the uprights which form the hames, by means of their upper and lower adjusting-bars and the bolts which unite the said bars and uprights, may be made to fit any collar of medium, maximum, or minimum size.

It may be further observed that by means of the uniting-yokes the animals will always be kept, during their work, relatively together, although by means of the peculiar connections between the said yokes and the V-shaped truss-bars, said connections being practically universal joints, full compensation is provided to give most advantageous liberty to the independent movements of the animals yoked together. A simple chain serves to connect the animals to the implement to be drawn, and a shallow or rank hold will be given to the latter by simply lowering or raising the bolt to which said chain is attached.

I am aware that hames for draft-animals have been used connected by combined horizontal and upright beams, which, when adjusted, serve to keep the animals relatively together, and to such, broadly, I make no claim.

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

1. The combination, with the hames adjust-

ably united by suitable bars, substantially as described, of the V-shaped truss-bars C C', the bifurcated and clevised bars H, and suitable yoke and beam connections, as and for the purpose set forth.

5 2. The combination, with hame-uprights A, of the bars B B', truss-bars C C', bifurcated and clevised bars H, yokes F F', and the beam I, all arranged substantially as and for the purpose set forth.

In testimony whereof I affix my signature, in presence of two witnesses, this 5th day of March, 1883.

EDWIN L. JOHNSON.

Witnesses:

JAMES GRINNELL,  
H. L. BARNARD.