

G. S. CRYNE.  
End-Gate for Wagons.

No. 210,756.

Patented Dec. 10, 1878.

Fig. 1.

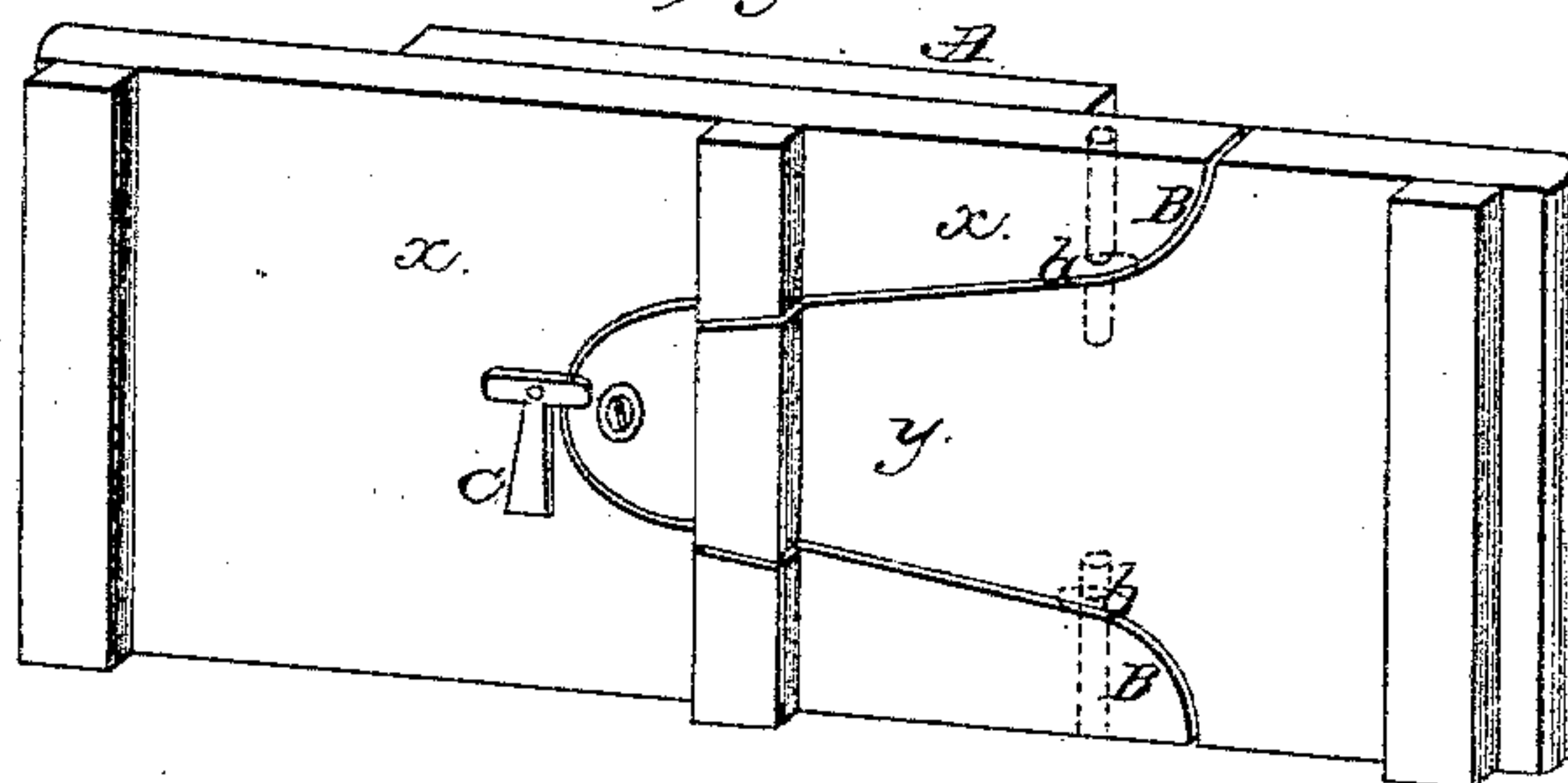


Fig. 2.

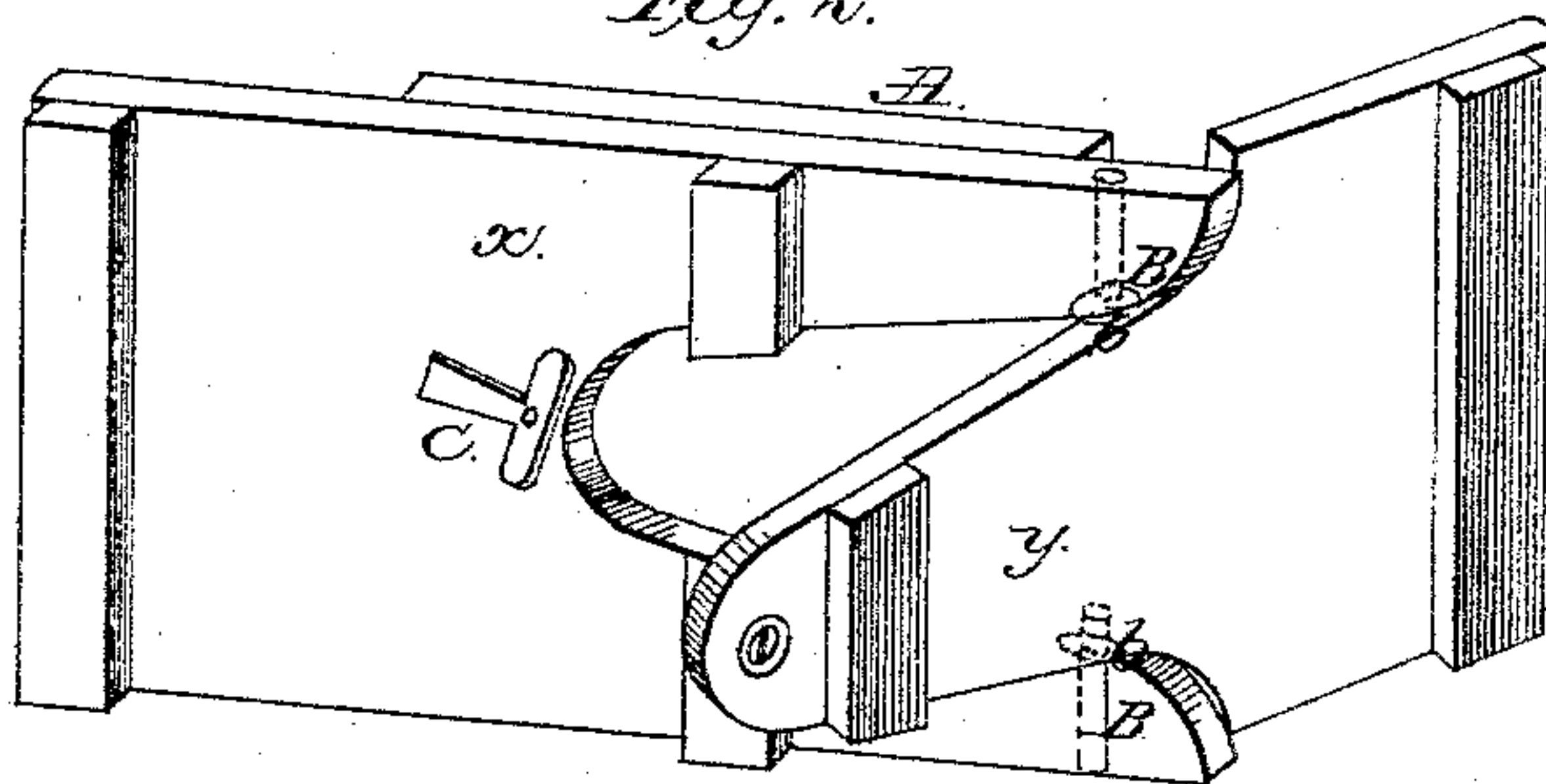
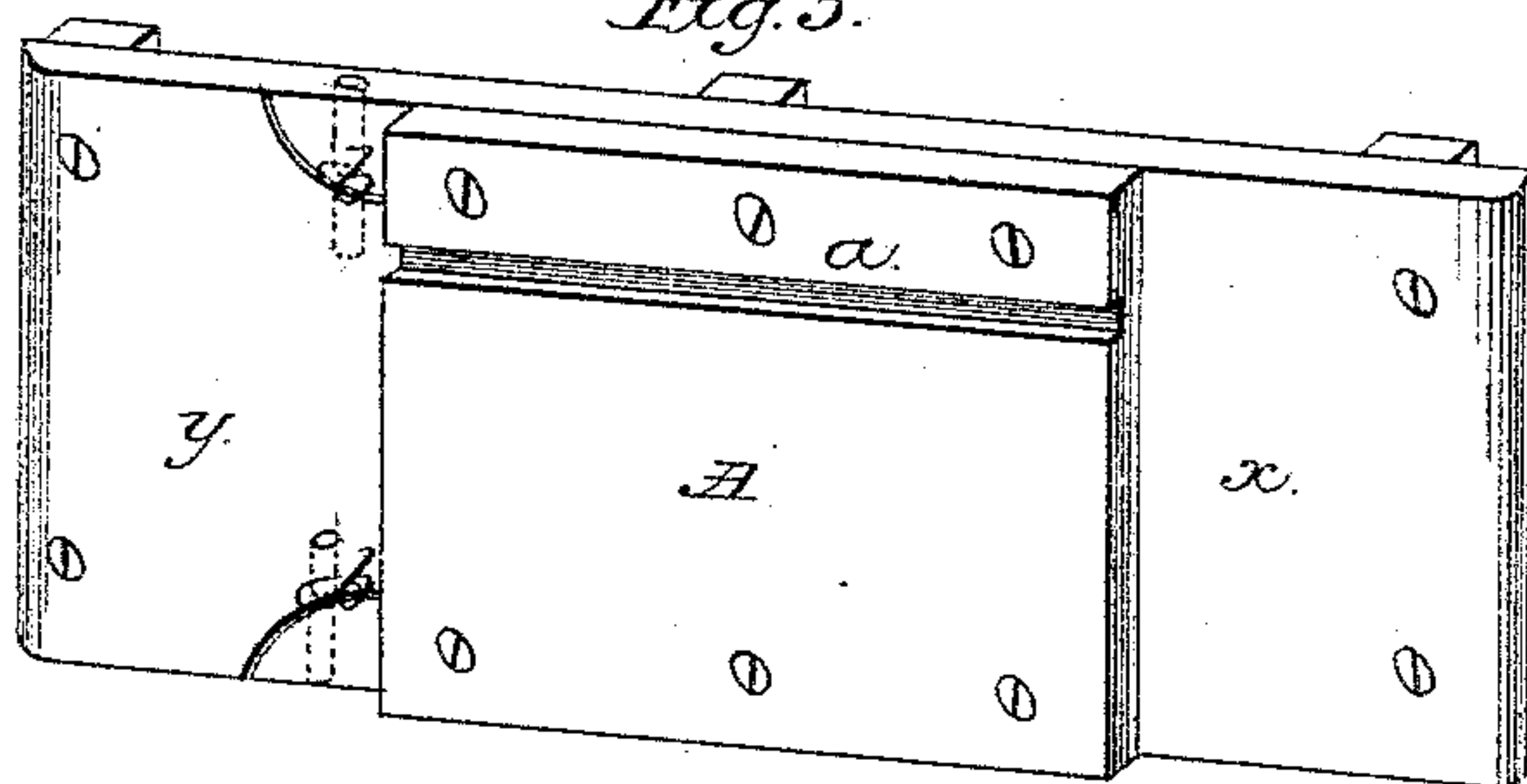


Fig. 3.



Witnesses:

P. Y. Morris.  
C. F. Kalk.

Inventor:

Gilbert S. Cryne.

# UNITED STATES PATENT OFFICE.

GILBERT S. CRYNE, OF FOND DU LAC, WISCONSIN, ASSIGNOR OF ONE-HALF HIS RIGHT TO BENJAMIN F. MOORE, OF SAME PLACE.

## IMPROVEMENT IN END-GATES FOR WAGONS.

Specification forming part of Letters Patent No. **210,756**, dated December 10, 1878; application filed October 21, 1878.

*To all whom it may concern:*

Be it known that I, GILBERT S. CRYNE, of Fond du Lac, Fond du Lac county, Wisconsin, have invented a new and useful Improvement in Dump-Gates, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

The nature and object of my invention are the construction of a dump-gate from the ordinary tail-board by dividing it into two parts of peculiar shape,  $x y$ , with double hinge-joints B, ball-hinges  $b b$ , grooved back piece, A  $a$ , and T-button C, as shown in drawings.

The drawings show as follows: Figure 1, a general view of my device closed; Fig. 2, view of same open; Fig. 3, back view of same.

A is the back piece;  $a$ , the rod-groove therein. B B is the double hinge-joint;  $b b$ , the ball-hinges. C is the T-button;  $x$ , the bifurcated section;  $y$ , the tongue-section of the tail-board.

I am aware there has been a tail-board in use cut in two L-shaped pieces, connected with single rod hinge-joint. These depend only upon their mitered edges for stiffness, and, having only one hinge-joint, warp and spread apart, and are latched by a large clumsy device.

My device is constructed as follows: I cut an ordinary tail-board in two sections—one,  $x$ , forming a fork, the other,  $y$ , a tongue. I hinge these pieces with ball-hinges  $b b$  at the points B B.

It will be evident that the fork  $x$ , clasping the tongue  $y$ , will prevent warping or spreading of the hinge-joints, and render effective the simple ball-hinges  $b b$ . These balls are dropped into bores sunk through the prongs of  $x$  to and slightly into the tongue  $y$ , and rimmed slightly at joints. The bores are then plugged.

I strengthen the fork-shaped section, and support the tongue with a back piece, A, nearly covering the pronged part of  $x$ .

I cut the groove  $a$  across the back piece, A, in which the tail-rod lies, and holds down the tail-board, while not interfering with its lateral movement in opening and closing.

Having thus made my tail-board strong and firm in every part, I am enabled to and do use the simple T-button C, which, by its own gravity, keeps always in place, and makes an effective and easily-worked latch.

I believe that I have thus shown an improvement in the construction of dump-gates embodying novelty, efficiency, and economy in their use and manufacture; and

I claim as my invention—

The combination, in a dump-gate, substantially as described, of the forked and tongue-shaped sections, double hinge-joints, ball-hinges, T-button, and grooved back piece.

GILBERT S. CRYNE.

Witnesses:

B. F. MOORE,  
C. F. KALK.