(No Model.)

R. M. WILLIAMSON.

LUMBER WAGON.

No. 306,303. Patented Oct. 7, 1884.

Fig. 1.

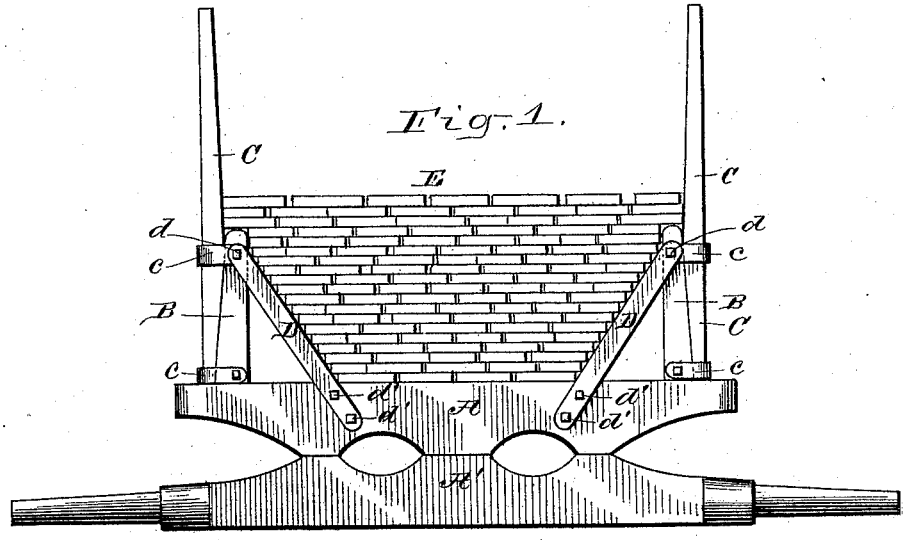


Fig. 2.

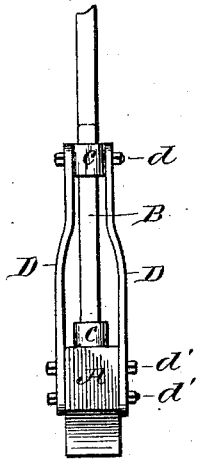


Fig. 3.

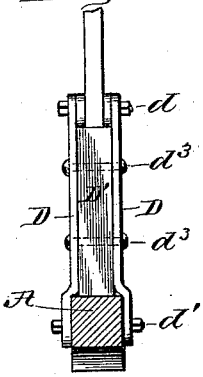


Fig. 4.

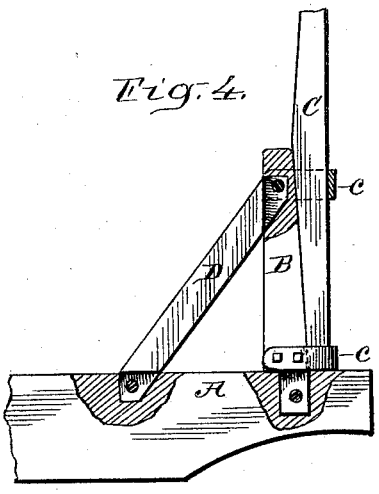
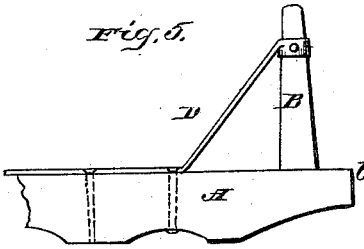


Fig. 5.



Witnesses:
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UNITED STATES PATENT OFFICE.

RELLY M. WILLIAMSON, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO HENRY STEPHENS, OF SAME PLACE.

LUMBER-WAGON.

SPECIFICATION forming part of Letters Patent No. 306,303, dated October 7, 1884.

Application filed January 30, 1884. (No model.)

To all whom it may concern:

Be it known that I, RELLY M. WILLIAMSON, of Chicago, in the county of Cook 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 thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention has for its object to provide a construction in wagons for carrying lumber, whereby the body or pile of lumber will be definitely narrowed at its base, so as to give room for turning the wagon more shortly and without injury to the boards, against which the wheels would otherwise strike.

The invention consists in providing braces or arms outwardly and upwardly inclined from the bolster to the stakes, between and against which braces or arms the lumber will be piled, thereby insuring a narrow base or a contraction of the lower part of the load, while at the same time affording the necessary lateral support for such part of the load.

Heretofore it has been common to pile lumber between the vertical stakes of a wagon substantially in the form or manner herein illustrated; but in so arranging the lumber as to give a narrow base to the load the loaders have been guided exclusively by the eye, and in the absence of immediate support for the lower contracted part of the load said load has been allowed to bear more forcibly against the prolonged stakes in a manner calculated to break them or to lessen the stability of the load. By means of inclined braces or arms extending from the bolster upwardly and outwardly into connection with the stakes, as I prefer to construct my device, not only is a permanent guide afforded for piling the lumber on the wagon, but the stakes are strengthened and the load is more safely sustained.

Referring to the drawings, Figure 1 is a rear view of a wagon containing my improvement, and partially loaded with lumber. Fig. 2 is an end view of the bolster, and a side view of the stakes and braces thereto attached. Fig. 3 is an inside view of the braces as preferably constructed, obtained by a transverse section of the bolster. Fig. 4 shows a bolster in elevation, having the brace connecting the bolster and stake applied as a permanent part of the structure, as will sometimes be the case in wagons intended exclusively for carrying lumber, and Fig. 5 shows another form of the permanent brace connecting the bolster and stake, it being, in this instance, an upturned inclined extension of the iron plate or strap secured to the top of the bolster, the end of which is split and secured on opposite sides of the stake by a through-bolt.

A is a bolster. A′ is the axle of a wagon. B B are the regular short stakes permanently secured to the bolster, and C are the removable long stakes usually employed in wagons for carrying lumber, being inserted in strap-loops *c c*, affixed to the stakes B. D are inclined braces or arms reaching from the tops of the stakes B to the bolster, and connected with the latter at points sufficiently near each other to give the requisite narrowness to the base of the load E. Both front and rear bolsters of the wagon should be provided with said braces D.

The braces D may be variously constructed, and may either be permanent or removable, as shown in the remaining figures of the drawings. In said Fig. 4 the brace is represented as being made of wood and as having its ends provided with tenons, which enter suitable mortises in the bolster and stake, and secured thereto by pins or bolts. Said braces may, however, consist of iron or wooden straps externally applied to the stake and bolster, as shown in Figs. 1, 2, and 3. In Fig. 2 the brace D is shown to consist of two similar straps applied one on either side of the bolster and stake, being held to the latter by a bolt, *d′*. In this case the lowermost bolt or bolts, *d′*, may be withdrawn and the brace-straps D allowed to hang vertically at the sides of the stakes B, so as to permit the insertion of the usual wagon box or bed. If desired, the lower ends of the brace-straps may be temporarily secured to the bolster at a point below the stake, so as to retain them in their vertical position until again required for use. The construction shown in Figs. 1 and 2 will of course also permit the braces D to be entirely removed from the wagon to permit the use of the

ordinary wagon-bed, and replaced when necessary for hauling lumber.

For the purpose of providing a broad face in the brace when constructed of opposite straps D D, or one of such straps, Fig. 3 shows an intermediate block, D′, bolted to the brace, being preferably of wood, and arranged either flush with the brace-straps or projecting beyond the same, so as to afford a broad surface for contact with the edges or corners of the boards resting against them.

It is not strictly essential to my invention that the braces D be connected with the stakes B. They may rest against them, or other means may be provided for their proper support in the inclined position shown, so that they may both facilitate the proper piling of the load, and also support the load at its inclined sides. On the other hand, the braces may be positively attached only at their upper ends to the stakes B, and may simply rest at their lower ends upon the bolster, though the supporting effect will in this case be less perfect.

I claim as my invention—

1. The combination, with the bolsters A of a wagon-gear, the upper surface of said bolsters being lower than tops of the forward wheels, of upwardly and outwardly inclined braces D, substantially as and for the purpose set forth.

2. The combination, with the bolster A of a lumber-wagon, gear, and stakes B, of upwardly and outwardly inclined braces D, supported at their upper ends by the stakes, and at their lower ends by the bolster, substantially as and for the purposes set forth.

3. The combination, with the bolster A of a lumber-wagon, gear, and stakes B, of upwardly and outwardly inclined braces D, removably secured in place, substantially as and for the purposes set forth.

4. The combination, with the bolster A of a lumber-wagon, gear, and stakes B, of a brace-strap, D, and broad-faced block D′, substantially as and for the purposes set forth.

In testimony that I claim the foregoing as my invention I affix my signature in presence of two witnesses.

RELLY M. WILLIAMSON.

Witnesses:
M. E. DAYTON,
OLIVER E. PAGIN.