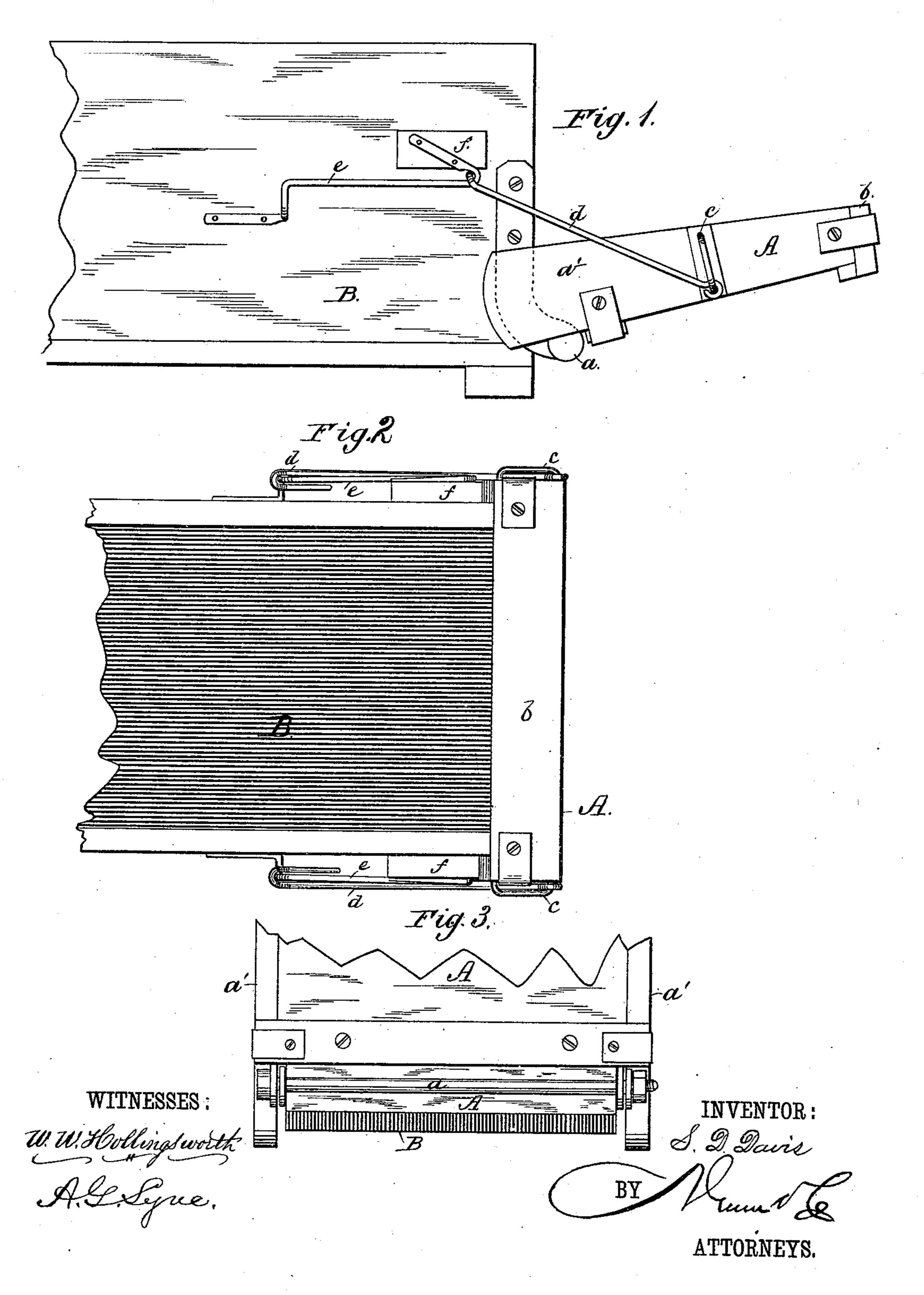
S. D. DAVIS.

END GATE FOR WAGONS.

No. 251,530.

Patented Dec. 27, 1881.



United States Patent Office.

STEPHEN D. DAVIS, OF MALVERN, IOWA.

END-GATE FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 251,530, dated December 27, 1881.

Application filed October 25, 1881. (No model.)

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 useful Improvement in End-Gates for Wagons, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, forming part of this specification.

This invention relates to end-gates for wagons, which are adapted to be let down to form boards or extensions to facilitate the use of a shovel in the removal of corn, potatoes, &c., with which the wagon may be loaded.

In a prior invention, described in Letters Patent No. 190,290, which were granted to me under date of May 1, 1877, I have shown an end-gate having extended sides which are adapted to inclose the end of the wagon-body, and curved arms secured to the extended sides, which are adapted to engage with lugs on the sides of the wagon-body to limit the downward movement of the end-gate.

In my present invention I have dispensed with the curved arms and provided instead a supporting device, which is also adapted for automatically locking the gate in a closed position, as will be hereinafter described.

In the accompanying drawings, Figure 1 is a side elevation of a portion of a wagon-body, showing the end-gate opened. Fig. 2 is a plan view of the same, showing the end-gate closed; and Fig. 3 is a detail view.

The end-gate A is hinged to the bottom of the wagon-body B by means of a rod, a, which is passed through projecting perforated plates secured to the body and gate, respectively, and removably held in place by a key inserted through a perforation in one end of the rod, or by a nut, as may be preferred.

The gate is constructed with extended sides a' and an end piece, b, which are adapted to inclose the end of the body B, and a broad staple, c, is secured to the outer surface of each extended side a', about midway, in a horizontal position. A straight rod, d, is pivoted to the rearmost tang of the staple c and arranged underneath the foremost tang thereof, so that when the gate is closed and the rod held in a horizontal position the said foremost tang will so rest upon the rod, and thus tend to force the forward end of the rod downward.

To the outer surface of the wagon-body, on each side thereof, is secured a rod, e, whose central portion is straight and arranged in a hori-

zontal position, while its rearmost end is turned upward and secured to a block, f, on the side of the wagon-body, and its forward end is bent downward at right angles, then inward to the surface of the said body, to which it is secured.

The rod d, whose forward end is bent inward 60 toward the body to form a loop, is placed in engagement with the rod e, so that the loop will inclose the said rod e and slide thereon as the gate is lowered or raised. Thus when the gate is lowered the loop will rest in the angle 65 at the rear end of rod e and support the gate, and when the gate is raised the loop will slide along the rod e until it reaches the downward bend at the forward end thereof, when the tension of the rod d, caused by the pressure of 70 the foremost tang of the staple e upon it, will cause the loop to slip over the said downward bend and lock the gate in its closed position.

When it is desired to open the gate it is necessary simply to lift the rods d until the loops 75 are allowed to slip out of engagement with the bent portions of the rods e at their forward ends, and when it is desired to detach the gate from the body after removing the hinge rod a the gate is to be lifted upward and the loops 80 of rods d thus disengaged from the rods e.

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

1. The combination of the hinged end-gate 85 A, having extended sides a', the broad staples c, secured to the said sides, the rods d, pivoted to the rear tangs of the said staples and having their forward ends provided with inward-curved loops, the wagon-body B, having blocks 90 f secured to its sides, and the rods e, bent upward at the rear ends and secured to said blocks, and bent downward and inward at their forward ends to form catches for the loops of rods d, and secured to the sides of the wagon-95 body, substantially as shown and described.

2. The combination, with an end-gate and a wagon-body, of a pair of rods secured to the gate and body, respectively, on each side thereof, and so adapted to be engaged with each 100 other that one rod shall serve as a guide and a stop for the other, substantially as shown and described.

STEPHEN D. DAVIS.

Witnesses:

J. E. GARRIGUES, A. L. YOUNG.