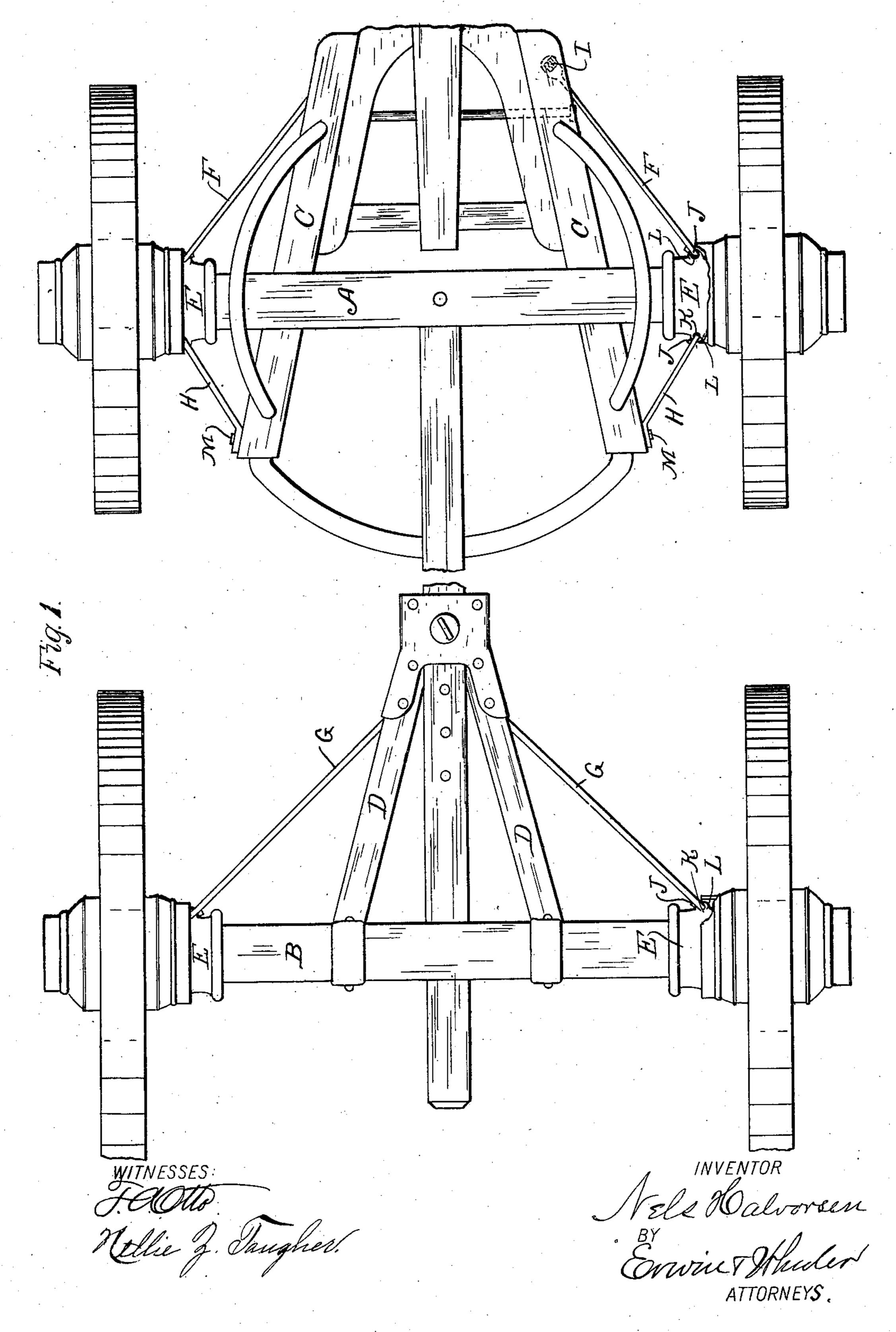
N. HALVORSEN.

DRAFT MECHANISM FOR WAGONS.

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UNITED STATES PATENT OFFICE.

NELS HALVORSEN, OF STOUGHTON, WISCONSIN.

DRAFT MECHANISM FOR WAGONS.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Nels Halvorsen, a citizen of the United States, residing at Stoughton, county of Dane, and State of Wisconsin, have invented new and useful Improvements in Draft Mechanism for Wagons, of which the following is a specification.

My invention relates to improvements in wagons, and it pertains more especially to the peculiar construction and arrangement of the mechanism by which the draft upon the hounds of the wagon is communicated to the axle-skeins within their inner ends in close proximity to the hubs of the wheels, whereby the shock and strain caused by contact of the wheels of the vehicle against an obstruction which might otherwise break the axle at the end of the skein is brought to bear at a point within the skein and the axles are relieved of the intense strain which might otherwise break them.

The construction of my invention is explained by reference to the accompanying drawing, which represents a top view thereof.

Like parts are identified by the same reference-letters.

A represents the front axle.

B is the rear axle.

C represents the front hounds, and D the 30 rear hounds.

E are the axle-skeins.

F are the draw-bars of the front axle, and G are the draw-bars of the rear axle.

H are the brace-bars communicating from the front-axle skein G to the rear end of the hounds C.

Heretofore it has been common where draw-bars were used between the hounds and the axles to connect the rear ends of such 40 bars to the extreme inner ends of the skeins or at an intermediate point between the skeins and the hounds, whereby it is obvious that when thus connected the draw-bar serves as a fulcrum to the axle at such point, where-45 by when a wheel is brought against an obstruction the strain of contact is brought upon the axle at the point of attachment of the draw-bar with the skein and the axle is liable to be broken at such point. It will be 50 understood that by attaching the draw-bars in close proximity to the hub at a distance from the inner end of the skein it is impossi-

ble to break the axle at such point, as the axle is reinforced at such point by the surrounding skein, and whereby the liability of 55 the axle becoming broken is greatly diminished.

For convenience of construction, the front end of the draw-bars F and G are connected with the respective hounds C and D 60 by bolts I in the ordinary manner, while their rear ends are connected with the respective axle-skeins E by the downwardprojecting hooks J, which engage in the apertures K of the lugs L. The rear ends of the 65 brace-bars H are connected with the hounds C by the bolts M, while their front ends are connected with the axle-skeins E by hooks J, engaging in apertures K of the lugs L. The rear ends of the brace-bars H are connected 70 with the hounds C by the bolts M, while their front ends are connected with the axle-skeins E by hooks J, engaging in apertures K of the lugs L. The bars H serve as a brace between the rear ends of the hounds C and the axle- 75 skeins.

Attention is called to the fact that the draw-bars F and G and brace-rods H are connected with the axle-skeins E substantially on a plane with the longitudinal center of 80 the skeins between their upper and lower sides, whereby the draft upon the skeins has no tendency to turn the same upon the axle; also, that said draw-bars and brace-bars are connected with the skeins in close proximity 85 to the bearing-surfaces of the hubs and partially within the hubs themselves, whereby the draft upon the skein is brought as near the center of the wheel as possible. Attention is also called to the fact that the bars F 90 and G, and H are connected with the skeins by hooks engaging apertured lugs formed in the skeins, whereby the contiguous ends of the bars and skeins are less liable to be broken by any vibratory movement of the hounds 95 with which such bars are connected.

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

The combination in a wagon of axle-in-100 closing skeins provided with apertured lugs formed integrally therewith, located in close proximity to the bearing-surfaces of the hubs, substantially on a plane with the longitudi-

nal center of the skeins between their upper and lower sides, draw-bars and brace-bars provided with downwardly-projecting hooks at one end engaging said apertured lugs and connected at their opposite ends by bolts to the wagon-hounds, all substantially as and for the purpose specified.

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

NELS HALVORSEN.

Witnesses:

A. E. Ausse, Grace Hart.