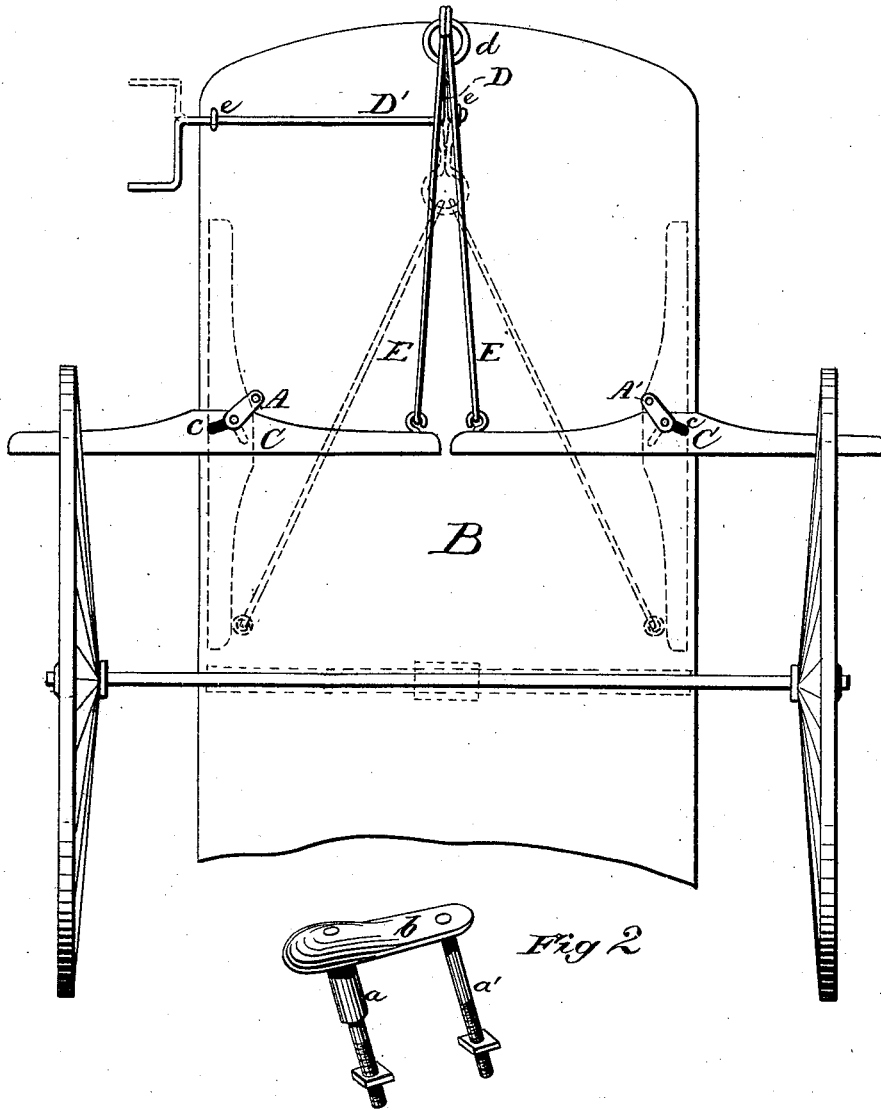


J. T. & I. R. BRYAN.
Wagon-Brakes.

No. 196,426.

Patented Oct. 23, 1877.

Fig. 1.



Attest:
E. E. Court
August Petermann

Inventors:
James T. & Isaac R. Bryan
by Louis Baggett & Co.
Attys.

UNITED STATES PATENT OFFICE.

JAMES T. BRYAN AND ISAAC R. BRYAN, OF SPRINGVILLE, WISCONSIN.

IMPROVEMENT IN WAGON-BRAKES.

Specification forming part of Letters Patent No. **196,426**, dated October 23, 1877; application filed August 13, 1877.

To all whom it may concern:

Be it known that we, JAMES T. BRYAN and ISAAC R. BRYAN, of Springville, in the county of Vernon and State of Wisconsin, have invented certain new and useful Improvements in Wagon-Brakes; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 represents the under side of that portion of a buggy box or body to which our improved brake, with its operating mechanism, is attached; Fig. 2, a detail showing one of the staples.

Our invention consists in the construction and arrangement of the brake-levers and their connecting-rods and levers in such a manner that the brakes, when not in use, shall be completely hidden under the wagon-body and out of the way, substantially as we shall now proceed more fully to describe.

In the drawing, A A' are two staples, which are firmly bolted to the under side of the box or body B, opposite to each other. Each of these staples consists of two bolts, *a a'*, and a cross-piece, *b*, which projects a little on one side, so as to reach out over bolt *a*, upon which the brake-levers C are pivoted.

The latter, which may be made of wood or metal, have each an oblique slot, *c*, through which passes the pivoting-bolt *a* of staples A A'. The staples A A' are placed obliquely upon the body B, so as not to be in the way of the brake-levers when these are swung out to brake the wheels, as represented in the drawing.

E E are two rods hinged upon the rear ends of levers C C, their other ends connecting with an eye, *d*, at one end of the cranked lever D. The latter, which is hung in bearings *e e*, consists of a short arm, D, terminating in the eye or loop *d*, and a long arm, D', which reaches to the edge of the bottom B, where it is bent upward and terminates in a treadle plate or step projecting upward parallel to the dash, so as to be within easy reach of the driver's foot.

From the foregoing description, taken in connection with the drawing, the operation of this brake will be readily understood.

When not in use the brake-levers and their operating-rods occupy the position shown in dotted lines, no part, except the end of lever D' with its treadle, projecting beyond the sides of the vehicle.

To apply the brake, the crank or treadle is depressed backward, which throws the levers C C out in a position at right angles to the sides of the body, as indicated in full lines, thereby forcing the brake-shoes square against the wheels and braking up the vehicle instantly.

To remove the brakes, the treadle is turned in the opposite direction, which will bring the brake-levers back into their original position.

The slots *c c*, in the brake-levers C, permit these to be thrown out against the rims of the wheels, when the brakes are applied, without binding or forming a dead-center, as would be apt to occur if the levers were simply pivoted upon bolts *a* without play.

By this construction the levers are, in applying the brakes, thrown forward the length of the slot before they swing out sidewise; and similarly, in releasing the brakes, they are first thrown back in under bottom B to the extent of the slot before they are folded down.

Another advantage of this slot is that it permits levers C C to be thrown out in a line with and abutting against each other, even when used on narrow bodies, which would not be the case if said levers had no play at their pivoting-points, and without which the shoes *g* could not be applied squarely against the wheels.

Having thus described our invention, we claim and desire to secure by Letters Patent of the United States—

In combination with the body or bottom B of a buggy or other vehicle, the swinging brake-levers C C, having oblique slots *c c*, rods E E, and cranked lever D D', when constructed and combined to operate substantially as and for the purpose hereinbefore set forth.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

JAMES TALIAFERRO BRYAN.
ISAAC ROLLEN BRYAN.

Witnesses:

HONS AMUNSON,
ELIAS HARRIS.