

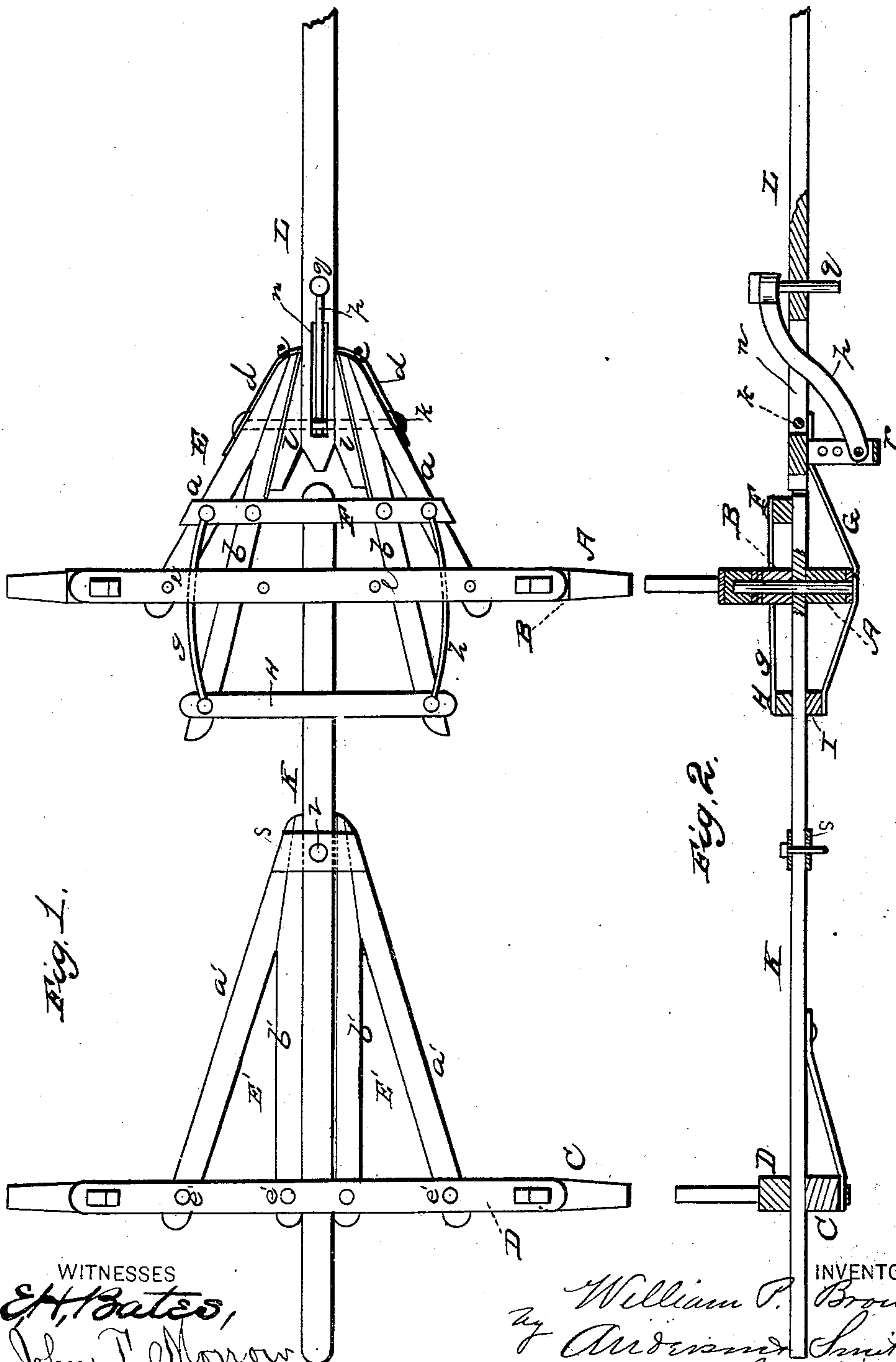
(No Model.)

W. P. BROWN.

WAGON GEAR.

No. 284,809.

Patented Sept. 11, 1883.



WITNESSES
E. H. Bates,
John T. Morrow.

INVENTOR
William P. Brown.
Anderson Smith
ATTORNEYS

UNITED STATES PATENT OFFICE.

WILLIAM PATTERSON BROWN, OF ZANESVILLE, OHIO.

WAGON-GEAR.

SPECIFICATION forming part of Letters Patent No. 284,809, dated September 11, 1883.

Application filed May 31, 1883. (No model.)

To all whom it may concern:

Be it known that I, WM. P. BROWN, a citizen of the United States, residing at Zanesville, in the county of Muskingum and State of Ohio, have invented certain new and useful Improvements in Wagon-Gear; 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 appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of a plan view of my device. Fig. 2 is a longitudinal section thereof.

The invention has relation to improvements in running-gear for wagons; and it consists in the construction and novel arrangement of parts, as will be hereinafter more fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, the letter A designates the front axle, and B the sand-bolster above the same. C represents the rear axle, and D its bolster. Both axles and bolsters are cut in plain straight form, without gains, and consequently without waste, as those parts are then required to be only large enough to insure the proper degree of strength.

E indicates the angular double-bar front hounds, consisting of the two straight bars *a* and *b*, on each side said bars, forming an angular junction in front, at *e*, and separating more and more toward the rear ends. The front ends of these bars are finally connected by plates *d* and bolts or screws. The bars *a* and *b* extend between the axle and bolster, and are fitted thereto plainly and without making gains in the bolster and axle, as the four points at which the hound-bars are secured to said axle and bolster by the bolts *e* are formed to afford sufficient support to the hounds as well as to the axle and bolster, and gains are not needed. In this manner material is saved in making the axle and bolster, and as four bolts are used in the connection they may be small, and the wood of the parts is not cut away materially to affect the bearings therefor.

Across the four bars of the front hounds, in front of the bolsters, extend the slider-bar F, which is bolted to the hound-bars and supports them materially. The hound-bars are also braced and supported by oblique strap-braces G, which extend from under the axle below the outer hound-bar to the inner hound-bar in front of the axle. The inner hound-bars, *b*, are longer than the outer hound-bars, *a*, and extend in rear of the axle sufficiently to receive the upper and lower slider-bars, H and I, which are bolted thereto. The reach K, or bar connecting the front and rear gearing, extends between the slider-bars H and I and under the slider-bar F. Braces *g* and *h* strengthen and support the slider-bars with relation to the axle. The outer bars, *a*, of the hounds extend to the axle and terminate near the shoulders thereof, adjusted to the spindles, thereby supporting the axles and bolsters as near the ends as possible. The inner hound-bars, *b*, are inclined somewhat toward each other as they extend forward and from the guide-bearings or gains, between which the jaw end of the tongue L is seated, being secured thereto by the transverse bolt *k*, which passes through the tongue and hound-bars. The hounds are in this manner composed of straight pieces, and are strong and durable. The end of the tongue which fits in the jaws is solidly constructed, having the tapering side blocks, *l*, securely bolted to its rear portion, as shown.

The tongue may have a simple bearing for the double-tree bolt, or a bearing may be made in front of a slot, *n*, through which passes a strap-connection, *p*, from the double-tree bolt *q* to a bearing, *r*, under the rear end of the tongue-strap. The rear gearing is of similar construction, the double wood bars E' consisting each of two bars, *a'* and *b'*, joined in front in angular form, and securely connected, and separating more and more toward the rear ends, which extend between the rear axles and bolsters, supporting the same at four well separated points, where the bolts *e'* serve to form a strong connection.

The rear hound-bars, *b'*, extend straight forward, and form the rear guide-bearings for the rear portion of the reach K, which is connected to a rear gearing by a bolt, *z*, passing through

the broad transverse plates *s s*, which extend above and between it, connecting the angular front ends of the double hounds *E'*.

It is designed by the construction to afford
5 full support to the axles and bolsters, and to brace the same and the hounds securely together without cutting gains in the wood of the parts, and to use therefor plain and straight timber of the smallest size consistent with the
10 strength required.

By reversing the position of the front double hounds, turning the outer bars so that they will be directed straight forward from end to end, these bars will serve as the guide-
15 bearings for a pair of shafts.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. The wagon-gear herein described, comprising, in connection with the front and rear
20 axles and their respective bolsters, the angu-

lar double-bar front hounds, *E*, the slider-bars *F*, *H*, and *I*, the oblique strap-braces *G*, the reach *K*, connecting the front and rear gearing and extending between the said slider-bars, 25 the bars *a* and *b*, joined in front in angular form with securing-bolts, and the tapering side blocks, *l*, tongue *D*, and transverse bolt *k*, all constructed and adapted to operate substantially as specified. 30

2. The pole or tongue having a slot in its rear end, in combination with the strap extending through said slot from the double-tree bolt *q* to the bearing *r* under the rear end of the tongue, substantially as specified. 35

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

WILLIAM PATTERSON BROWN.

Witnesses:

EDWARD BETHEL,
JOHN R. TRAINER.