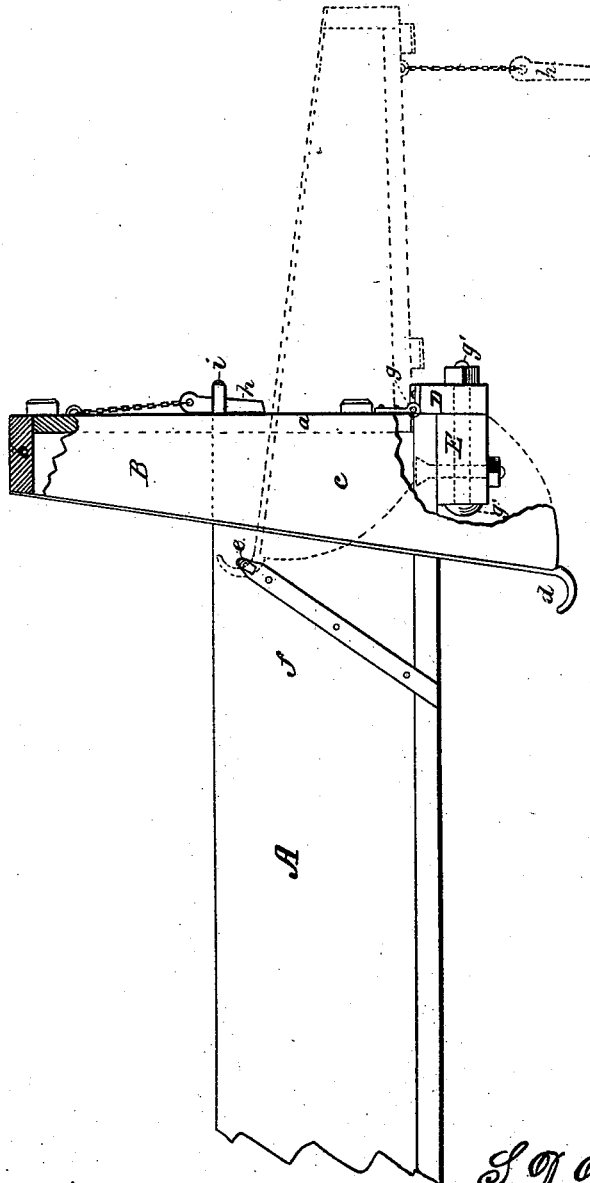


S. D. DAVIS.
WAGON END GATE.

No. 190,290.

Patented May 1, 1877.



WITNESSES:

W. W. Hollingsworth
Chas. Kemou

INVENTOR:

S. D. Davis

BY

Rice & Co.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

STEPHEN D. DAVIS, OF MALVERN, IOWA.

IMPROVEMENT IN WAGON END-GATES.

Specification forming part of Letters Patent No. 190,290, dated May 1, 1877; application filed February 17, 1877.

To all whom it may concern :

Be it known that I, STEPHEN D. DAVIS, of Malvern, in the county of Mills, and State of Iowa, have invented a new and Improved Wagon-Bed Extension and End-Gate; and I do hereby declare that the following is a full, clear, and exact description of the same.

The invention is an improvement in the class of wagons having a hinged end-gate provided with side pieces, which serve to support it when adjusted in horizontal position.

The improvement relates to the construction of the end-gate, and the means for attaching it to the body of a wagon, so that it may be readily detached therefrom, when required, and will support the sides of the body when adjusted in vertical position, as herein-after described.

In the accompanying drawing, forming part of this specification, I show in side elevation a fragment of a wagon-body with my improved end-gate attached.

The wagon-body A may be constructed in the usual form. The hood-shaped end-gate B is composed of a bottom, *a*, tail-piece *b*, and sides *c*. The latter are broadened slightly at their inner ends, and extended beyond the hinge-connection *g*, and provided with curved arms *d*, which, when the end-gate is in horizontal position, engage the lugs or hooks *e* attached to the sides *f* of the body A.

The end-gate is hinged to a cross-bar, D, and the latter is attached, by means of screw-bolts *g'*, to the end sill E of the wagon-bed. By removing the bolts *g'* the end-gate and its supporting-bar D may be detached from the wagon-body.

The length of bar D and sill E is the same as the width of the wagon-body A, so that they do not interfere with the adjustment of the end-gate in vertical position. The end piece *b* of the gate braces the sides *c*, and prevents them spreading apart when the end-gate is horizontal, besides forming the end of the extended wagon-body, and preventing the escape of the contents thereof.

When the end-gate is closed—that is, raised to a vertical position, as shown in full lines in drawing—the means for securing it in that position serve also to prevent the sides of the body A spreading apart. Said means are arms *i*, projecting horizontally from the end of the wagon-body, and passing through holes in the bottom of the end-gate, and the keys *h*, which are inserted in slots in the ends of said arms. The latter support the sides *c* of the end-gate, and prevent them from being subjected to lateral pressure or strain when the end-gate is in vertical position.

By extending the inner ends of the sides *c* of the end-gate, as shown, the leverage is increased correspondingly, since the distance between the hinge or fulcrum *g* and the lugs or hooks *e* is thereby greater. This extension of the sides *c* in the manner shown is rendered practicable by the ends of the bar D, and end sill E being flush with the sides of the wagon-body, and the end piece *f* of the end-gate holds together the sides *c*, and causes them to support or brace the sides *b* of the wagon-body, when the end-gate is extended horizontally. The necessity of lateral braces for the sides *f* is therefore avoided.

The bottom *a* of the end-gate is inclined, in order to facilitate the use of a shovel for removal of corn, potatoes, &c., when the wagon-body is full.

What I claim is—

In combination with the wagon-body having the slotted projecting arms *i*, side lugs *e*, and end sill E, the hinged end-gate, having the end piece *b* and extended sides *c*, provided with curved arms *d*, the detachable bar D, and screw-bolts *g'*, all as shown and described.

STEPHEN D. DAVIS.

Witnesses:

J. M. STRAHEM,
R. J. BROWN.