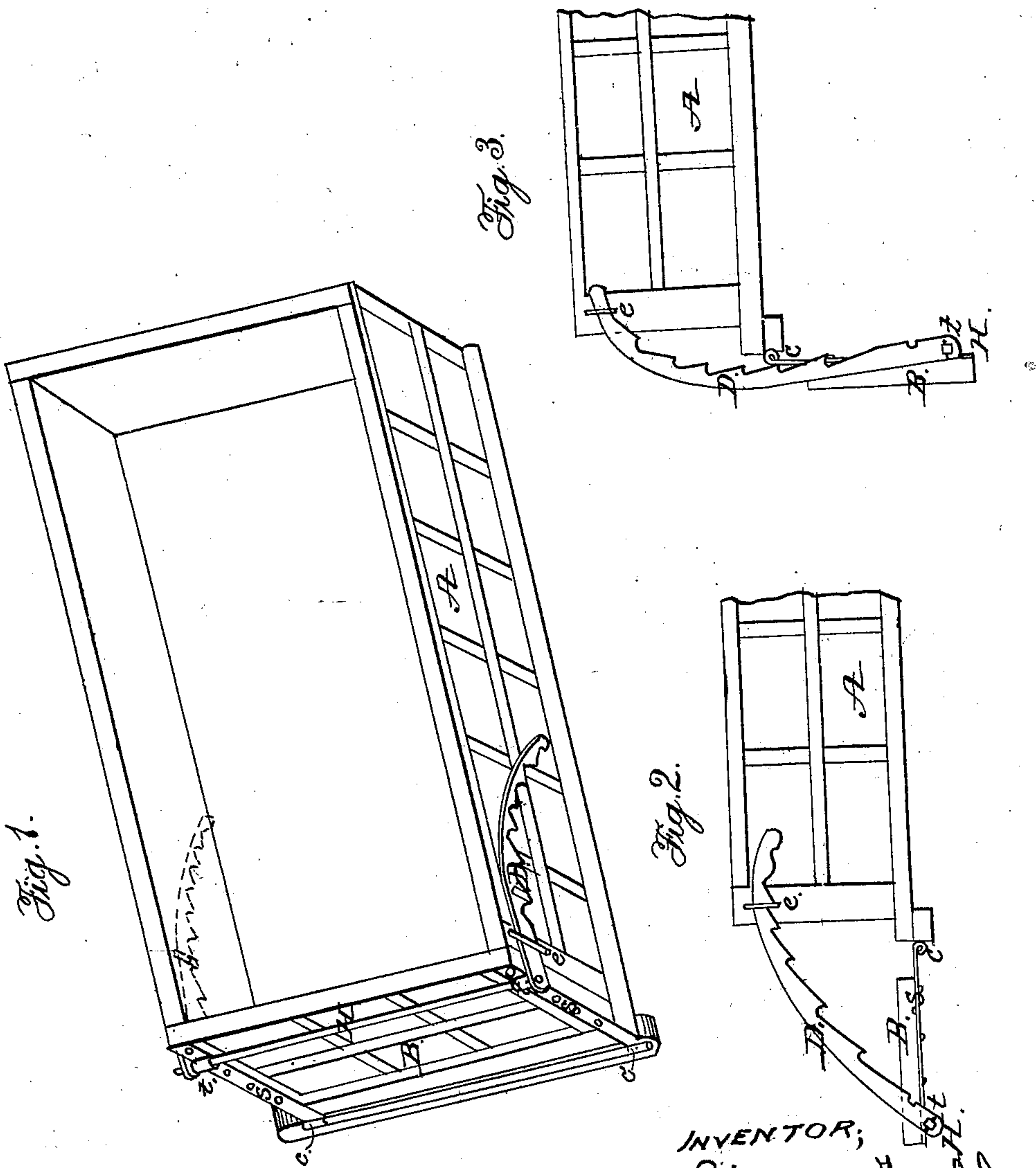


S. WALKER.

Wagon End-Gate.

No. 52,230.

Patented Jan. 23, 1866.



INVENTOR;

S. Walker

WITNESSES:

James H. Beardsley
Geo. T. Palmer

UNITED STATES PATENT OFFICE.

SYLVENUS WALKER, OF NEW YORK, N. Y.

IMPROVEMENT IN SELF-LOCKING TAIL-BOARDS.

Specification forming part of Letters Patent No. 52,230, dated January 23, 1866.

To all whom it may concern:

Be it known that I, SYLVENUS WALKER, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Self-Locking Tail-Boards of Wagons; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, which form part of this specification, in which the letters of reference correspond in all the figures.

My said improvements form a simple and durable self-lock, in which the hinged curved arms are locked by their own weight in any desired position.

My invention also consist in connecting said curved arms by a connecting-rod which serves the triple purpose of forming a hinge-support for strengthening the tail-board and communicating motion from one curved arm to the other in the act of locking or unlocking; also, certain forms, construction, and arrangement calculated to simplify the process of manufacture and reduce the cost.

To enable others to make and use my invention, I will proceed to describe the construction and operation of the same.

Figure 1 in the drawings annexed is a perspective view, showing the tail-board in a locked position when closed. Fig. 2 shows the position of the curved arms as hinged to the tail-board when the same is let down on a plane with the bottom of the wagon-body. Fig. 3 shows the position of the curved arms and tail-board when let down to its lowest position.

A represents the body of the wagon. B is the hinged tail-board. *c c'* are the hinges of the same. D D' are the hinged curved arms, having notches upon their under side, which catch upon the staples *e e'* as they pass through them. H is the connecting-rod, having square tenons upon each end, which fit a square opening in the ends of the curved arms D D'. *s s'* are the straps forming the hinges *c c'*, and *t t'* are the hinges of the curved arms D D', being formed by the straps *s s'* passing over the connecting-rod H.

The tail-board is unlocked by simply raising either of the curved arms D D', which disengages the notches from the staples *e e'*, and lowering the tail-board to the desired position, the curved arms let fall and they catch in other notches by their own weight, thus locking the tail-board in a secure and permanent manner. To lock the tail-board in an

upright closed position it is only necessary to lift it to that position, and the hinged curved arms are made to catch by their own weight by the notches catching upon the staples, as shown in Fig. 1.

In other self-locking tail-boards having sector-bars and vertical spring-bolts for holding them in position, it becomes necessary to have the sector-bars formed in a half-circle in order to let the tail-board down as low as required, and consequently are very liable to become bent or straightened out, either by the great weight they are subject to or, when in a closed position, by their ends extending below the bottom of the wagon-body, and also very objectionable in appearance. My invention entirely overcomes these objections, being more durable, and at a greatly lessened expense.

This kind of tail-board is designed to be used upon express-wagons, which is commonly held in the desired position by straps with buckles or chains with hooks, which have many objections and inconveniences.

My said invention may be readily applied to old as well as new wagons, and at but little expense, being cheap, simple, and durable.

I am well aware that similar devices have been used for fastening doors of writing-desks, also in lifting-jacks. I disclaim all such uses.

I am also aware a patent was granted to J. O. Farrell, April 23, 1861, for a self-locking tail-board for wagons having sector-bars and vertical spring-bolts, said sector-bars being attached rigidly to the tail-board. Therefore I disclaim, broadly, such when so attached; but I am not aware that curved arms have ever been attached to a tail-board of a wagon by means of a hinge formed by a connecting-rod, which would allow the sector-arms to turn on a pivot or hinge at their connection with the tail-board, thus allowing them to be constructed nearly straight, as the joint allows them to turn at different angles to the tail-board in raising and lowering the same.

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

The combination of the hinged curved arms D D' with the connecting-rod H, operating by their own weight as a self-lock by the notches coming in contact with the staples *e e'*, combined and arranged with a hinged tail-board, substantially as set forth.

Witnesses: SYLVENUS WALKER.

JOHN F. GRAY,

GEO. T. PALMER.