

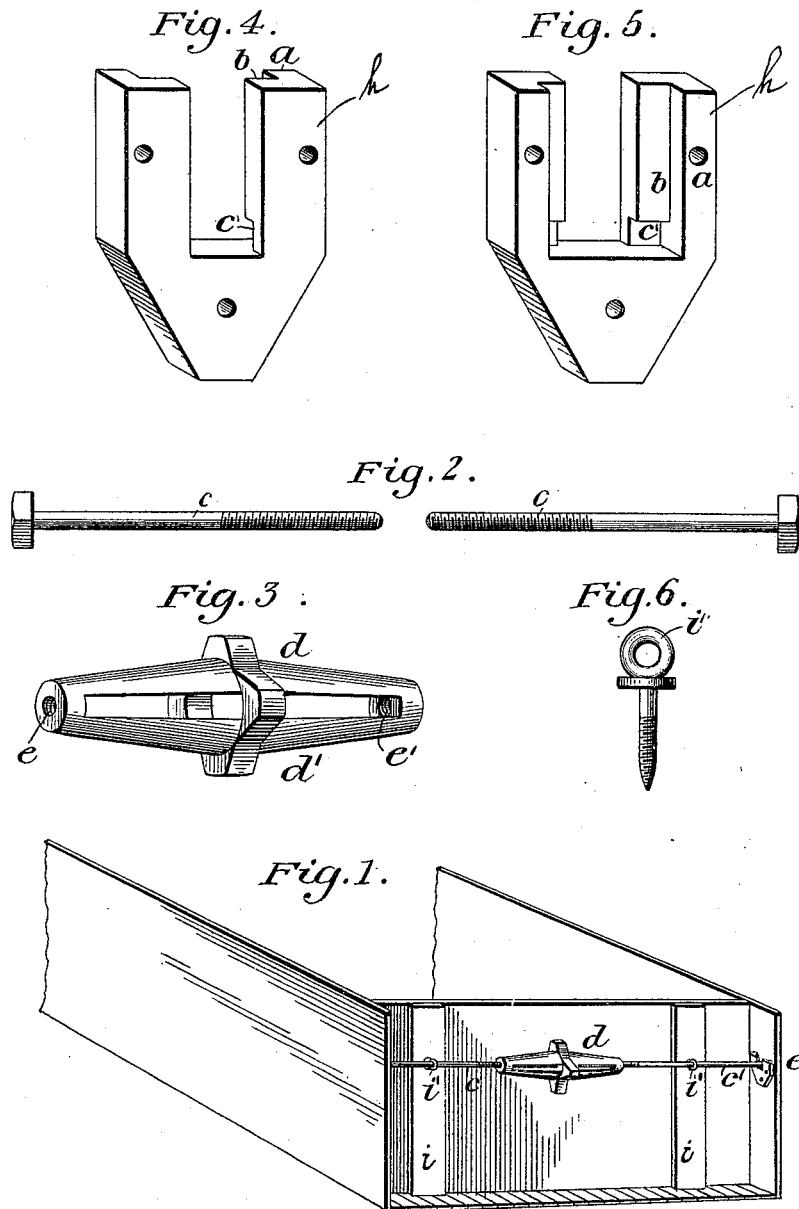
No. 645,836.

Patented Mar. 20, 1900.

V. E. SIMMONS & R. L. WILLIAMSON.  
ROD AND FIXTURE FOR WAGON END GATES.

(Application filed Nov. 9, 1898.)

(No Model.)



Witnesses:

J. L. Warren  
C. N. Smith

Inventors:

R. L. Williamson  
V. E. Simmons

# UNITED STATES PATENT OFFICE.

VALERY EVANDER SIMMONS AND ROBERT LEE WILLIAMSON, OF TARKINGTON, TEXAS.

## ROD AND FIXTURE FOR WAGON END-GATES.

SPECIFICATION forming part of Letters Patent No. 645,836, dated March 20, 1900.

Application filed November 9, 1898. Serial No. 695,994. (No model.)

*To all whom it may concern:*

Be it known that we, VALERY EVANDER SIMMONS and ROBERT LEE WILLIAMSON, of Tarkington, in the county of Liberty and State of Texas, have invented a new and valuable Improvement in End-Gate Rods for Wagons; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

Figure 1 of the drawings is a representation of an end view of the wagon-body with our fastening applied. Fig. 2 shows the end rods; Fig. 3, the turnbuckle. Figs. 4 and 5 show inner and outer surface of metal attachment for head of rods. Fig. 6 shows screw with ring for body of rod.

This invention has relation to improvements in means for fastening the end-gates of wagons; and it consists in combining with an end-gate sashed into the sides of the wagon-box a turnbuckle and rods connecting with it at one end by means of screw-threads and having heads at opposite ends for attachment to the metal attachment provided for them. The said turnbuckle affords means of tightening the rods, thereby preventing the sides from further separating when loaded.

It also consists in the combination, with the sides of a wagon-box, of a gate sashed therein, a turnbuckle and rods secured at one end to the sides of the box and secured at the other in the ends of the said buckle by screw-threads, of screws with rings for passage of rods, thus connecting rod with end-gate, a connection which is permanent and prevents end-gate from jolting or rattling.

In the annexed drawings, Fig. 1 shows the end-gate in place. *i i* show strips of wood through which the rod passes or to which it is attached by the screw shown in Fig. 6, as at *i*. The ends of buckle *d* are perforated at *e* and *e'* and screw-threaded oppositely for the purpose of receiving oppositely-screw-threaded ends of rods *c*, which have on their free ends each a head adapted to engage the cavity *c'* of Figs. 4 and 5, which are arranged

opposite each other upon inside of wagon-body in rear of gate, with surface shown in Fig. 4 against side of wagon-body and surface shown in Fig. 5 directed to similar surface on opposite attachment. The buckle *d* and its rods *c* are thus extended across the wagon-body behind the end-gate, in which position the said rods are supported by the ring in outer end of screw. (Shown in Fig. 6.)

*h h* are retaining-pieces attached to the inside of the side-boards of the wagon, as by screws or other suitable means. These retainers have vertical recesses *b*, terminating in deeper recesses *c'* for the reception of the heads of threaded bolts which hold the end-gate in place.

Having first inserted the sliding end-gate in its place, the necks of rods immediately adjacent to the heads are slid straight down between the two upright arms of Figs. 4 and 5, thus allowing head of rod to enter from above and occupy cavity *c'*. The turnbuckle *d* is now rotated and the rods drawn tight, thus pulling heads of rods into deeper cavity of Fig. 4. This draws sides of wagon-box forcibly against ends of end-gate. We thus prevent end-gate from rattling or jolting up, and thus giving opportunity for loss of contents. To remove end-gate, turn the buckle back a few revolutions, thus pushing heads of rods *c* out of inner cavity of Figs. 4 and 5. This enables one to lift end-gate, with rods attached, out. The attachment of rod to end-gate is here made clear and shown to be expedient, as it makes impossible the loss of either without the other.

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

1. The combination of a wagon-body provided with retainers attached to the inner sides of the body, said retainers having recesses adapted to receive the heads of threaded rods a screw-threaded turnbuckle engaging said rods and means to attach said rods to an end-gate, all arranged as set forth.

2. The combination of a wagon-body provided with inside retainers having interior

recesses, threaded rods having heads fitting said recesses, and a threaded turnbuckle engaging said rods all arranged as set forth.

3. The combination of a wagon-body provided with inside retainers having interior recesses *b* terminating in deeper recesses *c'*, threaded rods fitting said recesses *c'* and a

threaded turnbuckle engaging said rods, all arranged as specified.

VALERY EVANDER SIMMONS.  
ROBERT LEE WILLIAMSON.

Witnesses:

CHARLES NUTTER SMITH,  
JOHN ADKIN SIMMONS.