

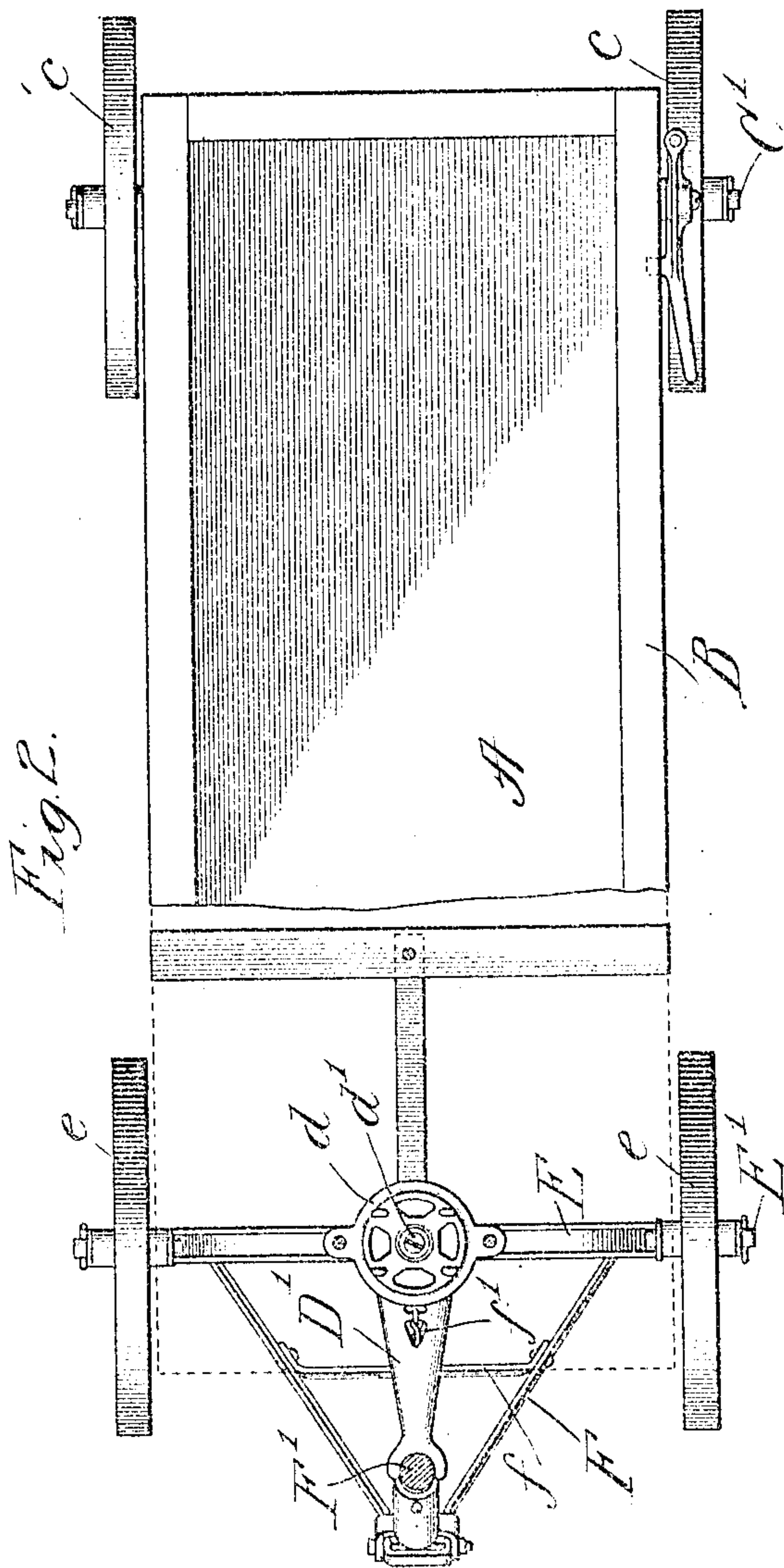
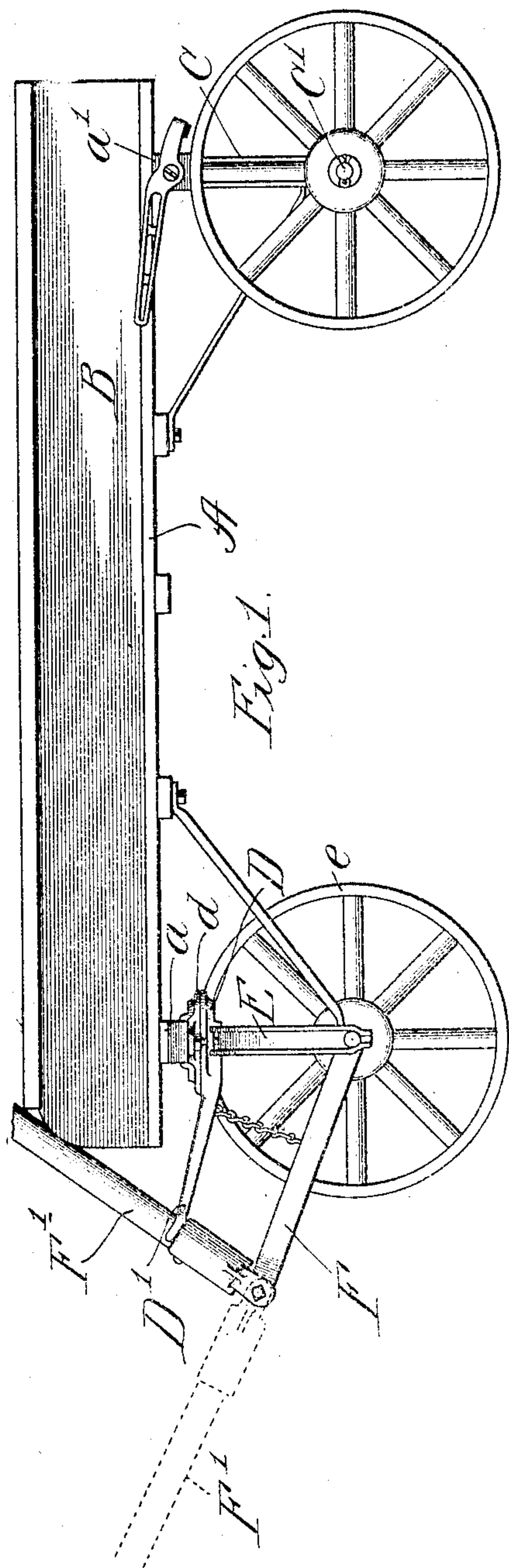
No. 887,385.

PATENTED MAY 12, 1908.

H. L. FERRIS.
TOY WAGON.

APPLICATION FILED OCT. 17, 1907.

2 SHEETS—SHEET 1.



Witnesses:
John Enders
Chas. H. Buell.

Inventor:
Henry L. Ferris.
By Dyrenforth, Lee, Chittenden & Wiles,
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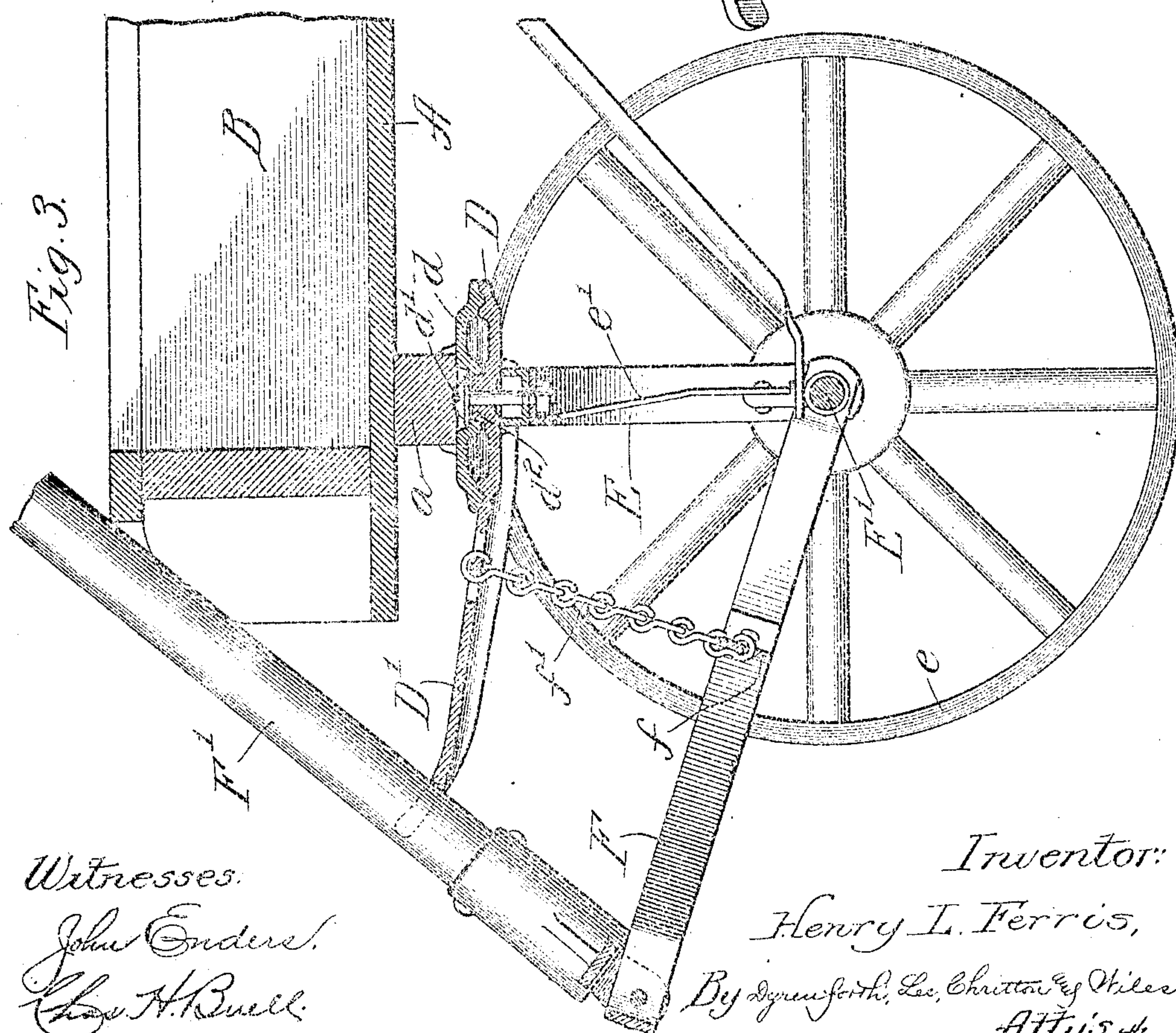
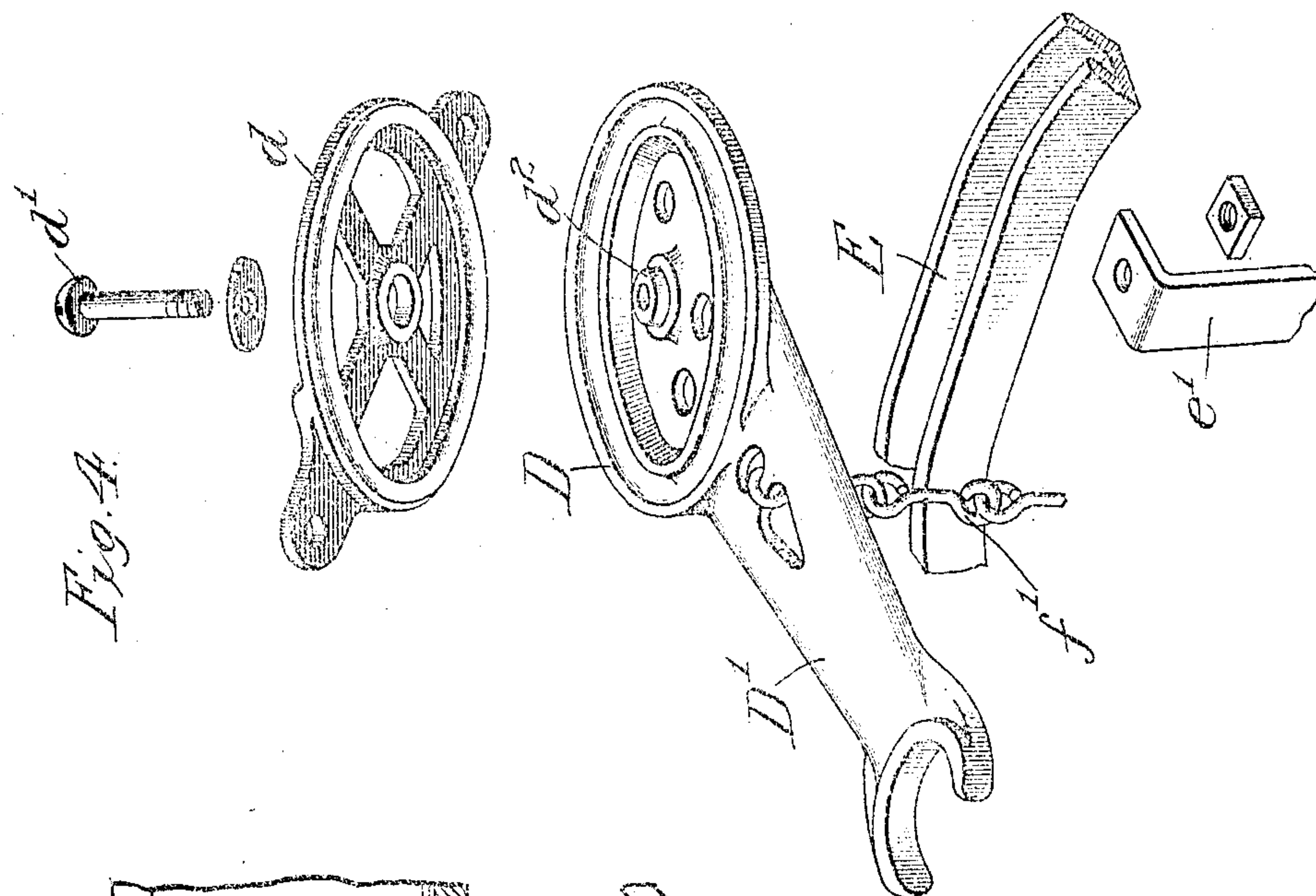
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2 SHEETS—SHEET 2.



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Attys.

UNITED STATES PATENT OFFICE.

HENRY L. FERRIS, OF HARVARD, ILLINOIS, ASSIGNOR TO HELM, HUNT, FERRIS & CO., OF HARVARD, ILLINOIS, A CORPORATION OF ILLINOIS.

TOY WAGON.

No. 887,385.

Specification of Letters Patent.

Patented May 12, 1908.

Application filed October 17, 1907. Serial No. 397,910.

To all whom it may concern:

Be it known that I, HENRY L. FERRIS, a citizen of the United States, residing at Harvard, in the county of McHenry and State of Illinois, have invented a new and useful Improvement in Toy Wagons, of which the following is a specification.

My invention relates to certain new and useful improvements in toy wagons and is fully explained in the specification and shown in the accompanying drawings, in which:

Figure 1 is a side elevation of my improved wagon; Fig. 2 is a top plan thereof, the forward portion of the body and bed being broken away; Fig. 3 is a central longitudinal section through the front portion of the wagon; and Fig. 4 is a perspective view showing the fifth-wheel sections and adjacent parts separated one from the other, whereby their individual constructions and manner of assembling can be readily understood.

Referring to the drawings, A is a wagon-bed supporting the removable box B. The bed A has near its front end a bolster *a*, and near its rear end a bolster *a*¹ supporting an arch C, which carries a rear axle C¹, upon the ends of which are mounted rear wheels *c*.

To the lower face of the bolster *a*, is secured an upper fifth-wheel member *d* centrally perforated and hollowed out to receive the head of a bolt *d*¹. Beneath the upper fifth-wheel member *d* is a lower fifth-wheel member D, having a forwardly-projecting fork D¹. The lower fifth-wheel member D has a central boss *d*² which projects upward through the central perforation of the upper fifth-wheel member *d* and is adapted to receive the bolt *d*¹, as illustrated in Fig. 3. To the lower fifth-wheel member D and beneath the same, is secured an arch E supporting a front axle E¹, at the ends of which are secured front wheels *e*. A strut *e*¹ secures the central portion of the arch E to the central portion of the axle E¹, whereby the arch is stiffened and strengthened.

To the axle E¹ is pivotally secured a lower tongue-member F, preferably constructed of scrap metal, as illustrated, the said lower tongue-member being braced by a strut *f* and prevented from undue downward swing about its pivot by a chain *f*¹ connecting the forward extension D¹ of the lower fifth-wheel member with said strut. To the outer or forward end of the lower tongue-member F is pivotally secured an upper tongue-member

F¹, which is adapted to swing back over the bed for steering purposes, and which can be swung forward to draw the wagon. When swung back, as illustrated in Fig. 3, the upper tongue-member rests in the fork provided at the front of the forward extension D¹ of the lower fifth-wheel member D, and by this means the upper tongue-member is prevented from contact with the edge of the wagon-box, whereby the steering operation is facilitated. It will be understood that in the use of these wagons, the users frequently throw more or less weight upon the steering-handles, and when the steering-handles rest upon the edge of the wagon-box, as has heretofore been common practice, more or less friction takes place. With the improved construction here illustrated, any weight thrown upon the steering-handle by the user is supported by the forked extension D¹, which turns with the axle, so that there is no sliding contact between the steering-handle and the edge of the wagon-box, and consequently the steering operation is much easier.

When it is desired to remove the box from the bed and to use the wagon with a flat, unobstructed bed, it is often desirable to swing down the steering-handle below the angle permissible with the parts in the position shown in Fig. 3, and this can readily be accomplished by swinging up the lower tongue-member until its forward end passes over the forward end of the extension D¹ of the lower fifth-wheel member, in which case the upper tongue-member can be swung down quite low over the bed. In this position, the upper tongue-member will not strike the wagon-bed, by reason of the fact that its pivot to the lower tongue-member is raised a considerable distance above the plane of the bed, and because the pivotal connection between the two tongue-members is such as to limit the angle which they can assume with reference to each other. By this means I secure a steering-device which can be used both with and without the box in place upon the bed of the wagon, and which will perform its steering function with very little friction under all conditions.

I realize that considerable variation is possible in the details of construction of my improved device without departing from the spirit of my invention, and I do not intend, therefore, to limit myself to the specific form herein shown and described.

What I claim as new, and desire to secure by Letters Patent, is:

1. The combination with a wagon-bed and a pair of oscillating front steering-wheels, of a device pivotally supported to swing laterally and having operative connection with the wheels for oscillating them, a steering-handle secured to said device and adapted to swing forward and rearward for drawing and steering the wagon, and means oscillatable in an arc of a circle about the pivot of said device and adapted to support the handle when turned rearward for steering.
2. The combination with a wagon-bed, of a pair of oscillating front steering-wheels, a device pivotally supported to swing laterally and having operative connection with the wheels for oscillating them, a handle pivotally secured to said device and adapted to be swung forward and rearward for drawing and steering the wagon, and means having a connection rigid against lateral movement with said device and oscillatable therewith in an arc of a circle about the pivot thereof and adapted to support the handle when turned backwards for steering.
3. The combination with a wagon-bed, of a swiveling front axle supporting a pair of steering-wheels, a handle-supporting device extending forward from the axle, a handle pivotally connected to said handle-supporting device and adapted to be swung forward and rearward for drawing and steering the wagon, and means having rigid connection with the axle and oscillatable therewith in an arc of a circle about its center of oscillation, adapted to receive and support the handle when turned backwards for steering.
4. The combination with a wagon-bed, of a swiveling front axle supporting steering-wheels, a handle-supporting device extending forward from the axle, a handle pivotally connected to said handle-supporting device and adapted to be swung forward and rearward for drawing the wagon and steering it, and a forwardly-extending fork having rigid connection with the axle and adapted to receive and support the handle when turned back, said fork being mounted to oscillate rigidly with the axle.
5. The combination with a wagon-bed, a fifth wheel and an axle, and steering-wheels having support through the fifth wheel, of a handle-supporting device extending forward from the axle, a handle having pivotal connection with said handle-supporting device and adapted to be extended forward and rearward for drawing and steering the wagon, and a fork extending forward from the movable fifth-wheel member and adapted to receive and support the handle when turned backwards.

6. The combination with a wagon-bed, of an upper fifth-wheel member, a lower fifth-wheel member having pivotal connection therewith and provided with an integral forwardly-extending fork, an axle carried thereby and rigid with said lower fifth-wheel member, front wheels supported by the axle, means extending forward from the axle for supporting the handle, a handle having pivotal connection with said handle-supporting means and adapted to be swung forward for drawing the wagon and rearward for steering the same, said handle, when turned rearwardly for steering, being arranged to rest in said fork, to receive support therefrom.

7. The combination with a wagon-bed and a removable box therefor, of an upper fifth-wheel member having pivotal connection with the bed, a lower fifth-wheel member pivotally secured to the upper fifth-wheel member, an axle secured to the lower fifth-wheel member, front wheels upon said axle, a lower tongue-section pivotally secured to the axle, an upper tongue-section having pivotal connection with the lower tongue-section and adapted to be turned forward for drawing and backward for steering the wagon, and a fork extending forward from the lower fifth-wheel member and adapted to engage the upper tongue-section when turned back, said fork being arranged to swing through an opening in the lower tongue-section when said section is thrown directly upward, whereby, when the box is removed from the bed, the upper tongue-section can be brought down in proximity to said bed.

8. The combination with a wagon-bed, a removable box therefor and a stationary upper fifth-wheel member, of a lower fifth-wheel member having pivotal connection with the upper fifth-wheel member, a fork extending forward from said lower fifth-wheel member, an axle supported by the lower fifth-wheel member, a pair of wheels carried by the axle, a lower tongue-section pivoted to the axle, said lower tongue-section being of V-shape, and a handle pivotally secured to the lower tongue-section at its forward end and adapted to be swung rearwardly and to rest in said fork, the fork being positioned to swing through the V-shaped lower tongue-section when said tongue-section is swung up vertically, whereby the upper tongue-section can approach the bed of the wagon when the box is removed.

HENRY L. FERRIS.

In presence of—

R. A. HEMENWAY,
J. E. RANDERSON.