

No. 684,907.

Patented Oct. 22, 1901.

L. G. CARPENTER & M. SPROUL.

END GATE FOR WAGONS.

(Application filed Feb. 28, 1901.)

(No Model.)

FIG. 1.

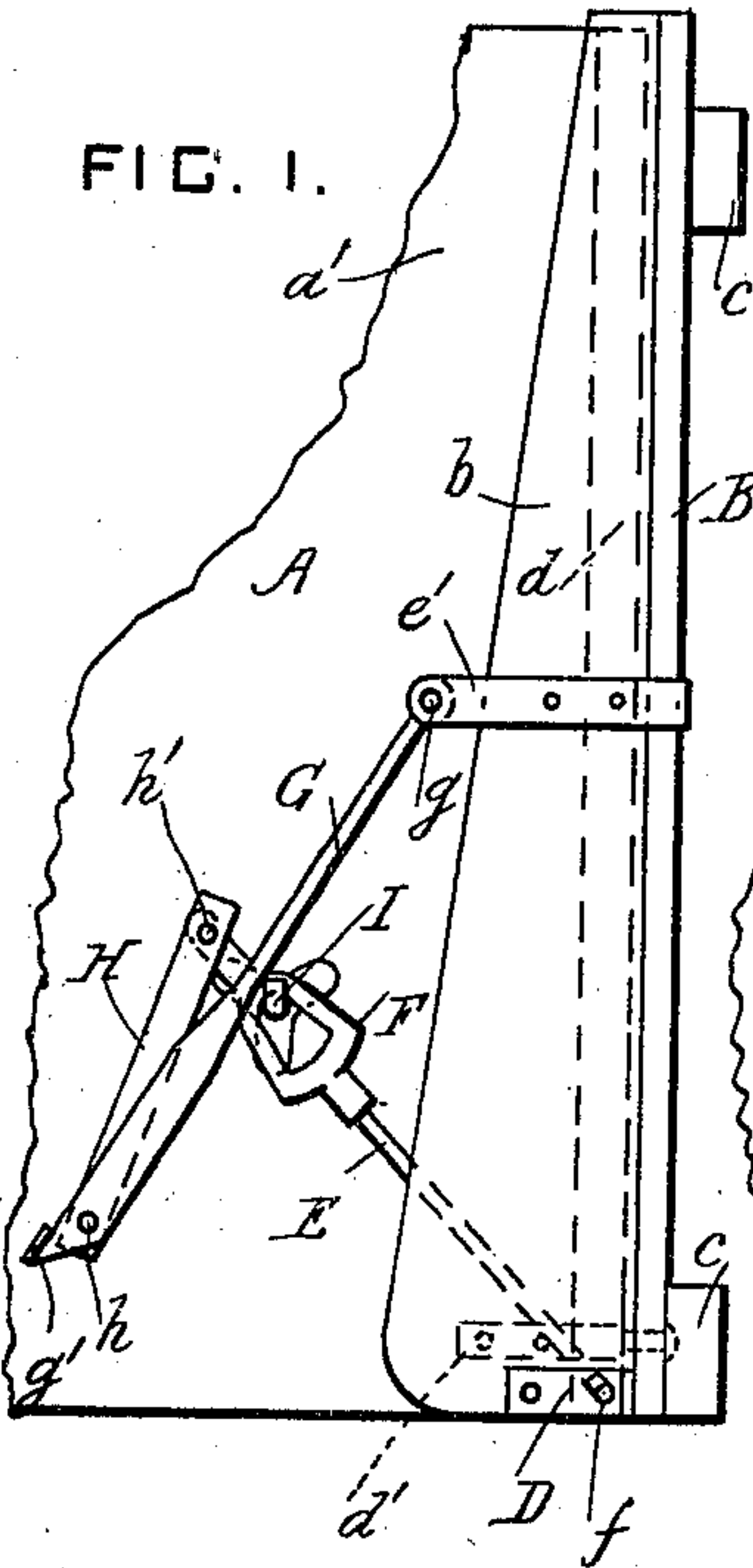


FIG. 2.

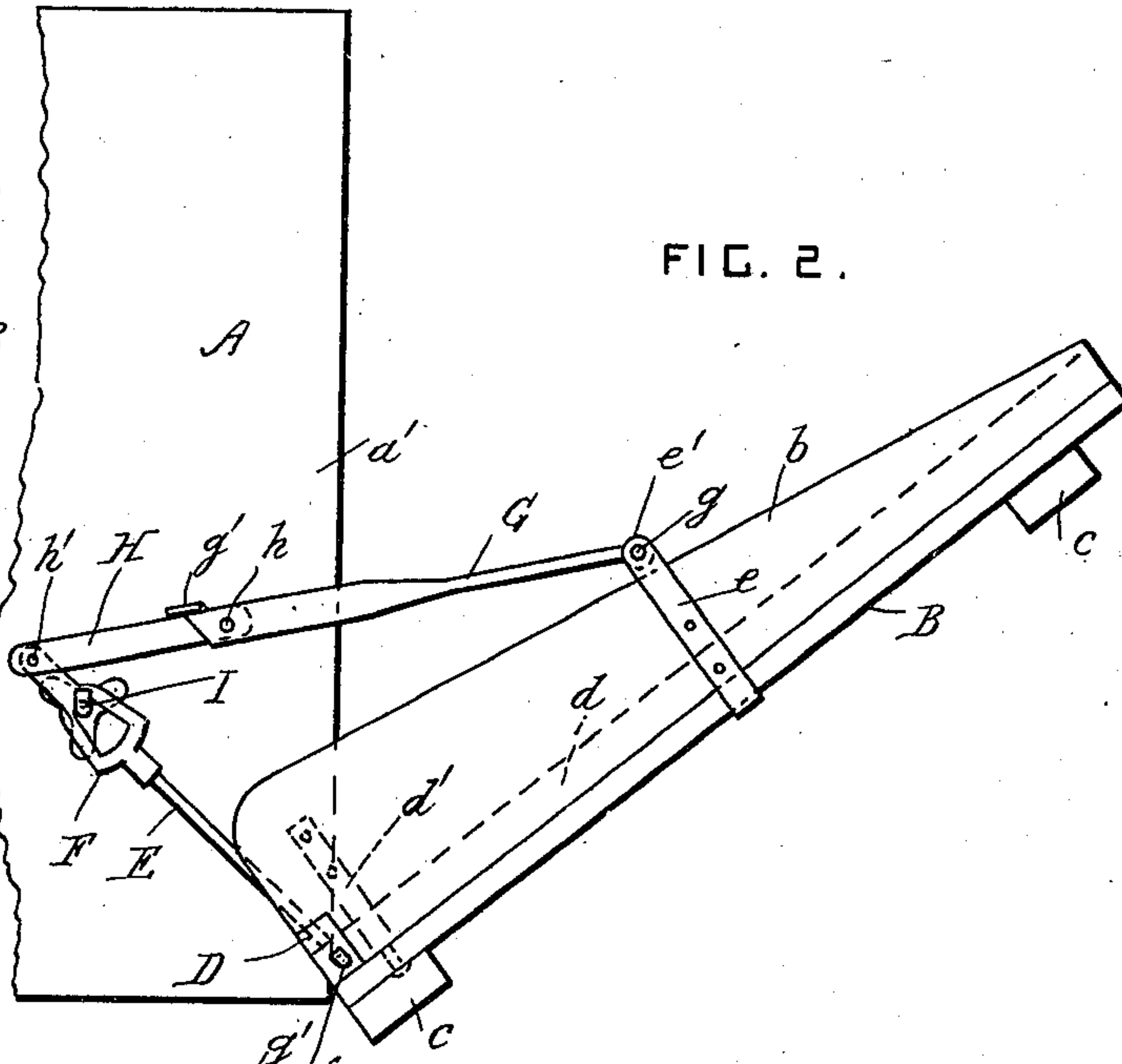


FIG. 3.

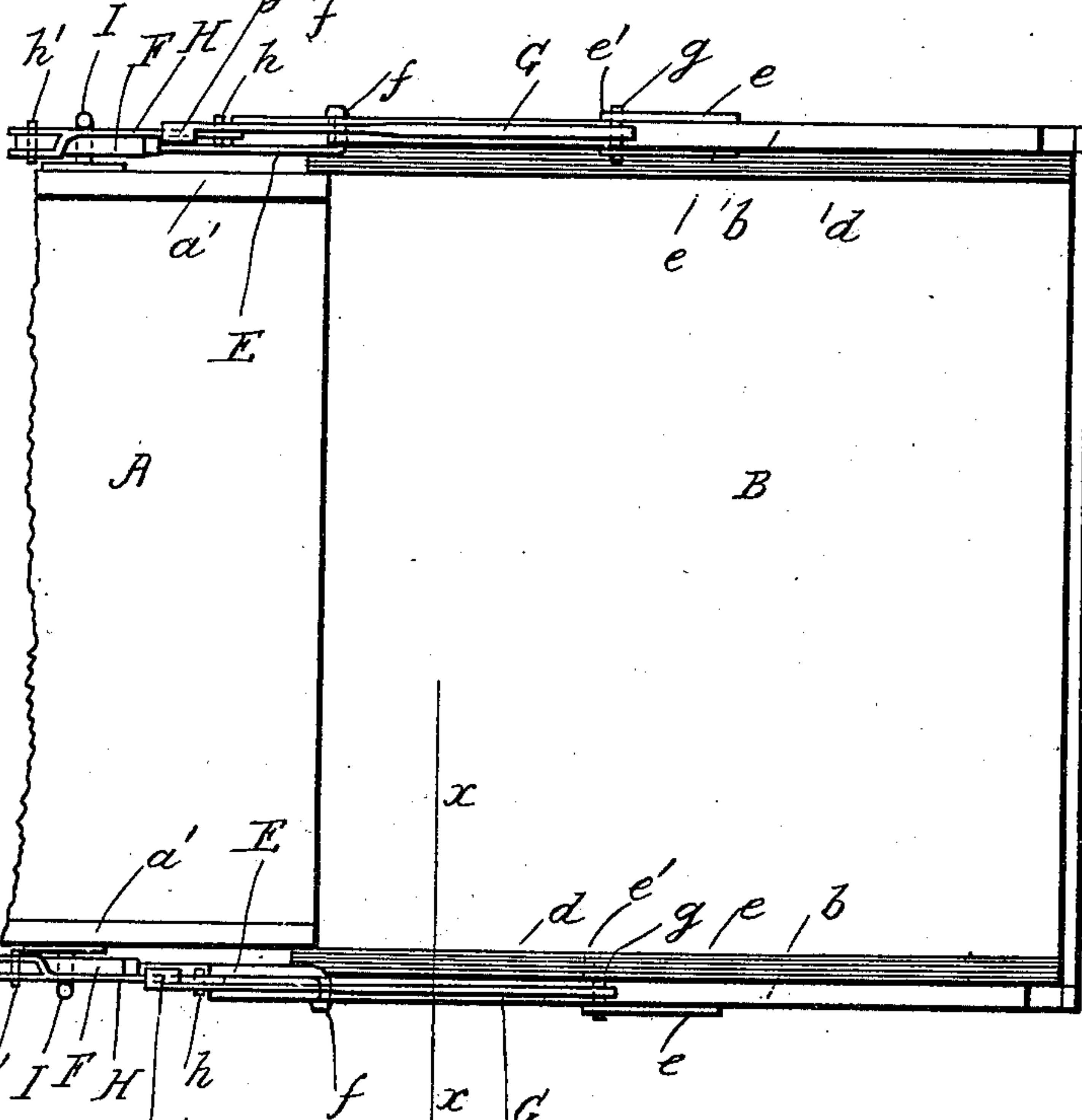
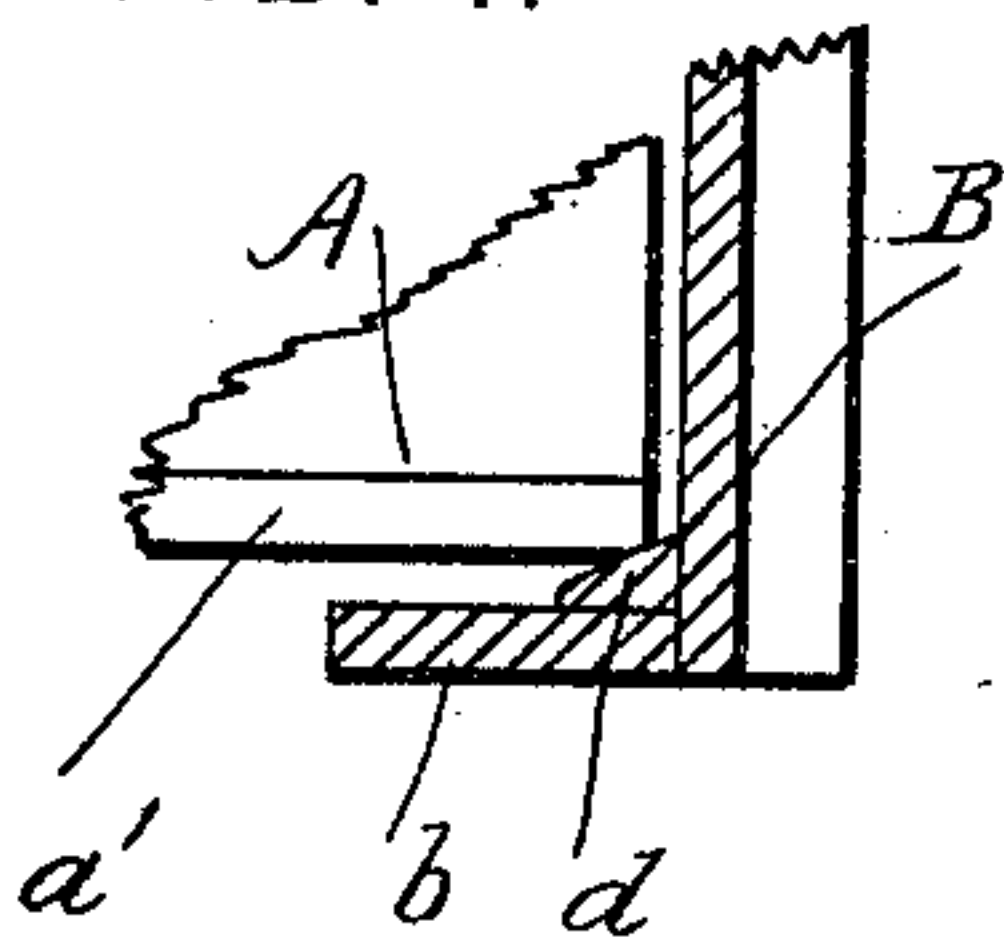


FIG. 4.



WITNESSES

J. O. Hancher
T. F. Conley

INVENTORS

Lewis G. Carpenter
and Morris Sproul.

by Herbert W. Jenner.

Attorney

UNITED STATES PATENT OFFICE.

LEWIS G. CARPENTER AND MORRIS SPROUL, OF WRIGHT, IOWA.

END-GATE FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 684,907, dated October 22, 1901.

Application filed February 28, 1901. Serial No. 49,232. (No model.)

To all whom it may concern:

Be it known that we, LEWIS G. CARPENTER and MORRIS SPROUL, citizens of the United States, residing at Wright, in the county of Mahaska and State of Iowa, have invented certain new and useful Improvements in End-Gates for Wagons; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to end-gates for wagons; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed.

In the drawings, Figure 1 is a side view of the rear part of a wagon-body, showing the end-gate closed. Fig. 2 is a similar view showing the end-gate open. Fig. 3 is a plan view of the parts shown in Fig. 2. Fig. 4 is a cross-section taken on the line xx in Fig. 3.

A is the end portion of the body of a wagon or any other vehicle of approved construction.

B is the end-gate or scoop-board, which is provided with wings b at its sides. The wings b straddle the sides a' of the end portion of the wagon-body.

The end-gate is provided with cross-pieces c for strengthening it and has beveled cleats d in its angles next to the wings. Spaces are left between the sides a' and the wings, and when the end-gate is closed, as shown in Fig. 1, the beveled cleats d are forced into these spaces and bear hard against the sides of the body, forming tight joints and preventing the sides from spreading when the wagon is filled with loose material.

D is a strap secured to the lower part of each wing for the purpose of reinforcing the wing and forming a metallic bearing for the pin of the suspension-arm. Each wing is secured to the board by a strap-bolt d' near the strap D and by straps e near the middle of the board. The straps e are provided with eyes e' .

E is a suspension-arm provided with a loop F and having a pivot f at its lower end which engages with the strap D.

G is a rod pivoted at one end to the eyes e' by a pin g . H is a link which is pivoted to the other end of the rod G by a pin h and to the arm E, near the loop F, by a pin h' . The

rod G is provided with a stop g' , which bears on the link H when the end-gate is lowered, as shown in Fig. 2, and thereby prevents the said rod and link from being moved too far in one direction.

I is a hooked pivot secured to the outside of the body A and engaging with the loop F. The arm E works in the space between the wing and the side of the body, and each side of the wagon may be provided with similar arms, rods, and links, as shown.

The lower part of the end-gate bears against the wagon-body and turns upon the pivots f as a center.

When the end-gate is closed, as shown in Fig. 1, the rod G is moved across the center of the pin h' , so that the end-gate is locked in its raised position and cannot be shaken loose by the motion of the wagon. The action of the rod, arm, and link not only locks the end-gate in its raised position, but tightens the cleats upon the sides of the wagon-body. There are no loose pins to be taken out in order to open or lower the end-gate. The end-board can also be raised clear of the bottom of the wagon in order to permit the material in it to be dumped.

What we claim is—

1. The combination, with a vehicle-body, of a pivoted end-gate provided with wings which straddle the sides of the said body, spaces being formed between the said sides and wings, and cleats arranged in the angles between the end-board and its wings in line with the said spaces, said cleats bearing against the outer edges of the said sides when the end-gate is closed and forming tight joints, substantially as set forth.

2. The combination, with a vehicle-body, of a pivoted end-gate provided with wings which straddle the sides of the said body, spaces being formed between the said sides and wings, cleats secured to the said end-board and its wings and bearing against the outer edges of the said sides when the end-gate is closed, and locking mechanism which presses the said cleats forcibly against the said sides thereby forming tight joints and preventing the sides from spreading, substantially as set forth.

3. The combination, with a vehicle-body, and a pivoted end-gate; of a pivot projecting

from the side of the said body, an arm having a loop at its middle part which engages with the said pivot and having its lower end pivoted to the lower part of the end-gate, and
5 jointed connections between the upper end of the said arm and the upper part of the end-gate, substantially as set forth.

4. The combination, with a vehicle-body, and a pivoted end-gate; of a pivot projecting
10 from the side of the said body, an arm having a loop at its middle part which engages with the said pivot and pivoted to the lower

part of the end-gate, a rod pivoted to the upper part of the end-gate, a link coupling the said arm and rod, and a stop which limits the
15 movements of the said rod and link in one direction, substantially as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

LEWIS G. CARPENTER.
MORRIS SPROUL.

Witnesses:

WILLIAM H. BOND,
JOHN L. HAMMOND.