(No Model.) 2 Sheets—Sheet 1.

T. K. FRANKENBERRY.

DRAFT EQUALIZER.

No. 340,996. Patented May 4, 1886.

Fig. 1.

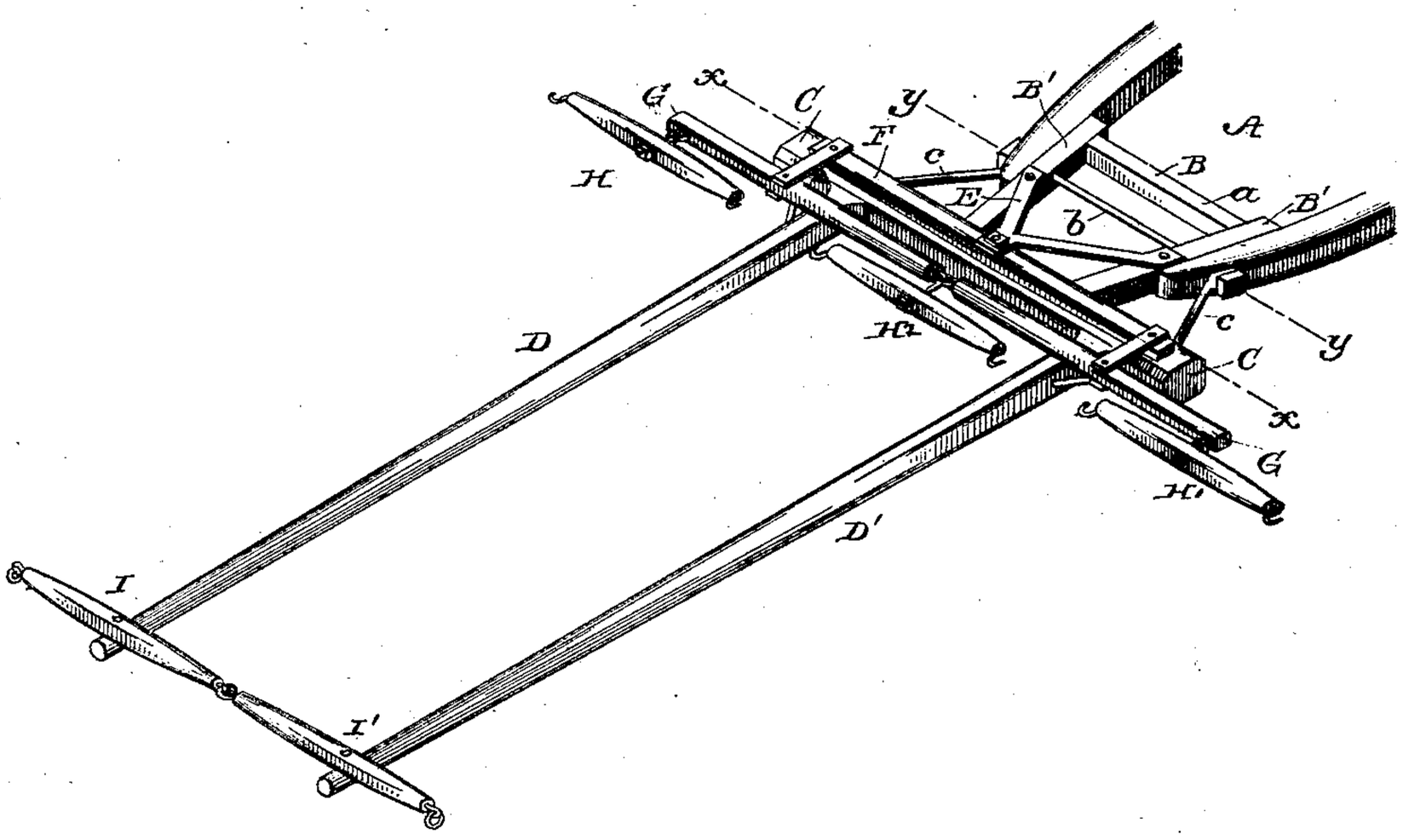
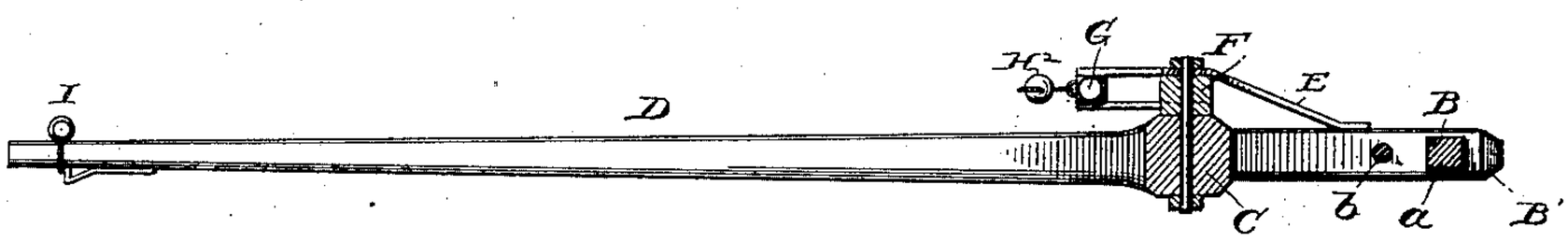


Fig. 4.



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F. B. Noyes

Inventor:
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by his attorney
J. R. Littell,

(No Model.) 2 Sheets—Sheet 2.

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DRAFT EQUALIZER.

No. 340,996. Patented May 4, 1886.

Fig. 2.

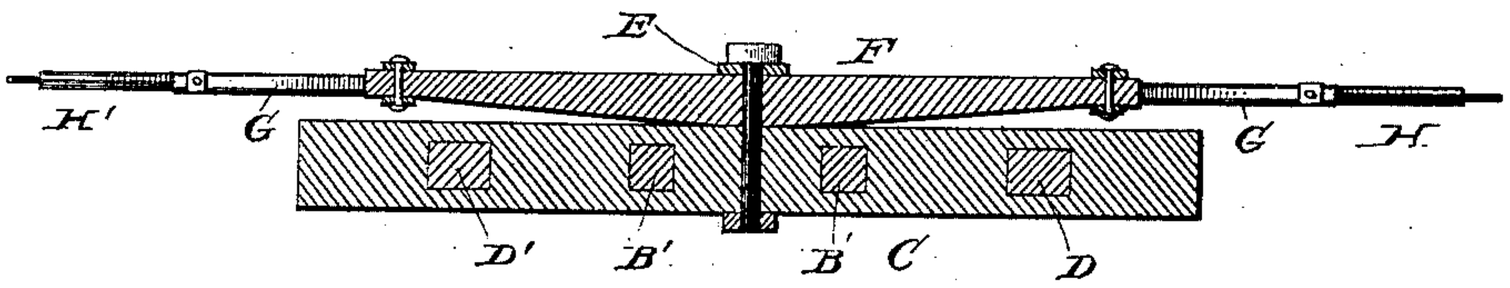
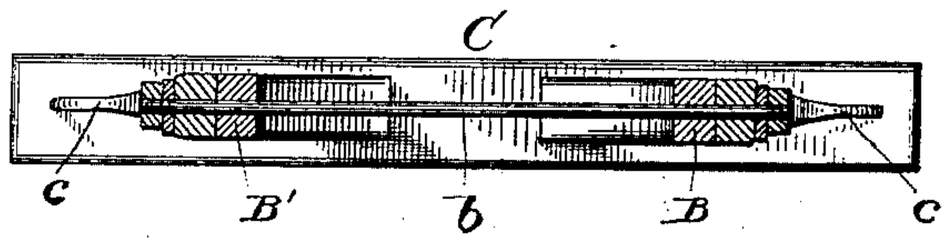


Fig. 3.



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Inventor:

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UNITED STATES PATENT OFFICE.

THOMAS K. FRANKENBERRY, OF NORTH LIBERTY, INDIANA.

DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 340,996, dated May 4, 1886.

Application filed February 15, 1886. Serial No. 191,993. (No model.)

To all whom it may concern:

Be it known that I, THOMAS K. FRANKENBERRY, a citizen of the United States, residing at North Liberty, in the county of St. Joseph and State of Indiana, have invented certain new and useful Improvements in Draft-Equalizers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to draft-equalizers; and the object of the invention is to provide a device of this character whereby three horses may be worked to a wagon, and the strain or draft be equally divided between them.

A further object of the invention is to provide a device of this character which shall be simple in its construction, strong and durable, effective in its operation, and which may be readily and quickly removed and replaced by the ordinary tongue when desired.

With these ends in view the invention consists in the improved construction and combinations of parts hereinafter fully described, and pointed out in the claims.

In the drawings, Figure 1 is a perspective view of my invention. Fig. 2 is a section on the line *x x* of Fig. 1, and Fig. 3 is a section on the line *y y*. Fig. 4 is a longitudinal transverse section.

Corresponding parts in the several figures are denoted by the same letters of reference.

Referring to the drawings, A represents portions of the hounds of the wagon, between which is pivoted a frame, B. This frame B consists of two bars, connected at their inner ends by a short bar, *a*, and at their outer or forward ends by a cross-beam, C. The frame is pivoted between the hounds by a cross-rod, *b*, and the beam C and hounds are braced by rods *c*, connecting them. In the cross-beam C are mortised, near the ends thereof, tongues D D′, arranged a suitable distance apart.

E represents a metal plate, which is substantially V shape in form, and which has its ends secured to the bars B′ of the frame B. Between the other end of the metal plate and the cross-beam C is pivoted a main double-tree, F. To the outer ends of this double-tree F are pivoted metal plates, between which at each end of said main double-tree are secured double-trees G.

H H′ H² represent single-trees, which are secured, the single-trees H and H′ to the outer ends of the double-trees G, while the single-tree H² is arranged to pivotally connect the double-trees G at their inner ends.

I I′ represent holdbacks, which are located on the outer ends of the tongues, and which are connected, preferably, by rings at their inner ends.

In use the horses are attached one between the tongues and to the single-tree H², and the other two one on each side of each tongue and to the single-trees H and H′, respectively. The horse which is attached to the single-tree H² is attached to the inner ends of the holdbacks, while the other horses are attached to the outer ends thereof.

As will be seen, the holdbacks are so located on the tongues that the short portions of the same are located on the outer sides of the tongues, while the long portions are located on the inner sides. Thus while the middle horse is attached to both tongues the strain or work in descending a hill is equally divided.

By the construction before shown and described it will be seen that where three horses are used the strain in descending a hill will fall upon all three of them, instead of two, as has heretofore been the case.

Having thus described my invention, I claim—

1. In a draft-equalizer, the combination, with a supporting-beam secured to a supporting-frame pivoted between the hounds of a wagon, of two tongues secured thereto, a pivoted main double-tree, double-trees pivotally connected with the latter near the ends thereof, single-trees carried by the double-trees, and holdbacks, as set forth.

2. In a draft-equalizer, the combination, with the hounds of a wagon, of a frame, a bar pivotally connecting the frame with the hounds, and the bracing-rods connecting the frame and hounds, as set forth.

3. In a draft-equalizer, the combination, with a beam secured to a supporting-frame pivoted between the hounds of a wagon, of

two tongues, a pivoted main double-tree, double-trees pivotally connected with the latter and carrying single-trees at their outer ends, a single-tree connecting the inner ends of the double-trees, and holdbacks on the forward ends of the tongues, said holdbacks being connected at their inner ends, as set forth.

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

THOMAS K. FRANKENBERRY.

Witnesses:

SAMUEL C. GROVE,

LEWIS W. PORMMERT.