H. SWINTZ.

END-GATE.

No. 180,673. Patented Aug. 1, 1876.

Fig 1.

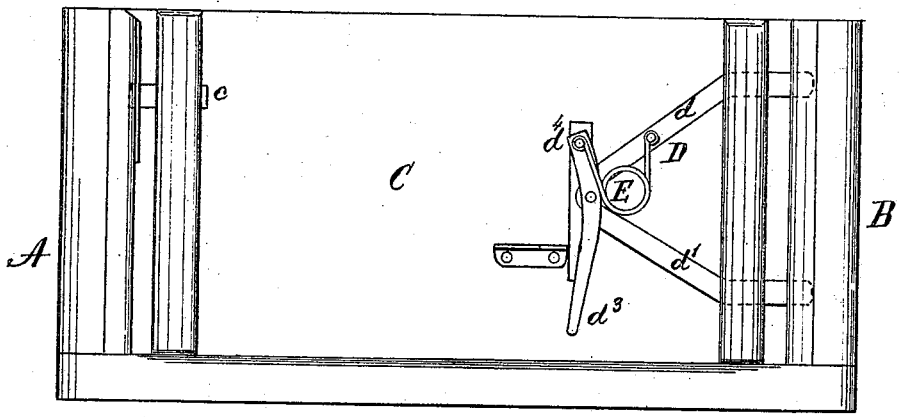

Fig 2.

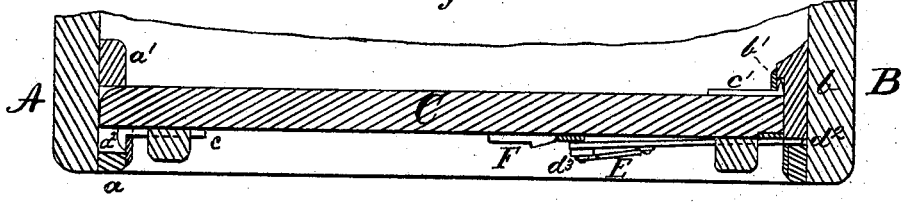

Fig 3.

Witnesses
B. C. Pole
R. H. Lacey

Inventor:
Henry Swintz.
by R. S. & A. P. Lacey,
his attorneys.

UNITED STATES PATENT OFFICE.

HENRY SWINTZ, OF SOUTH BEND, INDIANA.

IMPROVEMENT IN END-GATES.

Specification forming part of Letters Patent No. **180,673**, dated August 1, 1876; application filed July 5, 1876.

To all whom it may concern:

Be it known that I, HENRY SWINTZ, of South Bend, in the county of St. Joseph and State of Indiana, have invented certain new and useful Improvements in End-Gates for Wagon-Boxes; and I 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 pertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in wagon-box end-gates; and has for its object to provide an end-gate that may be readily put into and locked in or unlocked and removed from its place in the wagon-box, and which will prevent the side-boards from being pressed apart. It consists in a series of angle-irons or hooks secured on opposite sides and at opposite ends of the gate, and in a sliding bolt, operated by a lever and spring, all of which will be hereinafter fully explained.

In the drawings, Figure 1 is an end view of a wagon-box with my improved gate attached. Fig. 2 is a horizontal section of same, and Fig. 3 is a detail view of a part thereof.

A and B are the side-boards, and C the end-gate, of a wagon-box. To the side-board A are attached the cleats a a^1, between which the end of the gate C is held. The outer cleat a is recessed at a^2, to receive the hook of the angle-iron, hereinafter described. On the side-board B is secured the single cleat b, against which is pressed the end of the gate when the latter is in proper position in the box. The cleat b is recessed at b', to receive the hook on the angle-iron secured on the inner side of the end-gate. c c' are angle-irons or claws, arranged and secured, respectively, on the outer and inner sides and on opposite ends of the end-gate. The hooks on these irons catch in the recesses a^2 b', and hold and prevent the side-boards A and B from being pressed apart. The inner corner of the end-gate, on the end to which is secured the angle-iron c, is slightly rounded or beveled, as shown, to facilitate the placing of the hook on said iron into the recess a^2, and the end of the gate between the cleats a and a^1. The gate is put in place by first presenting to the box the end on which is secured the angle-iron c, and inserting the point of the hook into the recess a^2, which creates a kind of hinge-joint, on which the gate may be swung into position against the cleat b on the side-board B. D is a sliding bolt, by preference formed with the upper and lower arms d d^1, the outer ends of which move in suitable guides on the gate, and catch in suitable recesses or slot d^2 in the side-board B. It is secured to the lever d^3, which is fulcrumed to the gate at d^4. When the gate is in proper position in the box the bolt enters the recesses or slot d^2 and locks the gate. E is a spring attached to the bolt D and to the lever d^3, and so arranged as to throw the bolt outward from the lever, and into the recesses or slot d^2, where it will be held securely. By drawing the lever d^3 the bolt is withdrawn from the slot d^2, which unlocks the gate, which may then be taken from the box. F is a catch for holding the lever d^3 when drawn back to unlock the gate by withdrawing the bolt D from its hold in the slot d^2.

I do not confine myself to placing my devices on any particular end or ends of the gate, as it will be readily perceived that the several parts may be placed on the reverse ends from that herein described; but,

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

The end-gate C, provided with the angle-irons c c', arranged, respectively, on the outer and inner sides and at opposite ends thereof, and having the sliding bolt D, with its lever d^3, and the actuating-spring E, secured to the outer side of, and on the end on which is the inner angle-iron c', all arranged so that the angle-irons and sliding bolt will engage with the recesses in the cleats and side-board B, and automatically lock the gate in the wagon-box, substantially as set forth.

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

HENRY SWINTZ.

Witnesses:
LEWIS T. VANNEST,
CASSIUS LISK.