

(No Model.)

J. C. MILNES.
END GATE.

No. 589,665.

Patented Sept. 7, 1897.

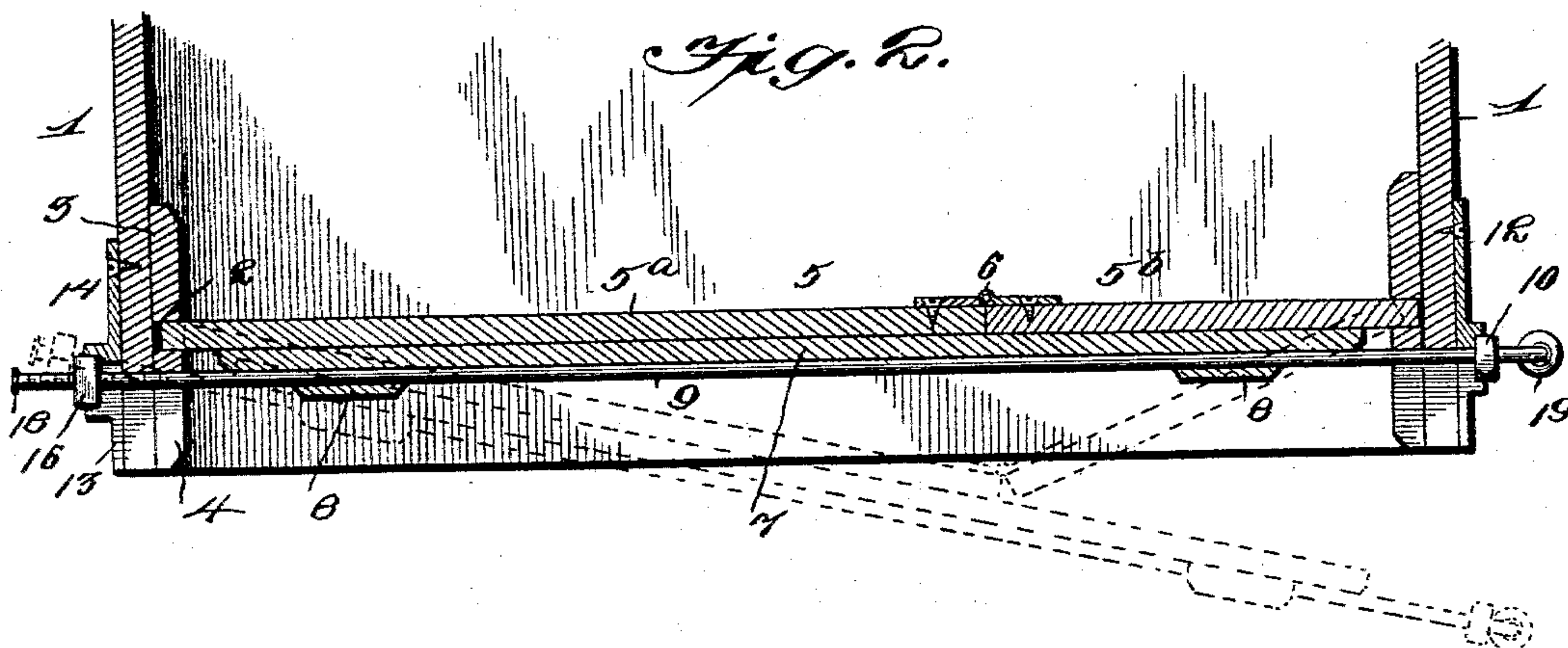
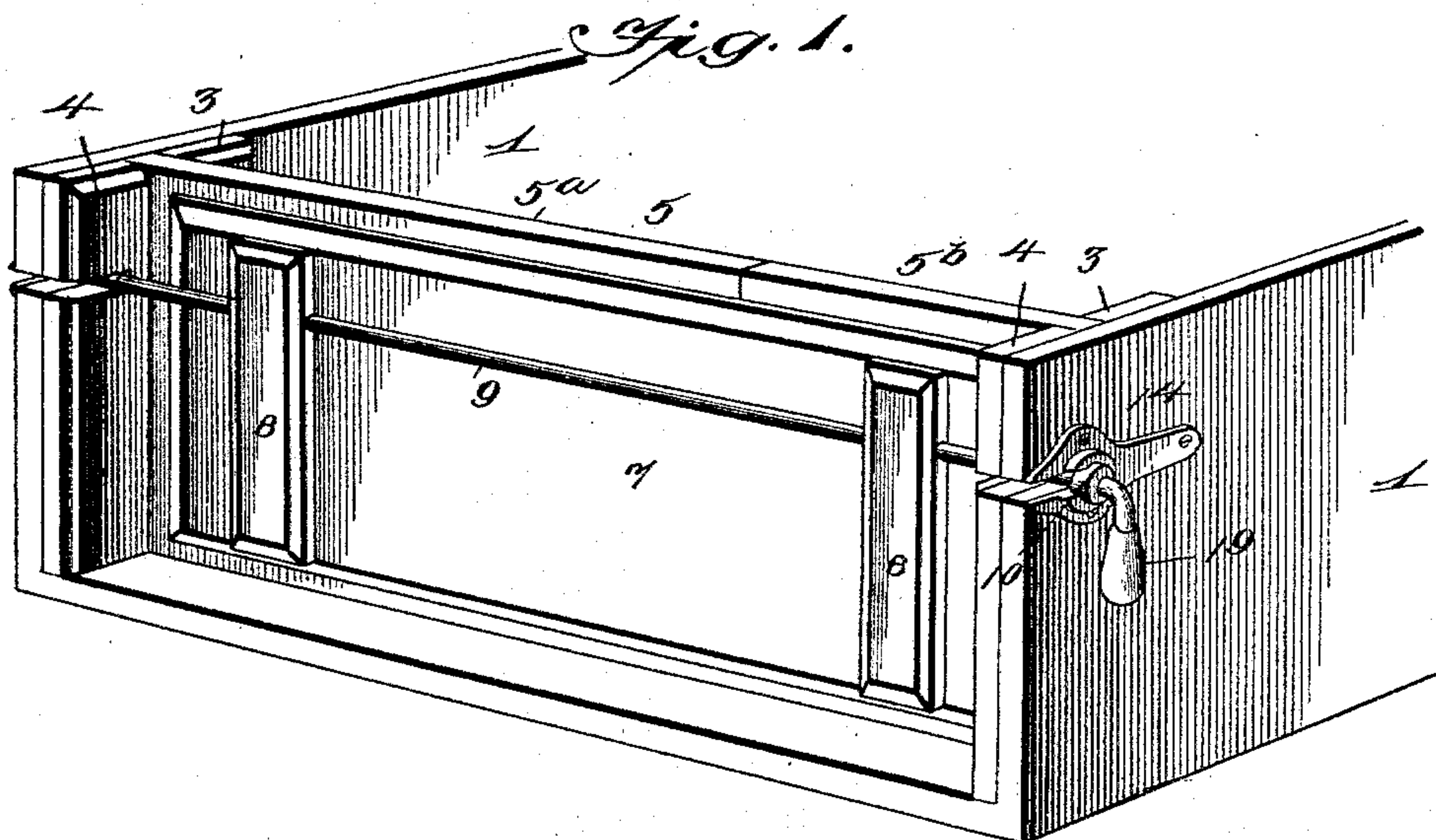


Fig. 3.

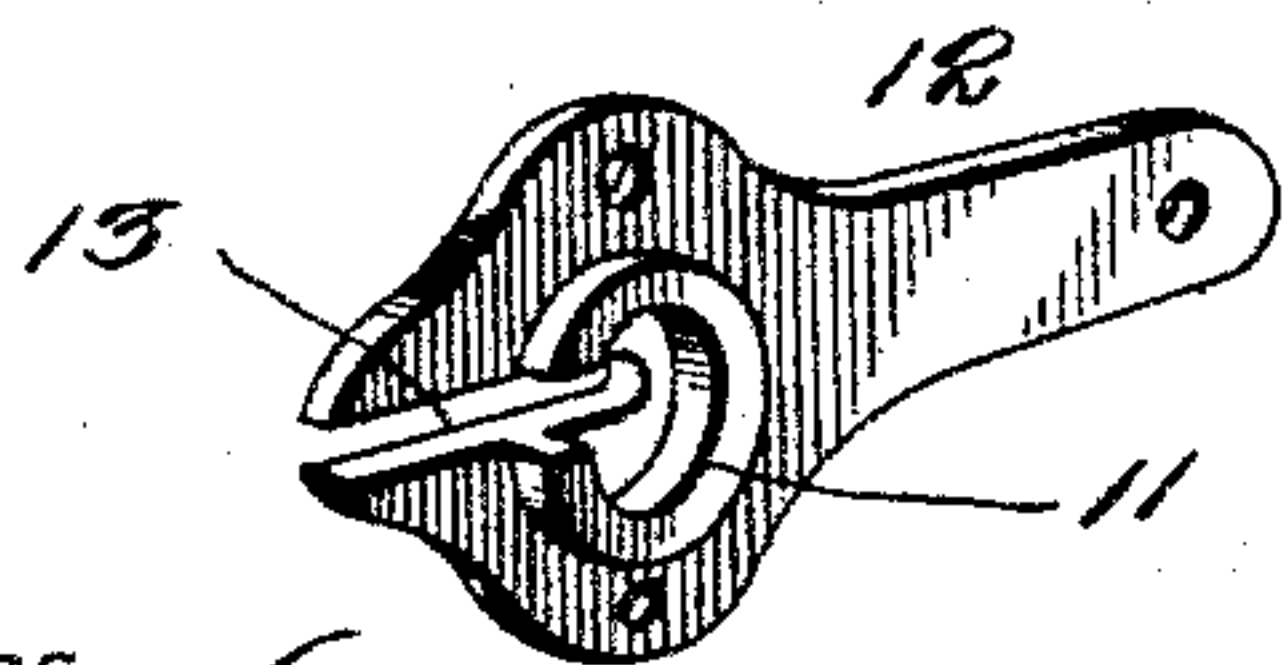
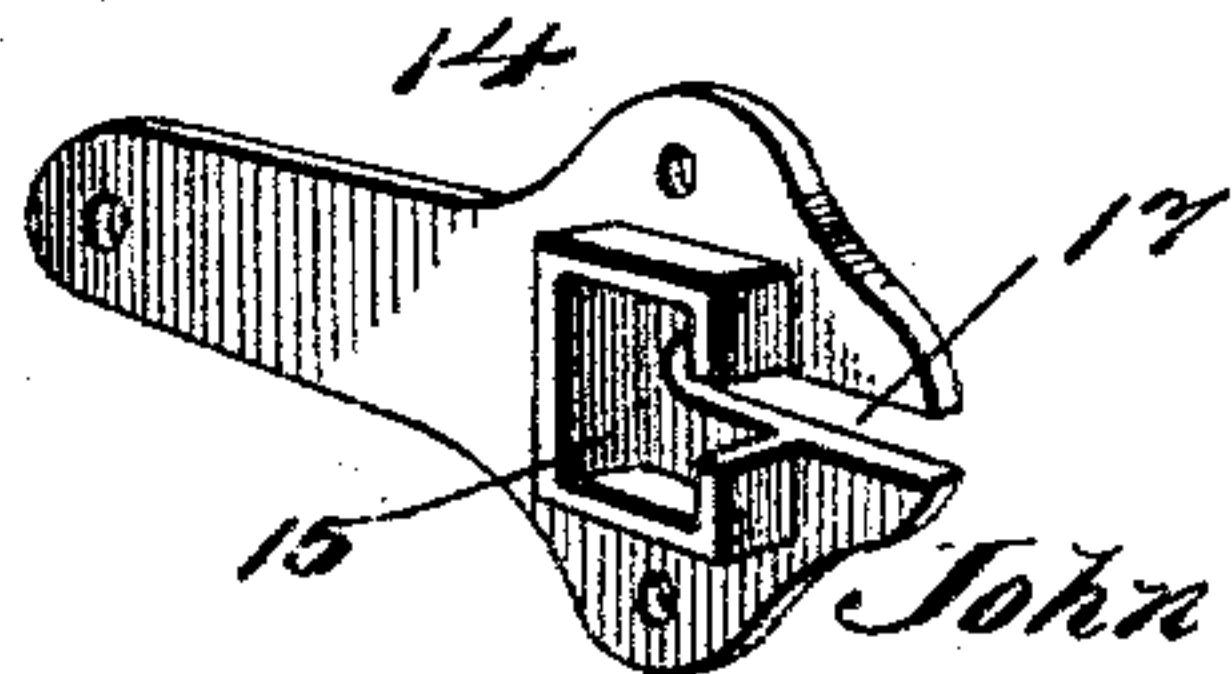


Fig. 4.



Inventor

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Witnesses

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UNITED STATES PATENT OFFICE.

JOHN COOPER MILNES, OF KANSAS CITY, MISSOURI.

END-GATE.

SPECIFICATION forming part of Letters Patent No. 589,665, dated September 7, 1897.

Application filed December 12, 1896. Serial No. 615,507. (No model.)

To all whom it may concern:

Be it known that I, JOHN COOPER MILNES, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented a new and useful End-Gate, of which the following is a specification.

My invention relates to end-gates of the sectional or folding type, and has for its object to provide a simple and efficient construction and arrangement of parts whereby the members are inseparable to avoid disconnection by jolting, and, furthermore, to provide means for protecting the main or sectional member of the gate to prevent the splitting or other injury thereof by the contact therewith of tongues approaching the same from the rear.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claim.

In the drawings, Figure 1 is a perspective view of an end-gate constructed in accordance with my invention applied in the operative position to a vehicle-body. Fig. 2 is a transverse horizontal section of the end-gate and the contiguous portions of the sides of the wagon-body. Fig. 3 is a detail view in perspective of the socket employed upon one side of the wagon-body for receiving a collar on the locking-rod. Fig. 4 is a similar view of a socket employed upon the opposite side of the wagon-body for seating the nut, which is threaded upon said locking-rod.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates the sides of a wagon-body, which are provided with guides 2, formed by front and rear vertical guide-bars 3 and 4, said guides being adapted for the reception of the extremities of the main or body portion 5 of the end-gate. This main or body portion of the end-gate is of sectional construction, having the members 5^a and 5^b, which are hinged together, as at 6, and are adapted to fold, as indicated by the dotted lines in Fig. 2, to remove their extremities from the guides and thereby avoid raising the gate to the upper extremities of said guides.

In order to secure the sections of the main or body portion of the end-gate in their normal relative positions in a common transverse plane, I employ a shield or protecting portion 7, consisting of a board which is permanently secured to one of the sections of the main or body portion of the end-gate and is approximately coextensive with the end-gate to protect the same from contact with the tongues of other vehicles approaching from the rear. This protecting portion or shield 7 is braced by means of transverse cleats 8, having aligned bearings for the reception of a locking-rod 9, said locking-rod being of such length as to extend through openings formed in the sides of the vehicle-body.

The locking-rod is provided at one end with a shoulder or enlargement 10, adapted to be fitted in a seat 11, formed in a socket-plate 12, which is secured to the contiguous side of the vehicle, said socket-plate being provided with a horizontal slot 13 in registration with a corresponding slot in the side of the vehicle to provide for the introduction of the locking-rod from the rear or transversely. Secured to the opposite side of the vehicle is a similar socket-plate 14, having an angular seat 15 to receive a nut 16, which is threaded upon the contiguous extremity of the locking-rod, said socket-plate 14 being also provided with a horizontal slot 17, arranged in registration with a corresponding slot in the side of the vehicle to facilitate the introduction of the locking-rod. The extremity of the locking-rod contiguous to the nut is preferably swaged or enlarged, as shown at 18, to prevent the removal of the nut, and the opposite extremity of the locking-rod, contiguous to the shoulder or enlargement 10, is provided with a weighted handle 19, which is held by gravity in a pendent position and thereby prevents the locking-rod from turning by reason of the jarring of the vehicle.

When it is desired to remove an end-gate constructed in accordance with my invention, the locking-rod is turned until the shoulder thereof leaves its socket, after which the contiguous end of the rod is swung rearwardly to "break" the end-gate at its joint 6. This leaves the locking-rod free to be moved longitudinally to unseat the nut when the device

is free to be removed rearwardly. The replacement of the end-gate is accomplished by a reversal of this operation.

5 An important advantage of the construction above described resides in the fact that the locking-rod is permanently mounted upon the protecting portion or shield of the end-gate, the nut being held from disengagement, and hence the parts cannot be disconnected
10 either through carelessness or by the jolting of the vehicle. The end-gate and locking-rod (than which there is no other locking device) are removable together.

15 A further advantage of the construction resides in the fact that inasmuch as the protecting portion or shield is approximately coextensive with the main or body portion of the end-gate the latter is protected at all times from contact with objects, such as
20 wagon-tongues, approaching the vehicle from the rear, it being a common occurrence for the tongue of the following vehicle to strike and split the end-gate of a preceding vehicle. Furthermore, it will be seen that in addition
25 to preventing rearward displacement of the end-gate when the parts are arranged in their normal positions, the locking-rod prevents vertical vibration thereof, and thus prevents the loss of the contents of the vehicle due to
30 the working thereof between the lower edge of the end-gate and the floor of the body.

Having described my invention, what I claim is—

A sectional end-gate adapted to be fitted terminally in vertical guides on the sides of 35 a wagon-body, said sections being hinged together; a shield, approximately coextensive with the end-gate, secured to one of the sections to overlap the other and provided with horizontally-alined closed bearings; a lock- 40 ing-rod permanently mounted in said bearings and extending terminally through horizontal slots, open at their rear ends, in the sides of the wagon-body, to allow the end-gate with the attached rod to be removed 45 rearwardly; socket-plates secured to the sides of the wagon-body and provided respectively with angular and round seats and communicating slots which register with the slots in the sides of the wagon-body; the said 50 locking-rod being provided with a shoulder or enlargement 10 to fit in the round seat, and a nut threaded upon the locking-rod contiguous to and adapted to be fitted in said angular seat, said locking-rod being provided 55 at the shouldered end with a fixed handle 19 and at the nut-engaged end with a head 18 to prevent disengagement of the nut; substantially as specified.

In testimony that I claim the foregoing as 60 my own I have hereto affixed my signature in the presence of two witnesses.

JOHN COOPER MILNES.

Witnesses:

L. J. ALLEN,
D. W. PATTON.