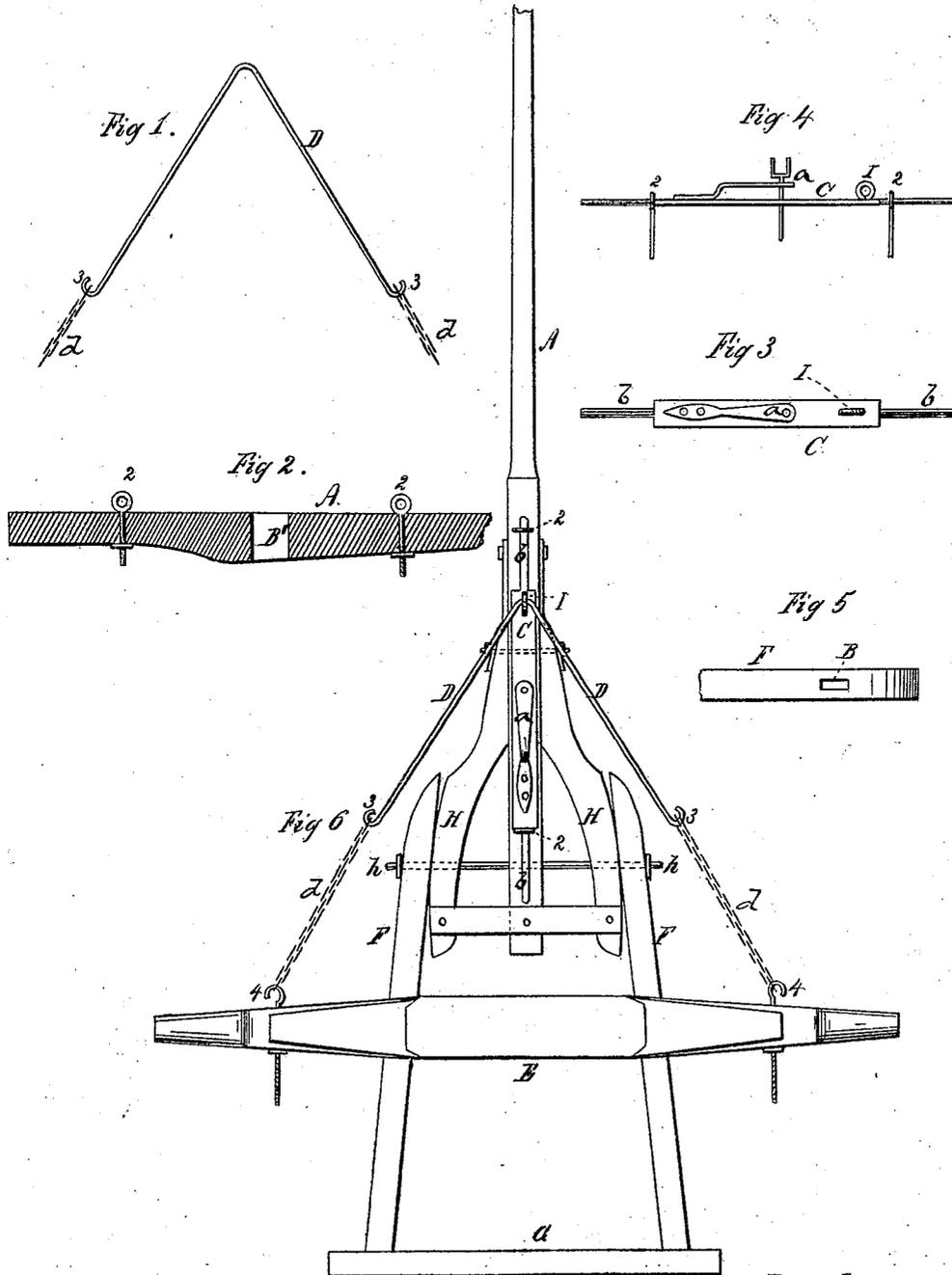


L. KENDLLE, G. GATES & J. M. ORPUT.

Improvement in Draft-Equalizers for Wagons.

No. 132,725.

Patented Nov. 5, 1872.



Witnesses.

Eli B. Gilbert.
Reuben M. Havenur

Inventors.

Lorenz Kendlle.
George Gates.
James M. Orput.

UNITED STATES PATENT OFFICE.

LORENZ KENDLLE, GEORGE GATES, AND JAMES M. ORPUT, OF ROCHELLE,
ILLINOIS.

IMPROVEMENT IN DRAFT-EQUALIZERS FOR WAGONS.

Specification forming part of Letters Patent No. 132,725, dated November 5, 1872.

To all whom it may concern:

Be it known that we, LORENZ KENDLLE, GEORGE GATES, and JAMES M. ORPUT, of Rochelle, in the county of Ogle and State of Illinois, have invented certain new and useful Improvements in Wagons; and do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of our invention consists in an improved mode of attaching the tongue and drawing appliances to wagons; the object of the same being to equalize the draft on the team and to prevent the tongue of the wagon from moving from side to side and striking the team whenever either of the forward wheels meets with an obstruction, and also to furnish a more perfect draft, thereby making a saving in the moving-power.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawing which forms a part of this specification, and in which—

Figures 1, 2, 3, 4, and 5 represent detached views of certain parts of our invention; and Fig. 6 is a plan view, showing our invention complete.

E represents the front axle-tree, and F F the main hounds, connected at their rear ends by a cross-bar, G. A represents the tongue, to which are attached the small hounds H H, the said tongue and small hounds being placed between and attached to the large hounds by a rod, *h*. These parts are all constructed in substantially the same manner as in common wagons, with the following exceptions: Through the large hounds F F are made slots B, as shown in Fig. 5, and the ends of the rod *h* pass through said slots, there being nuts or other suitable fastenings upon the ends of the rod to prevent it from going through. The small hounds H H are curved or beveled both toward the front and rear from the hole made for the passage of the rod *h*, and by this means the wagon may swag or give to either side

when either of the front wheels meets or strikes an obstruction without causing any movement of the tongue, and thereby preventing the so common striking of the horses by the tongue. C represents the draw-bar, to which the double-tree is attached by the usual device, *a*, shown in Fig. 4. At both ends of the draw-bar are rods *b*, which pass under or through eye-bolts 2 2 attached to the tongue A. The pin *a*, which pivots the double-tree, passes down through a slot, B', in the tongue, which allows the draw-bar to move in accordance with the slots in the long hounds. D D are the draw-rods, which pass through an eye-bolt, 1, on the draw-bar C, and their rear ends are formed with hooks 3 3, from which chains *d d* connect with hooks 4 4 on the axle-tree E.

By this means there is no draft on the large hounds nor on the tongue. All the draft is directly from the draw-bar and chains upon the hooks or clips in the forward axle-tree, in consequence of the slots in the hounds and tongue.

In lieu of placing the slots B B in the long hounds F F, they may be made in the small hounds H H, and the action of the tongue will be just as free; and the tongue will in either case hold back and guide the wagon in as perfect a manner as with the usual arrangement.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination of the slotted hounds F F, tongue A, curved or beveled hounds H H, and pin *h*, all substantially as and for the purposes herein set forth.

2. The combination of the slotted tongue A, draw-bar C with rods *b b*, eye-bolts 1 and 2 2, draft-rods D D, hooks 3 3 and 4 4, chains *d d*, and axle-tree E, all substantially as and for the purposes herein set forth.

LORENZ KENDLLE.
GEORGE GATES.
JAMES M. ORPUT.

Witnesses:

ELI B. GILBERT,
REUBEN M. HEVENOR.