

No. 664,498.

Patented Dec. 25, 1900.

J. PEARSON.
END GATE FASTENING.

(Application filed Apr. 5, 1900.)

(No Model.)

Fig. 1.

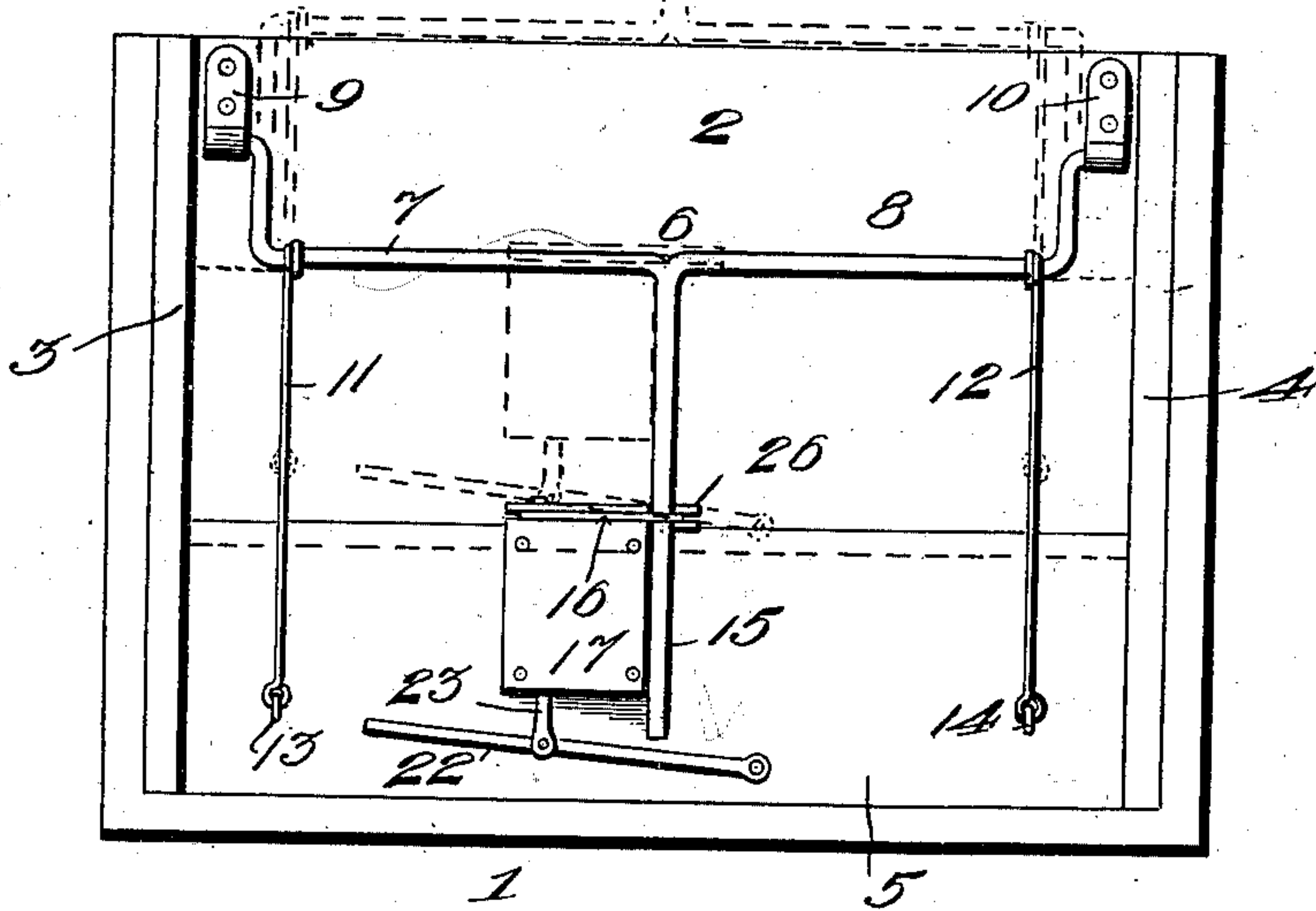


Fig. 2.

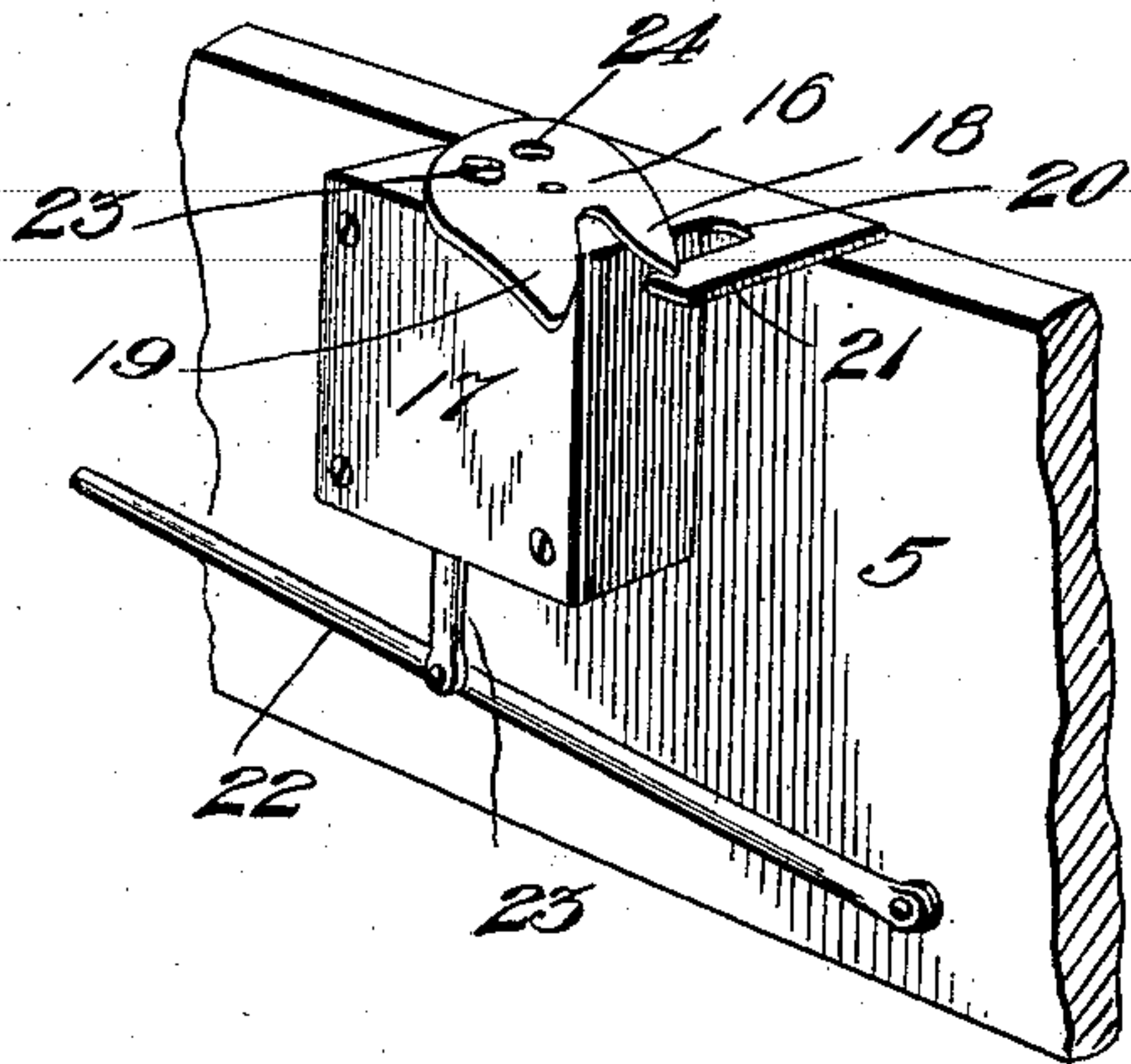


Fig. 3.

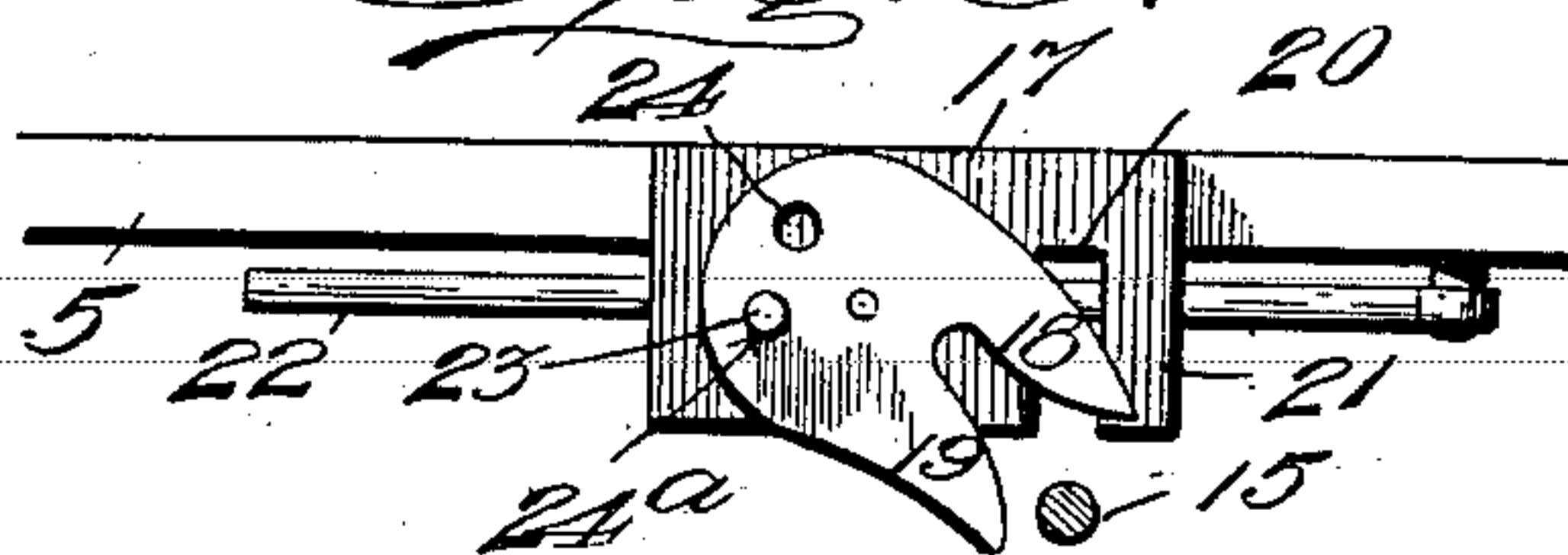


Fig. 4.

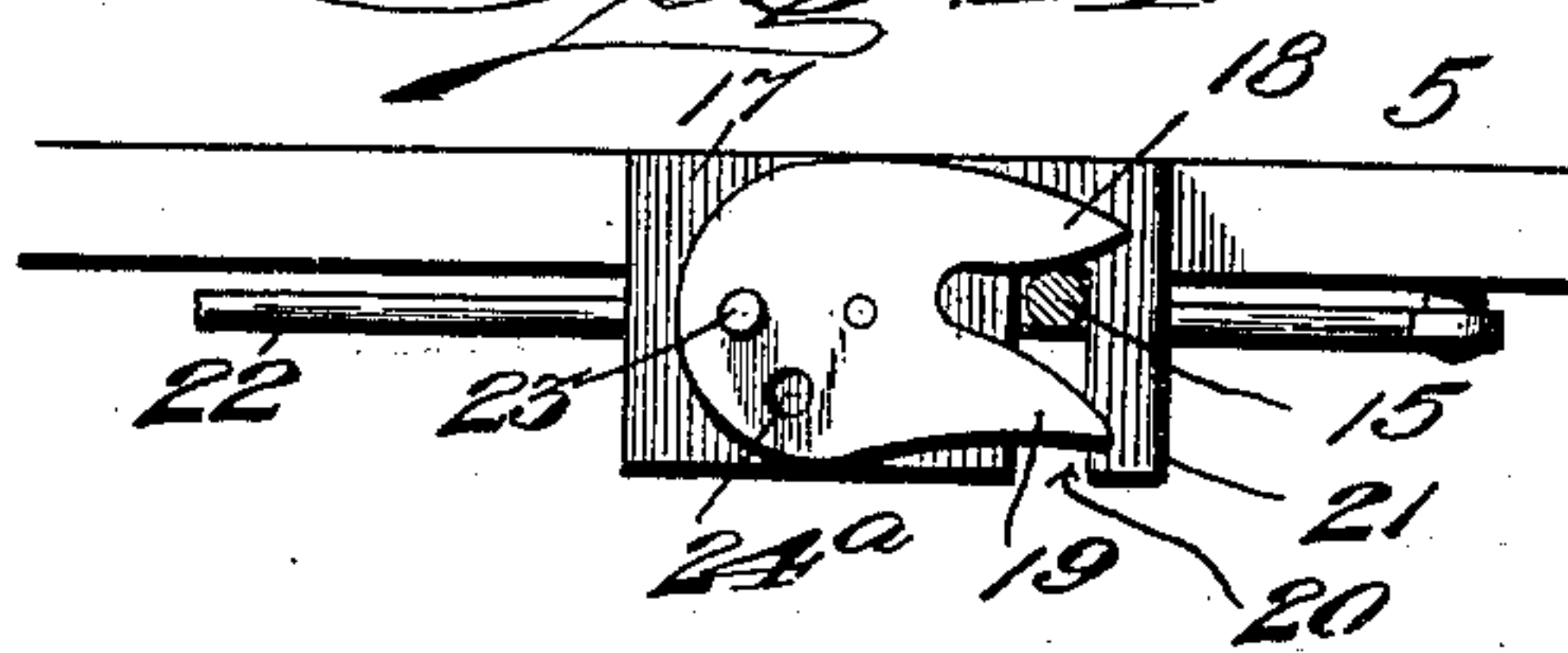
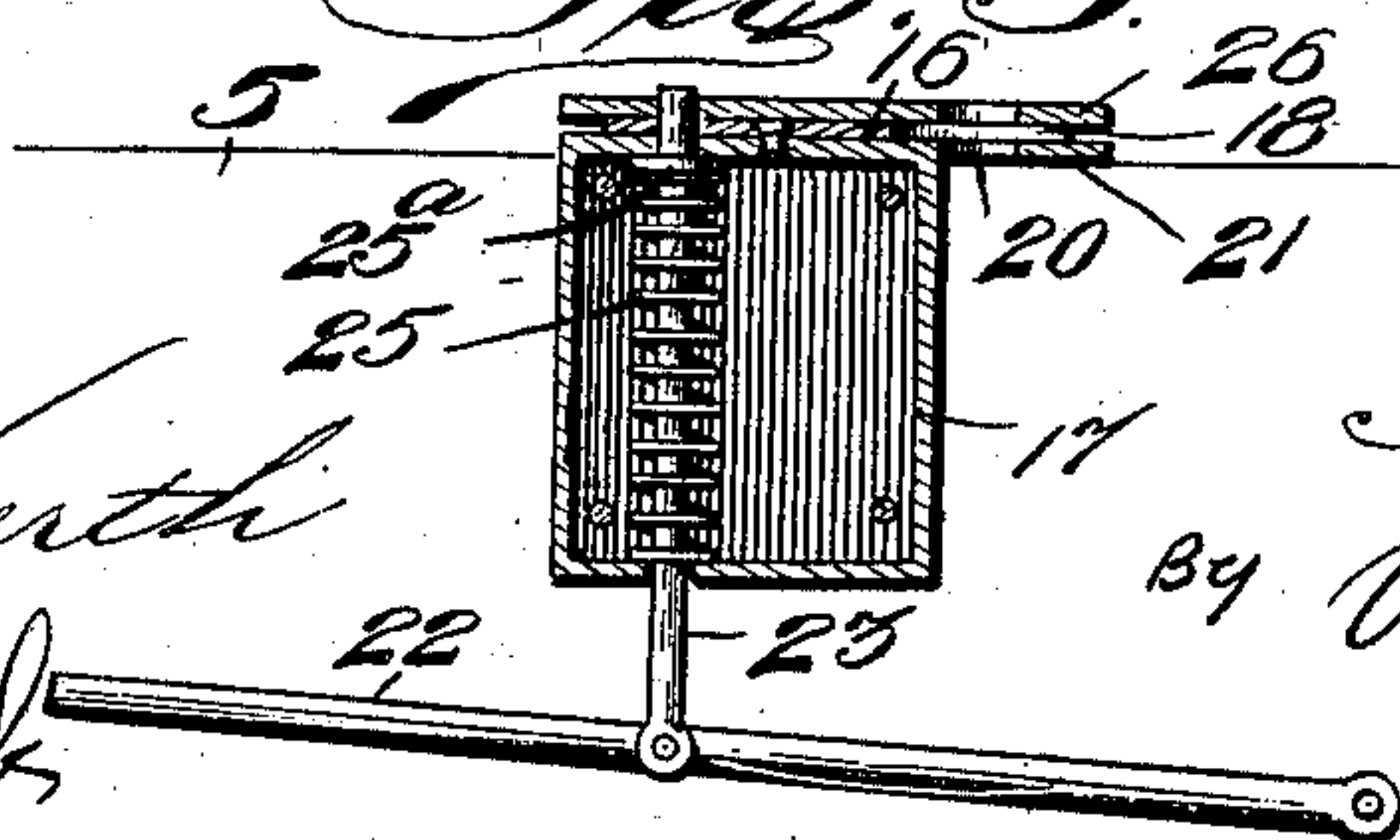


Fig. 5.



Witnesses

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JOHN PEARSON, OF NORTHWOOD, NORTH DAKOTA.

END-GATE FASTENING.

SPECIFICATION forming part of Letters Patent No. 664,498, dated December 25, 1900.

Application filed April 5, 1900. Serial No. 11,571. (No model.)

To all whom it may concern:

Be it known that I, JOHN PEARSON, a citizen of the United States, residing at Northwood, in the county of Grand Forks and State of North Dakota, have invented new and useful Improvements in End-Gate Fastenings, of which the following is a specification.

This invention relates to end-gate fastenings for wagons, cars, and the like; and its main object is to provide an efficient device of the character described which can be readily operated, but which will prevent the opening of the gate by other than manual means.

With this object in view my invention consists of the parts and combinations of parts, which will be clearly set forth in the following description and defined in the accompanying claims.

To fully understand the construction of the device I claim as novel, reference should be had to the accompanying drawings, in which—

Figure 1 is an end view of a wagon-body, showing the invention applied. Fig. 2 is a detail perspective view of the locking means for the elevating-lever. Figs. 3 and 4 are top plan views of the lock, showing the different positions of the engaging dog or plate; and Fig. 5 is a vertical longitudinal view taken through the lock-case to illustrate the interior thereof.

Referring now to the drawings by reference-numerals, 1 indicates the rear end of the car or wagon body, to which is rigidly secured the end plate or board 2 by battens 3 and 4. This end-board does not extend down to the bottom of the body proper, but terminates a sufficient distance therefrom to provide a discharge-opening normally covered by the slidable gate 5. In order that this gate 5 may be elevated, I provide a bifurcated lever 6 and suitably journal the bifurcated arms 7 and 8 in bearings 9 and 10 on the end-board 2. The lever is connected to the gate 5 by two depending rods or link connections 11 and 12, which engage the arms 7 and 8 of the lever 6 and eyes 13 and 14 on said gate, so that when the handle 15 of the said lever is raised to a point indicated by the dotted lines in Fig. 1 the said gate will be slid upwardly to uncover the opening. Of course it will be understood that the discharge-opening will only be partially uncovered if the lever is not raised its entire

height, and it is obvious that should it be found desirable to lessen the size of the discharge-opening this can readily be accomplished by only raising said lever a short distance.

To provide against the lever 6 becoming accidentally raised and to prevent the contents of the wagon-body becoming discharged at inopportune times, I arrange a locking means on the gate 5, which will normally hold the handle 15 in engagement therewith. This lock comprises an elliptical plate or dog 16, pivotally secured upon the top of the lock-case 17 and bifurcated or slotted to form arms 18 and 19, which will be engaged with the handle 15 to lock the same within the slot 20 of the extending plate 21 of the lock-case 17 when said handle or lever is in its normal position.

Below the case 17 and to the gate 5 is pivoted a locking-lever 22, carrying an upwardly-projecting bolt 23, which extends up through the case 17 and is held in engagement with one of two openings 24 and 24^a by a surrounding coil-spring 25, the lower end of which presses against the bottom of the case, while the upper end thereof bears against a collar or head 25^a, carried by said bolt. A protecting-plate 26 is also provided and extends over the upper surface of the dog to prevent the disarrangement thereof, and this plate is provided with an opening coinciding with the openings 24 and 24^a, so that the end of the bolt may project therethrough to lock the parts in position.

The operation of the device is as follows: Suppose the parts to be properly assembled, as shown in Fig. 1. The operator can press down upon the lever 22, which will withdraw the locking-bolt from engagement with the dog, and thereby allow the same to be swung around on its pivotal point by the handle 15 of the elevating-lever 6, and thus permit the gate to be raised. As the dog is swung around the opening 24 will be engaged by the spring-pressed locking-bolt, and the handle 15 of the lever 6 cannot again be locked until said bolt is withdrawn.

While I have described in detail what to me appears to be the very best means of accomplishing the desired result, I would have it understood that I do not limit myself to the

exact details of construction described and illustrated, but hold that slight changes might be made without departing from the spirit of my invention.

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

1. The combination with a wagon-body and a sliding end-gate of a pivoted elevating-le-
10 ver secured to the body and end-gate, a pivoted plate carried by the sliding gate and designed to lock the lever against operating.

2. The combination with a wagon-body and its sliding end-gate, of means for elevating
15 said gate, secured to the body, a lock carried by the gate and engaging said means to prevent its operation, said lock comprising a pivoted and slotted plate and a spring-pressed bolt engaging it for the purpose set forth.

20 3. A sliding-gate fastening for cars and wagons, comprising a pivoted lever, the handle of which normally lies adjacent the gate,

a pivoted plate or dog to engage said handle and lock it with relation to the gate and a spring-pressed bolt to engage the plate to nor- 25
mally retain the lever in engagement therewith.

4. The combination with a car or wagon body of a sliding gate secured thereto, a bifur-
cated lever journaled above the gate and con- 30
nected thereto so as to raise it, a lock-case carried by the gate, an engaging plate or dog pivoted thereto for engagement with the lever, a spring-pressed bolt passing through the lock-case and adapted to engage the plate, and a 35
lever pivoted below the case and connected to the bolt to withdraw the same from engagement with the plate or dog.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN PEARSON.

Witnesses:

E. F. SWIFT,
H. ROSTAD.