(No Model.)

C. ABRESCH.

SKELETON WAGON.

No. 415,430. Patented Nov. 19, 1889.

Fig. 1.

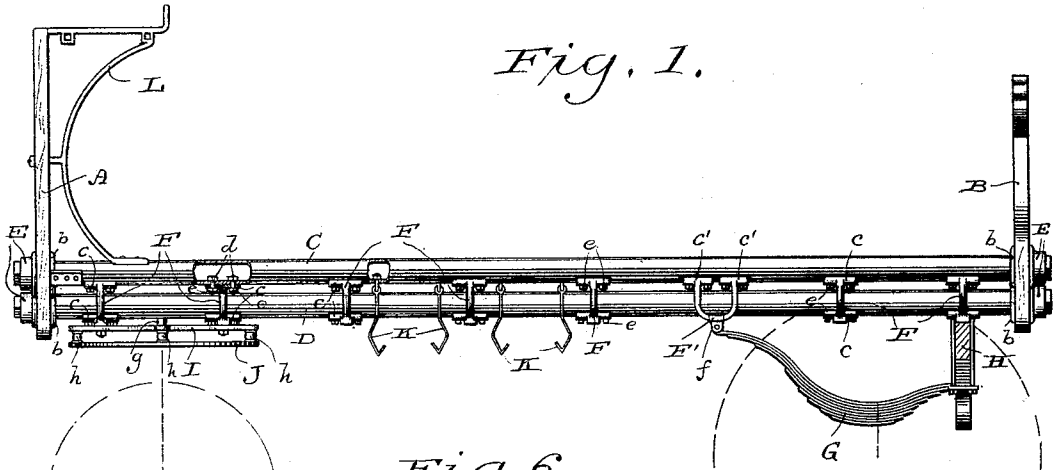


Fig. 6.

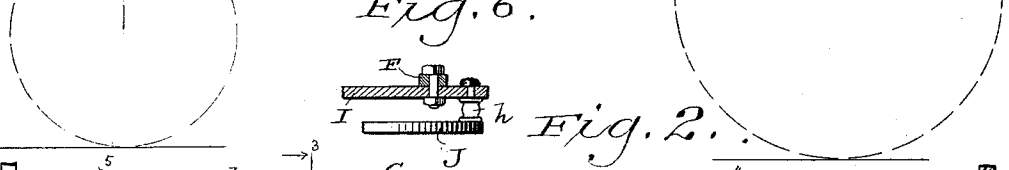


Fig. 2.

Fig. 3.

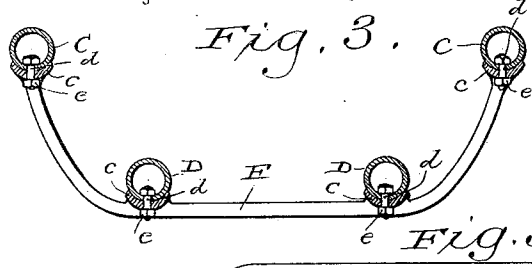


Fig 4.

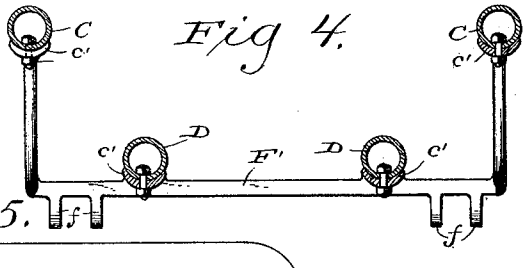
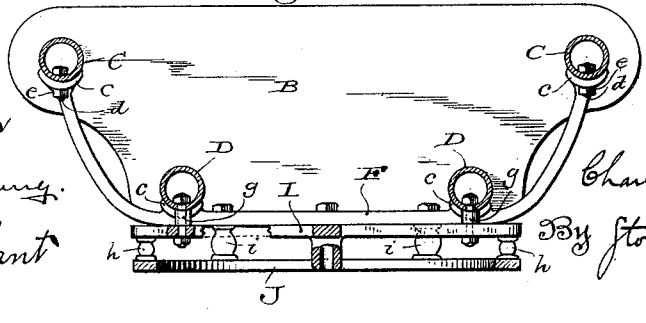


Fig. 5.



Witnesses
Geo. W. Young.
N. E. Oliphant

Inventor
Charles Abresch
By Stout & Underwood
Attorneys

N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

CHARLES ABRESCH, OF MILWAUKEE, WISCONSIN.

SKELETON WAGON.

SPECIFICATION forming part of Letters Patent No. 415,430, dated November 19, 1889.

Application filed August 12, 1889. Serial No. 320,436. (No model.)

To all whom it may concern:

Be it known that I, CHARLES ABRESCH, of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain new and useful Improvements in Skeleton Wagons; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to skeleton wagons, such as are employed for hauling barrels; and it consists in certain peculiarities of construction and combination of parts, to be hereinafter described with reference to the accompanying drawings and subsequently claimed.

In the drawings, Figure 1 represents a side elevation of a wagon constructed according to my invention and partly broken away; Fig. 2, a plan view of the same; Figs. 3, 4, and 5, transverse sections respectively taken on lines 3 3, 4 4, and 5 5 of Fig. 2; and Fig. 6, a detail view illustrating a connection between a fifth-wheel section and spider employed as parts of said wagon.

Referring by letter to the drawings, A represents the dash-board, and B the tail-board, of the wagon, these boards being provided at intervals with openings, through which are passed the ends of metallic tubes C D, the latter being designed for use instead of wooden beams, as ordinarily employed, said metal tubes being lighter, stronger, and more durable than the wooden beams. The side tubes C are at an elevation higher than the intermediate tubes D, and all the tubes are provided with rigid collars *b*, that come against the inner sides of the dash and tail boards A B to prevent longitudinal movement of said tubes as well as to brace said boards, the latter being held in place by socket-caps E, screw-threaded or otherwise connected to the ends of the tubes.

The tubes C D are united at intervals of their length by means of transverse braces F, each of the latter being provided with concave seats *c*, that are preferably secured to said tubes by bolts *d* and nuts *e*. The bolts *d* are placed in position from within the tubes, and thus the heads of said bolts are always out of the way and the upper surface of each tube is uninterrupted between the collars *b* thereon, whereby in the matter of loading and unloading a wagon of this description the barrels may be rolled back and forth on said tubes without coming in contact with any obstructions, this being an especial advantage of my invention.

A transverse brace F′ near the rear of the wagon-body runs straight across and has U-shaped ends provided with concave seats *c′*, similar to those *c* on the other braces, said seats being bolted to the side tubes C in the manner above described. The transverse brace F′ is provided with lugs *f*, and to these lugs are clipped springs G, belonging to the rear truck of the wagon, the bolster H of this truck being clipped to the rear one of the transverse braces F, as illustrated in Figs. 1 and 2.

Bolted or otherwise suitably secured to the tubes D and the two forward ones of the transverse braces F is a spider I, sleeves or washers *g* being arranged on the bolts between said tubes and spider, as is best illustrated in Fig. 5. The arms of the spider I are connected at their ends to a fifth-wheel section J by means of bolts and nuts or other suitable means, sleeves or washers *h* being arranged on the bolts between said spider and fifth-wheel.

In addition to the construction just described, I prefer to bolt the fifth-wheel section to the adjacent transverse braces F, sleeves or washers *i* being arranged on the latter bolts between said fifth-wheel section and transverse braces.

The usual barrel-slings K are bolted to the side tubes C in a manner similar to that by which the concave seats on the transverse braces are secured, and the dash-board A is provided with the usual seat-supporting brackets L, as shown by Fig. 1.

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

1. A skeleton-wagon body comprising a series of longitudinal tubes and a series of transverse braces united to the under surfaces of the tubes, whereby the upper surface of each tube is unobstructed from end to end of said wagon-body, substantially as set forth.

2. A skeleton-wagon body comprising a series of longitudinal tubes and transverse braces provided with concave seats secured

to the under surfaces of the tubes, substantially as set forth.

3. A skeleton-wagon body comprising a series of tubes united by transverse braces and provided near their ends with collars, dash and tail boards slipped onto the ends of the tubes against the collars, and socket-caps arranged on said ends of the tubes to impinge against said boards, substantially as set forth.

4. A skeleton-wagon body comprising the longitudinal tubes C D, united by the transverse braces F, the spider I, having the arms thereof fastened to the tubes D and the two forward ones of said braces, and a fifth-wheel section secured to said spider, substantially as set forth.

5. A skeleton-wagon body comprising a series of longitudinal tubes arranged at different elevations, transverse braces uniting the tubes, one of these braces made straight and provided with U-shaped ends for attachment to the adjacent tubes, and lugs on the latter brace for attachment to the springs of a truck, substantially as set forth.

6. A skeleton-wagon body comprising a series of longitudinal tubes and a series of transverse braces provided with concave seats bolted to the tubes, the bolts being passed through the seats and tubes from within the latter, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

CHARLES ABRESCH.

Witnesses:
N. E. OLIPHANT,
WM. KLUG.