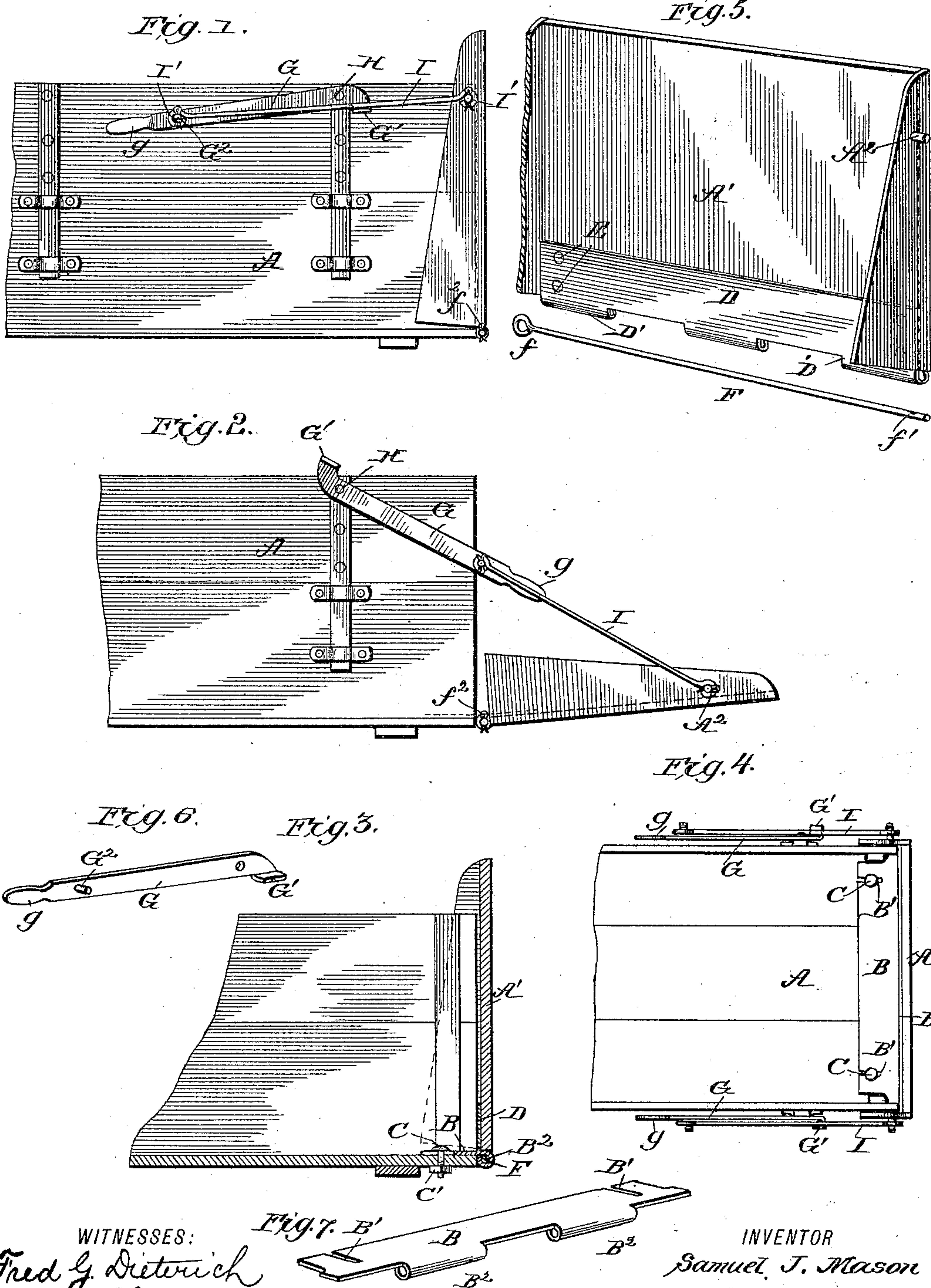


(No Model.)

S. J. MASON.
END GATE FOR WAGONS.

No. 409,413.

Patented Aug. 20, 1889.



WITNESSES:
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SAMUEL JASPER MASON, OF MEAD, NEBRASKA.

END-GATE FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 409,413, dated August 20, 1889.

Application filed May 14, 1889. Serial No. 310,706. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL JASPER MASON, of Mead, Saunders county, Nebraska, have invented a new and useful Improvement in
5 End-Gates for Wagons, of which the following is a specification.

My invention consists in a new and improved end-gate for wagons, which will be hereinafter fully described and claimed.

10 Referring to the accompanying drawings, Figure 1 is a side view with the gate closed. Fig. 2 is a similar view with the gate down. Fig. 3 is a vertical longitudinal sectional view. Fig. 4 is a plan view. Figs. 5, 6, and
15 7 are detail views hereinafter referred to.

The same letters of reference indicate corresponding parts in all the figures.

Referring to the several parts by letter, A indicates the rear part of a wagon to which
20 my invention is shown applied.

B indicates a metal hinge-plate, which for convenience of reference will be called the "wagon hinge-plate," as it is secured to the wagon. This hinge-plate is a flat plate of
25 such length as to fit between the cleats at the sides of the rear end of the wagon-bottom, being secured thereon, as shown, by means of bolts C, passing through transverse slots B' B' in the plate, which renders the hinge-
30 plate adjustable backward or forward, the bolts having nuts C' on their lower threaded ends. The ends of the wagon hinge-plate are recessed or cut out sufficiently to avoid interference with the wagon-box irons in case they
35 are attached to the inside of the wagon-box on the cleats. This flat wagon hinge-plate is formed with the hinges B² B² at its rear edge, and serves both as a hinge-plate and also to protect the rear end of the wagon-bottom from
40 the wear of the scoop-shovel in shoveling corn out of the wagon.

D indicates a flat hinge-plate, which I will call the "gate hinge-plate," as it is secured to the inner side of the wagon-gate A', usually
45 by two bolts E E at each end, as shown. The lower edge of this hinge-plate is formed with hinges D', and the two plates B and D are hinged together by a steel rod F, which is formed with a handle-ring *f* at one end and
50 a transverse perforation *f'* at the other, through which a spring-key *f*² passes.

G G indicate two levers formed at their free

ends with a convenient handle *g*, and these levers are pivoted at H to the outer sides of the wagon, and from that point are curved
55 down at about right angles, the extremities of these angled ends being bent out to form stops G' G'.

I I indicate connecting-rods, which are formed with eyes I' I' at both ends, and are
60 pivoted at one end on pins G² on the levers near their handle ends and at their other ends on pins A² near the upper end of the wagon-gate A'. It will be seen that by drawing back the levers G by their handles the
65 end-gate will be lowered, as shown in Fig. 2, while when the levers are pushed forward and down to raise and close the gate the connecting-rods I will pass down below the pivotal points H of the levers G, where they are
70 stopped by the end stops G' of the levers, and the levers will thus be automatically locked, holding the end-gate firmly and securely locked in its closed position. By pulling out
75 the spring-key *f*² the hinge-rod F can be drawn out, releasing the end-gate at the bottom for the purpose of emptying grain into an elevator-dump and for similar purposes. The same results can be obtained by loosening
80 the nuts C' C' on the bolts C C, which pass through the slots B' B' of the plate B, allowing the plate B to pull out and move back with the end-gate, thus releasing the grain with very little trouble. Only one lever and connecting-rod may, when desired, be employed. 85

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

1. The combination of the flat metal combined re-enforcing and hinge wagon-plate B,
90 extending the full width of the rear end of the wagon and formed at its outer edge with the hinges B², and the gate hinge-plate D, having the hinges at its lower edge and hinged to said wagon-plate, substantially as set forth. 95

2. The combination, with a wagon-body having a hinged end-gate, of the levers G, pivoted near their lower ends to the wagon-body, and the connecting-rods I, pivoted at one end to the gate and at their other ends to the levers G, near the upper ends of the same, substantially as set forth. 100

3. The combination, with a wagon-body having a hinged end-gate, of the levers G, pivoted

near their lower ends to the wagon-body and formed at their lower ends with the stops G', and the connecting-rods I, pivoted at one end to the gate and at their other ends to the levers 5 G, near the upper ends of the same, substantially as set forth.

4. The combination, with a wagon, of the end-gate, the pivoted levers and pivoted connecting-rods, and the hinge formed of the 10 wagon and gate hinge-plates, and the removable hinge-rod, substantially as set forth.

5. The combination, with a wagon, of the end-gate, the pivoted levers and pivoted connecting-rods, and the gate hinge-plate, the 15 wagon-plate hinged to the gate-plate and

formed with the transverse slots, and the threaded bolts having the nuts, substantially as set forth.

6. The combination, with a wagon, of the end-gate, the pivoted levers and pivoted connecting-rods, the gate hinge-plate, the wagon 20 hinge-plate formed with the transverse slots, the removable hinge-rod, and the threaded bolts having the nuts on their lower ends, substantially as set forth.

SAMUEL JASPER MASON.

Witnesses:

GEORGE WILLEY,
GUST SODERBERG.