

(No Model.)

N. A. CRUZAN.  
END GATE.

No. 451,916.

Patented May 12, 1891.

Fig. 1.

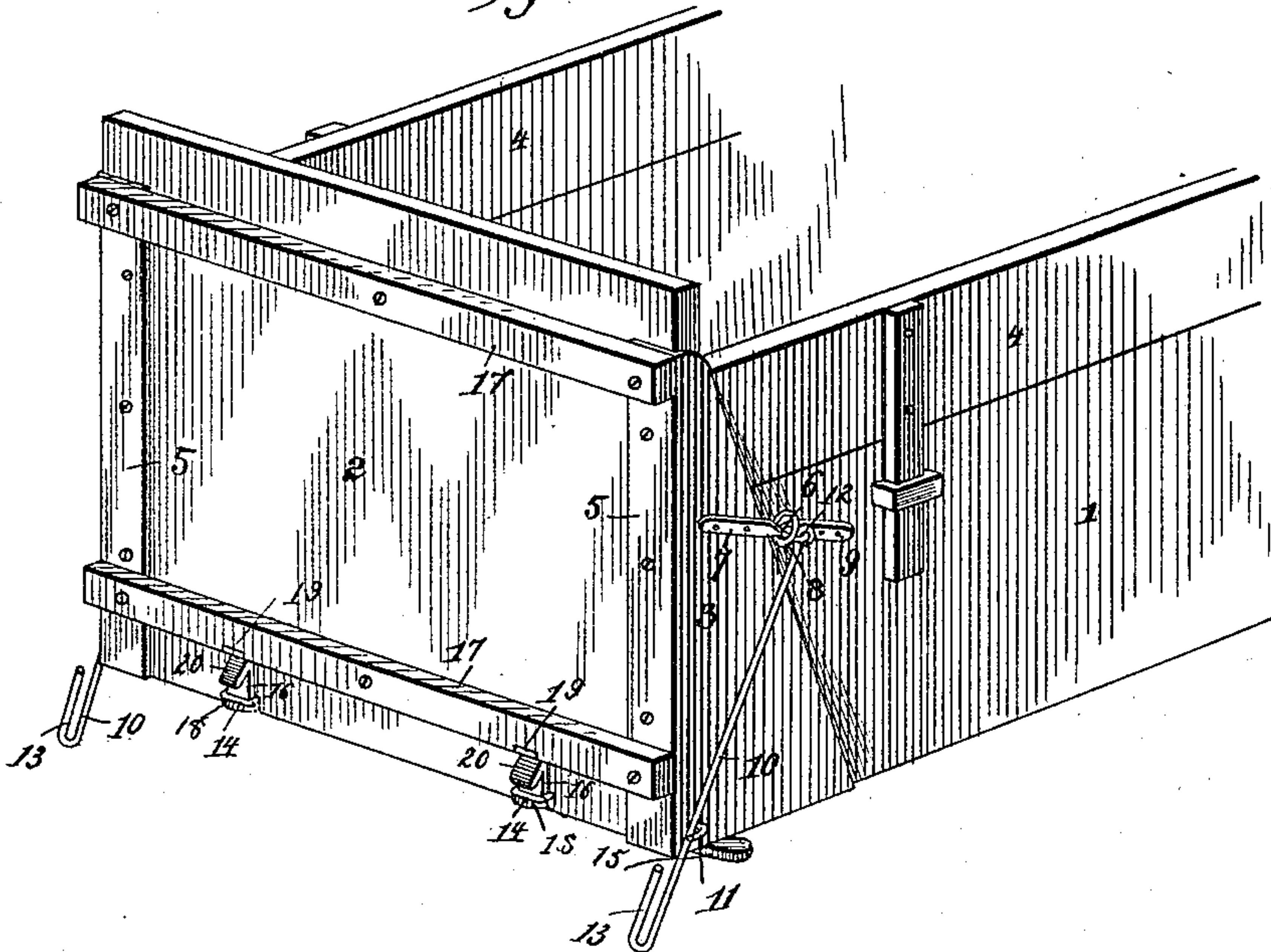


Fig. 2.

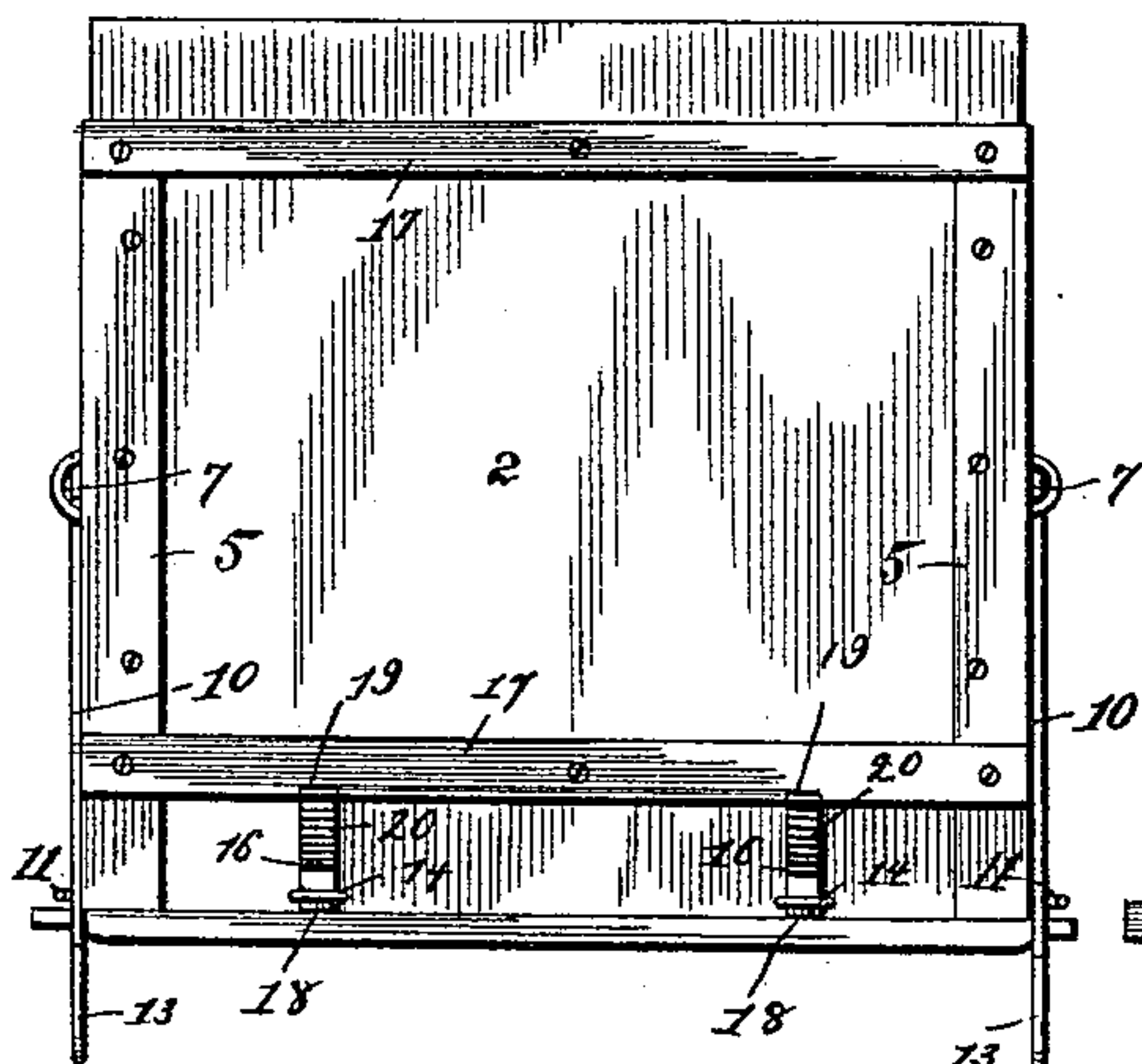


Fig. 3.

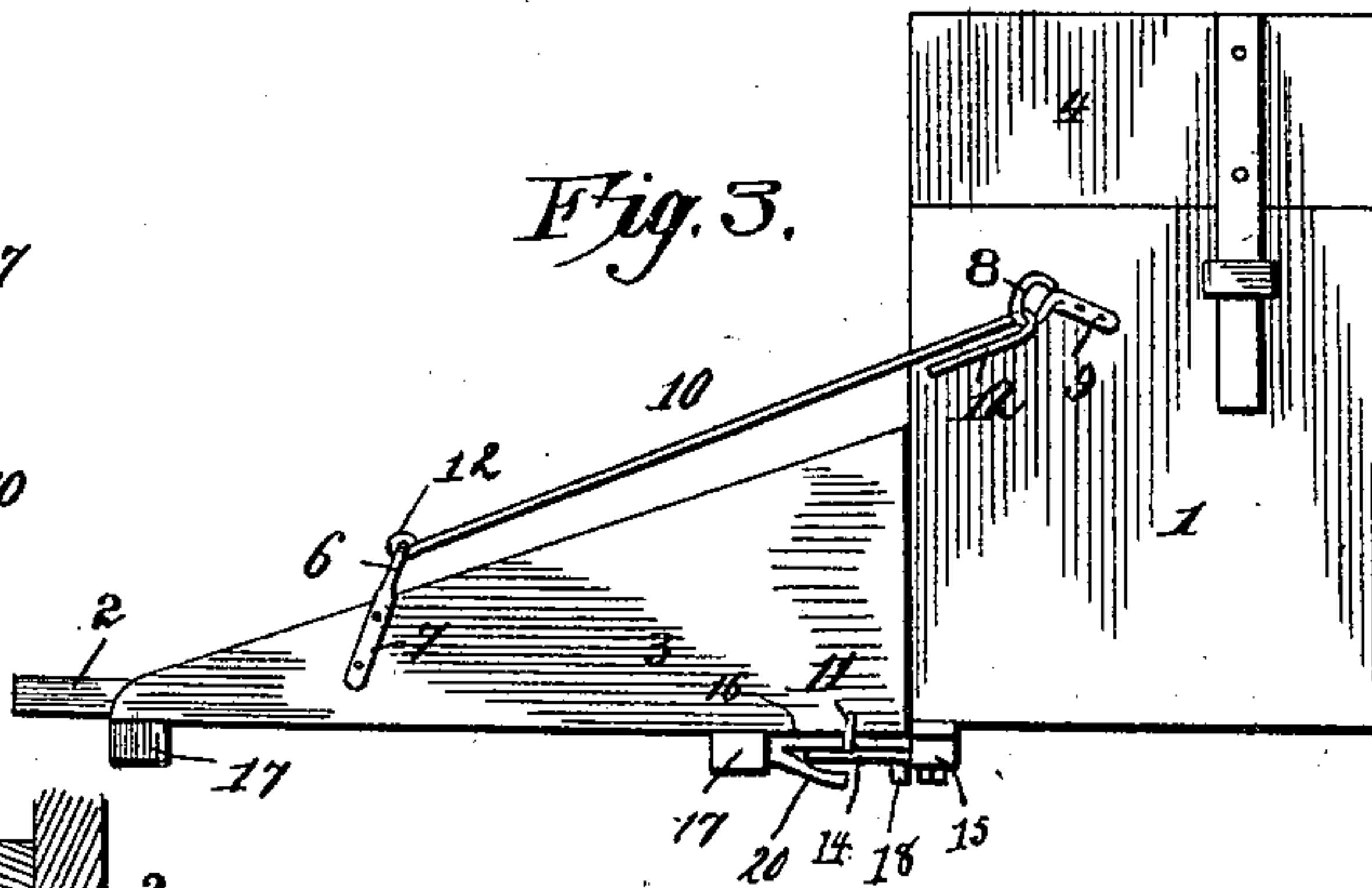
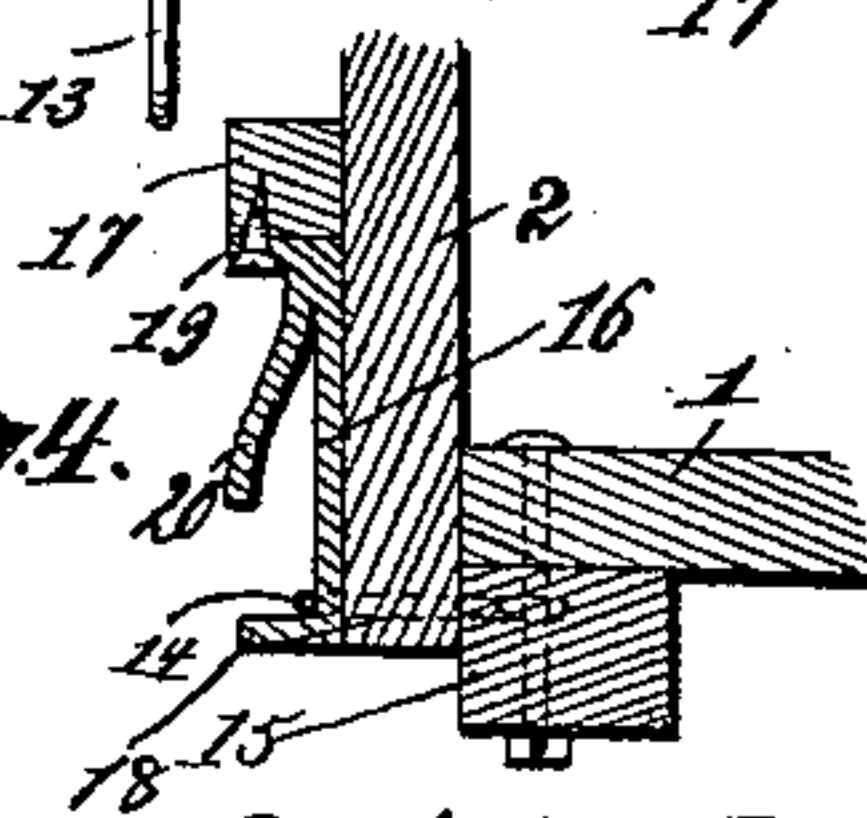


Fig. 4.



Witnesses  
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# UNITED STATES PATENT OFFICE.

NEWTON A. CRUZAN, OF ASTORIA, ILLINOIS.

## END-GATE.

SPECIFICATION forming part of Letters Patent No. 451,916, dated May 12, 1891.

Application filed December 16, 1890. Serial No. 374,903. (No model.)

*To all whom it may concern:*

Be it known that I, NEWTON A. CRUZAN, a citizen of the United States, residing at Astoria, in the county of Fulton and State of Illinois, have invented a new and useful Combined End-Gate and Shoveling-Board, of which the following is a specification.

The invention relates to improvements in end-gates.

10 The object of the present invention is to provide a simple and inexpensive end-gate and means for securely retaining the same in a vertical position and in an inclined or horizontal position for shoveling.

15 A further object of the invention is to arrange the end-gate to support the upper box of a wagon-body.

20 The invention consists in the construction and novel combination and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

25 In the drawings, Figure 1 is a perspective view of a wagon-body provided with an end-gate constructed in accordance with this invention shown in a vertical position. Fig. 2 is a rear elevation of the same. Fig. 3 is a side elevation, the end-gate being shown in position for shoveling. Fig. 4 is a detail sectional view.

30 Referring to the accompanying drawings, 1 designates a wagon-body, having hinged to it an end-gate 2, which is provided at its sides with triangular wings 3, constructed of sheet metal, preferably steel, and extending upward when the end-gate is in a vertical position to support the top box 4, and provided with flanges 5, which are secured to the outer face of the end-gate 2. The wings are provided with eyes 6, which have shanks 7, and are secured to the outer faces of the wing by rivets, bolts, or the like passing through the shanks, and are arranged to engage the eyes 8, provided with shanks 9, and secured to the outer faces of the wagon-body. The eyes of the wings engage the eyes of the body when the end-gate is in a vertical position, and they are locked into engagement by rods 10, which are sprung

into engagement with hooks 11, arranged at the lower ends of the wings adjacent the end-gate, and pass through the wings and are embedded in the end-gate. The rods 10 are each provided at one end with an eye 12, which is secured to the eye 6 of a wing, and is provided at its other end with a hook 13 to engage the eye 8 of the body and support the end-gate in its inclined or horizontal position for shoveling.

The end-gate is hinged to the body by loops 14, secured by bolts to the lower rear cleats 15, and clips 16, secured to the outer face of the end-gate and the lower cleat 17 and constructed of metal, and provided at their outer ends with flanges 18 to engage the staples or loops 14 when the end-gate is in a vertical position, and the inner ends 19 are bent outward and secured to the cleat 17 and are provided with inclined lips 20, arranged to engage the staples or loops when the end-gate is in an inclined or horizontal position for shoveling.

It will be seen that the end-gate is simple and inexpensive in construction and securely retained in its vertical and inclined positions, and is arranged to support the upper box of the wagon-body; and I desire it to be understood that I do not limit myself to the precise details of construction, but that I may without departing from the spirit of the invention make minor changes therein.

From the foregoing description and the accompanying drawings the construction, operation, and advantages of the invention will readily be understood.

What I claim is—

1. The combination of the wagon-body provided with eyes 8 and having the loops 14, the end-gate, the clips 16, secured to the end-gate and arranged to engage the loop 14 and provided at their lower ends with flanges 18 and at their upper ends with projecting lips 20, the wings provided at their lower ends with hooks 11 and having eyes 6, arranged to engage the eyes 8, and the rods 10, connected to the eyes 6 and adapted to engage the hooks 11, substantially as described.

2. The combination of the wagon-body provided with loops 14, the end-gate, and the clips 16, secured to the end-gate and arranged to engage the loops, and provided at their  
5 lower ends with flanges 18 and at their upper ends with projecting lips 20, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

NEWTON A. CRUZAN.

Witnesses:

I. DRIESEN,  
GEO. E. TOLER.