

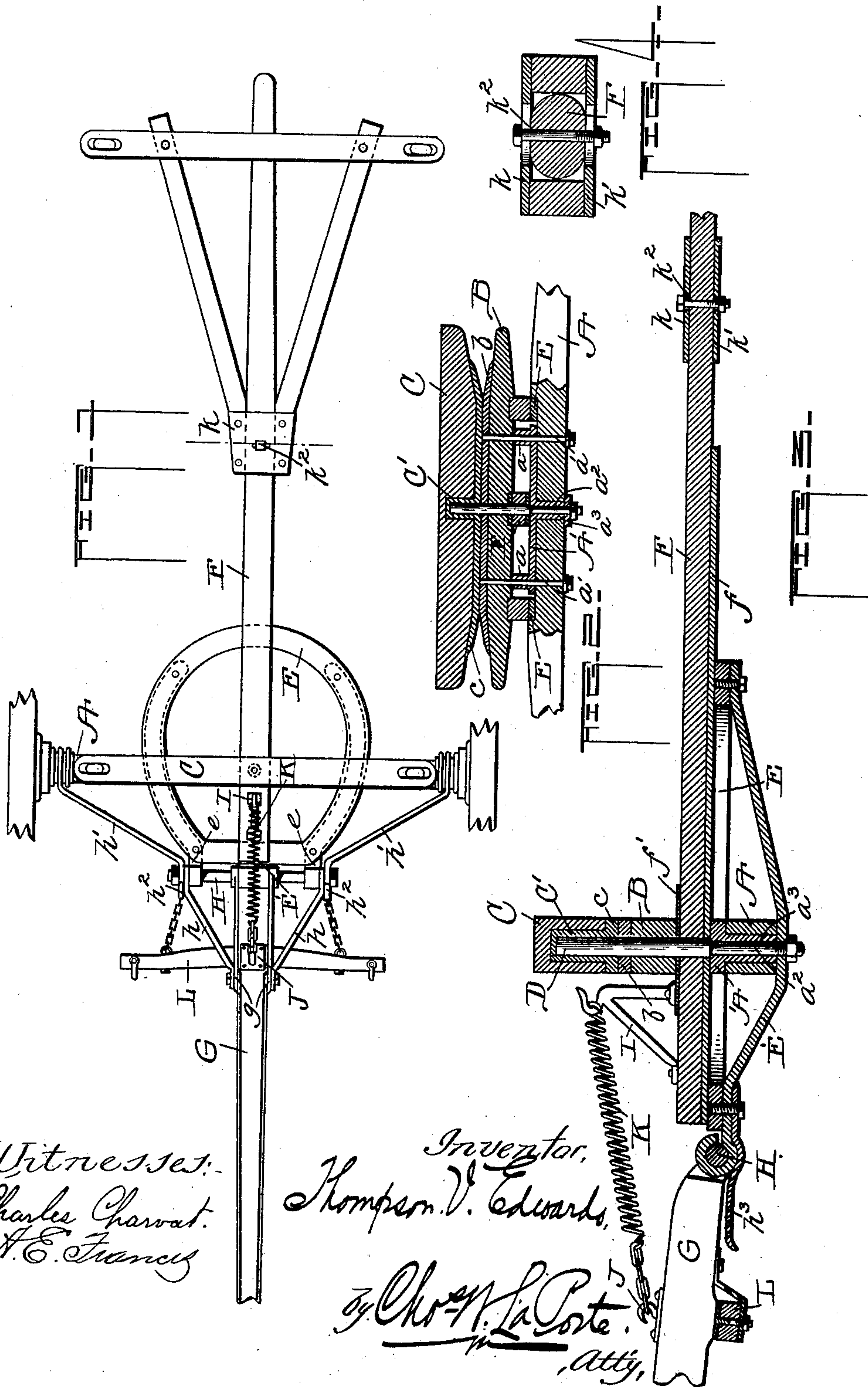
No. 668,985.

Patented Feb. 26, 1901.

T. V. EDWARDS.
WAGON.

(Application filed Dec. 22, 1899.)

(No Model.)



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UNITED STATES PATENT OFFICE.

THOMPSON V. EDWARDS, OF PEORIA, ILLINOIS, ASSIGNOR TO FRANK H. COTES, OF SAME PLACE.

WAGON.

SPECIFICATION forming part of Letters Patent No. 668,985, dated February 26, 1901.

Application filed December 22, 1899. Serial No. 741,253. (No model.)

To all whom it may concern:

Be it known that I, THOMPSON V. EDWARDS, a citizen of the United States, residing at Peoria, in the county of Peoria and State of Illinois, have invented certain new and useful Improvements in Wagons; 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 certain new and useful improvements in the construction of wagons or similar vehicles, whereby a wagon is made which is simple in construction and cheap at first cost.

More particularly, my invention has for its object the construction of a wagon having certain novel features, which consists in the provision of a new and improved means for coupling the bolster and its coacting parts to prevent the coupling pin or bolt from wearing away the wood of the bolster and bed-piece or axle or other engaging parts, and in the provision of a new and durable tongue-support and of suitable means for coupling the rear hounds to the reach in such a manner as to provide for a rolling of the reach in its support when the wagon is lunched from side to side, and of certain other features in combination therewith, which will be more fully described in the specification and pointed out in the claims.

That my invention may be more fully understood, reference is had to the accompanying drawings, in which—

Figure 1 is a plan view of a wagon constructed in accordance with my invention, the rear wheels not being shown and with only a portion of the front wheels thereon. Fig. 2 is a vertical cross-section of the front bolster, sand-board, bed-piece or axle, and the coupling therefor. Fig. 3 is a vertical longitudinal section through the reach, showing in detail the coupling and tongue-support; and Fig. 4 is an enlarged cross-section on the line X X, Fig. 1.

In the drawings like letters of reference indicate the several corresponding parts of the figures.

A represents the forward bed-piece or axle, B the sand-board, and C the bolster. The

sand-board is suitably supported on and above the bed-piece or axle upon the studs a , projecting up from a bearing-plate A' , carried on the bed-piece. These studs are provided with perforations through which brace-rods a' are carried, inserted through from the bottom of the bed-piece and carried up into the sand-board. The bearing-plate A' has a centrally-disposed downwardly-projecting stud or socket a^2 and is provided with an aperture a^3 . The bolster C is provided with a bearing-plate c , similar to the plate A' , and bears on a plate b somewhat similar, carried on the sand-board. The plate c has a centrally-disposed upwardly-projecting stud or socket C' , shown embedded in the bolster C . The function of these studs, as described, is to provide a bearing for the king-bolt, the purpose of which is to provide a coupling which will be durable and assist in maintaining the length of wear of the bolster and bed-piece or axle. The king-bolt is described as D , the lower portion being shown reduced in size.

A hound is provided, as at E , substantially of the shape of a horseshoe, and is shown supported on the bed-piece A , and $E'e$ are brace-rods connecting the hound at suitable points on either side of the axle, as shown. The forward ends of the brace-rods serve as journals, for a purpose to be described.

F is a reach suitably coupled to the rear axle and bolster and is carried between the axle and sand-board and is shown extended somewhat forward thereof and bearing on the forward and rear sections of the hound E .

f is a bearing-plate suitably secured to the bottom of the reach and extends from the forward end to a point somewhat central thereof, and f' is a plate similar to plate f but much smaller in length and serves as a bearing-plate for the upper side of the reach and beneath the sand-board.

The king-bolt or coupling-pin D is carried through the sand-board, reach, and axle, and has a nut secured on its lower end. The bolster C is then dropped into place, and the pin is carried in the socket or stud C' of the plate c . It is my purpose in providing a coupling of this character to so construct and form the several parts as that they will be easily cou-

pled together and will be durable and to provide journal-bearings in the axle and bolster, such as are shown by the studs a^2 and C' , which will materially assist in lengthening the wear
 5 of said parts and prevent any wearing away of the wood, such as is common in wagons now in use.

My invention consists, further, in the provision of a suitable tongue or pole support and
 10 suitable journal-bearings therefor and of the provision of novel means for assisting the horse in pulling a load, so that the draft will always be up. To this end I provide a pole, as at G , and a rod H , the rod being journaled
 15 in the braces $E' e e$, which serve as journals therefor, and directly in front of the hound E . The pole G is coupled to the rod H by means of the brackets $g g$, suitably secured to the pole. Brace-rods are provided, as at $h h$,
 20 coupled to the rod H and the pole, and $h' h'$ are rods suitably coupled to the rod H and the axle A , which are provided with the hooked ends $h^2 h^2$. I have shown my doubletree L located beneath the pole and linked to the
 25 hooked ends of the rods $h' h'$ and have shown the pole having a spring-support h^3 , suitably fastened beneath the front end of the hound and extending out beneath the pole and acting as a support therefor when in its normal
 30 position. The tongue-support consists of the brackets I and J , the bracket I carried on the forward end of the reach and the bracket J carried on the pole and above the doubletree. A spring K is provided, adapted to connect
 35 with the brackets I and J when it is desired to support the tongue, the length of adjustment being varied by interposing links to take up the length required. I have also provided as part of my invention a rolling reach,
 40 wherein there is provided a reach suitably connected with the rear hounds or braces of a wagon as to provide for the same rolling in its support when either side of the wagon comes into contact with deep depressions in
 45 the ground or when going over large obstacles, preventing any undue strain on the reach and saving the same from being splintered from such rough use.

Top and bottom plates $k k$ are provided,

as shown, suitably securing the rear hounds, 50 and between which the reach extends, the same having an oval shape, as shown in Fig. 4, at this point. A bolt k^2 is passed through the plates and reach and has a nut securing the same in place, the plates $k k'$ being 55 slotted to allow a free and easy movement of the reach and bolt as the same rolls in its support.

Having thus fully described my invention, what I claim, and desire to secure by Letters 60 Patent, is—

1. In a wagon, the combination with the forward axle thereof, of the hound substantially as shown and specified having the curved rear portion and the forward portion parallel 65 with the axle, and supported by the same, the reach passing between the sand-board and bed and resting upon the forward and rear portions of the hound, as shown.

2. In a wagon, the combination with the forward axle and reach, a hound supported and arranged as shown forming a support for the reach which is carried forward of the axle, a brace connecting the forward and rear portions of the hound and passing beneath and 75 connected with the axle, a tongue connected with the brace, the arrangement being such as to provide an upward draft from the center of the axle, substantially as described.

3. The means for supporting the forward 80 end of the reach and preventing lateral displacement of the axle and component parts, consisting in combination with the axle and reach, of the hound substantially of one piece and having forward and rear brace portions 85 of the axle and connected therewith and held firm by suitable straps, the brace located central of said axle and connected with the hound and arranged to have coupled therewith the pole substantially as and for the purpose set 90 forth.

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

THOMPSON V. EDWARDS.

Witnesses:

A. JACOBSON,
 CHAS. W. LA PORTE.