

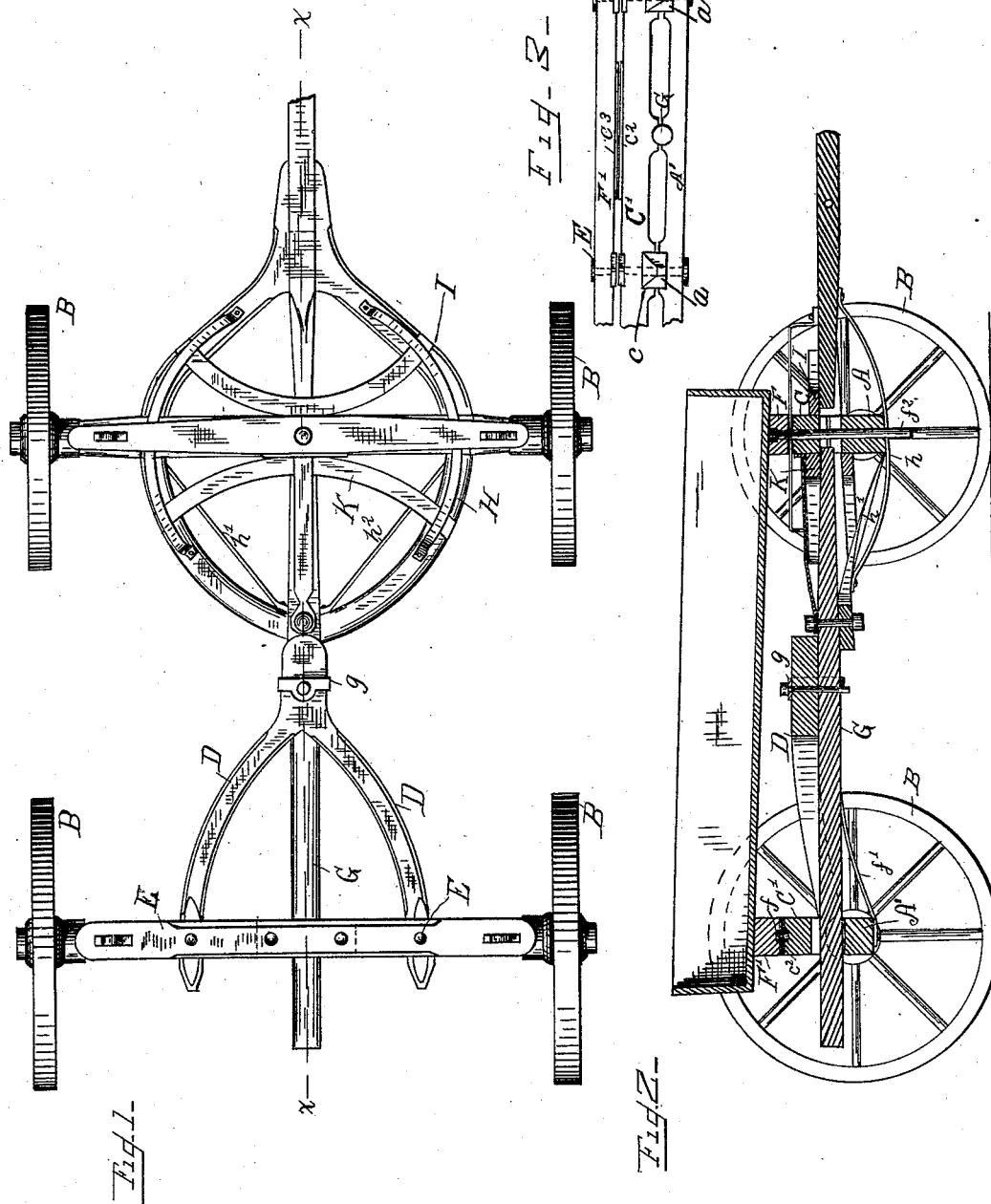
(No Model.)

H. BENSMANN.

RUNNING GEAR FOR WAGONS.

No. 345,661.

Patented July 20, 1886.



Witnesses
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UNITED STATES PATENT OFFICE.

HERMANN BENSMANN, OF MINSTER, OHIO.

RUNNING-GEAR FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 345,661, dated July 20, 1886.

Application filed March 30, 1886. Serial No. 197,139. (No model.)

To all whom it may concern:

Be it known that I, HERMANN BENSMANN, a citizen of the United States, residing at Minster, in the county of Auglaize and State of Ohio, have invented certain new and useful Improvements in Running-Gears for Wagons; 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.

This invention relates to improvements in running-gear for wagons and other vehicles; and it has for its object to economize space or room in turning where but little room is given for such object; and to this end the invention consists in the novel construction and arrangement of parts, as will be hereinafter more fully described, and specifically pointed out in the claim.

In the accompanying drawings, to which reference is made, and which fully illustrates my invention, Figure 1 is a top or plan view thereof, and Fig. 2 is a side sectional elevation taken on the line *xx* of Fig. 1. Fig. 3 is a rear detail view, showing the mortises in the axle and bed-piece.

A and A' represent the front and rear axles, respectively, of a wagon, having cut therein mortises *a a*, and upon the ends of said axles are loosely secured wheels B B. Rigidly secured to the axles are two bed-pieces, C C, the rear bed-piece, C', being mortised out, as at *c*, to receive the rear ends of two rear hounds, D D, which are secured therein by means of two T-shaped bolts, E E.

To the center of the rear bed-piece, C', and upon the top thereof, is secured a rectangular metallic plate, *c*², against which another corresponding metallic plate, *c*³, secured upon the under side and in the center of a rear bolster, contacts with to relieve the friction upon the wooden bed-piece and bolster.

F and F' represent the front and rear bolsters, the latter being loosely pivoted at its center, by means of pivots or bolts *f*, to the rear bed-piece, and the former being loosely pivoted at its center by a king-bolt, *f*², and upon which they (the bolsters) articulate or freely move. These bolsters are provided with short standards at their ends for inclosing and holding the body of the wagon in place. Two braces, *f*³, having their ends secured to the

under side of the rear hounds and axle, serve to brace and strengthen the hounds D D.

G is a reach, the rear end of which passes between the rear axle and bed-piece, and the forward end passes through a yoke, *g*, upon the front or forward part of the rear hounds, D D, where it is secured by means of a bolt or any suitable fastening.

H is a circular frame, or nearly so, made all of one piece of wood or any suitable material, having front hounds, I I, made integral therewith, the rear end of this frame being pivotally connected to the reach G near its front and free end, so as to enable said free end of the reach in turning the front axle to traverse in either direction, according as the axle is turned, an arc of a circle, K, formed of two bent strips of wood, one mortised in the upper and the other in the lower or under side of the circular frame H at the sides thereof.

Upon each side and top of the circular frame H are two metallic segments, which serve as guides for the front bolster to move upon in turning the wagon. The frame H has also braces *h h' h*², for bracing and supporting the frame upon the axle.

It will be readily observed that by having the front or forward part of the reach free, full play is given to the frame H, which is secured between the front axle and bed-piece to turn with them as they are turned, whereas if the front end of the reach were connected to the front axle, provision would have to be made by means of an adjustment of some kind for adjusting the two axles nearer together to allow the wheels to turn in a small compass; but by the arrangement of the free end of the reach moving in the arc of a circle it enables the hind wheels to move in opposite directions and make room for the front wheels to turn short around without rubbing the bed of the wagon, as would be ordinarily the case with other wagons. Thus the time taken to adjust the end of the reach, were it connected with the axle, as well as the labor employed, is avoided, and the vehicle can be in this example of connection turned extremely short, safely, and expeditiously.

My invention is simple in its construction, not easily gotten out of order, and is cheaply manufactured.

Having thus described my invention, what I

claim as new, and desire to secure by Letters
Patent, is—

The combination, with the rear hounds, D
D, and reach G, of the circular frame H and
5 front hounds, I, constructed of one piece of
wood, and provided with the slotted arc K
and braces $h' h^2$, all arranged, constructed, and
operating as shown and described.

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

HERMANN BENSMANN.

Witnesses:

HENRY LAUT,
WILLIAM SCHULENBERG.