

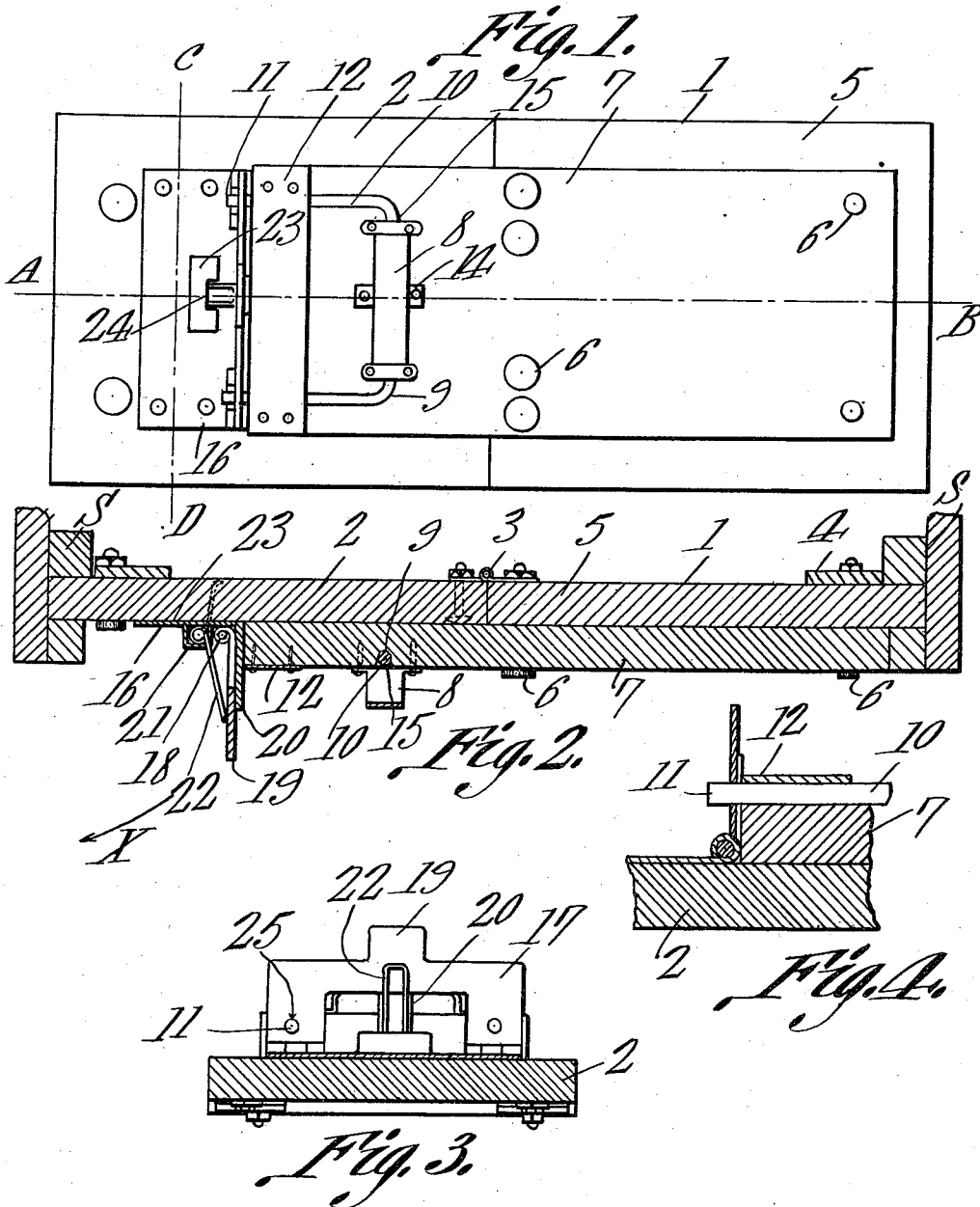
W. A. ROGERS.

END GATE.

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1,013,446.

Patented Jan. 2, 1912.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM A. ROGERS, OF BOICOURT, KANSAS.

END-GATE.

1,013,446.

Specification of Letters Patent.

Patented Jan. 2, 1912.

Application filed April 8, 1911. Serial No. 619,795.

To all whom it may concern:

Be it known that I, WILLIAM A. ROGERS, a citizen of the United States, residing at Boicourt, in the county of Linn and State of Kansas, have invented a new and useful End-Gate, of which the following is a specification.

It is the object of this invention to provide an end gate for a vehicle, which may readily be mounted in position upon the vehicle, and locked therein, the construction being such that the device may readily be removed from the vehicle, without disassociating any of the parts thereof.

Another object of the invention is to provide a locking device of novel and improved form, adapted to be mounted upon one portion of an end gate, for engagement with another portion thereof, to maintain the end gate rigid.

A further object of the invention is to provide a novel form of striking member, adapted to be mounted upon one portion of an end gate, for engagement with a spring actuated latch member which is mounted upon the other end of the end gate.

Figure 1 is an elevation; Fig. 2 is a longitudinal section on the line A—B of Fig. 1; Fig. 3 is a section on the line C—D of Fig. 1; and Fig. 4 is a sectional detail showing the coöperation of the constituent elements of the locking device.

In carrying out the invention, there is provided, a primary member 1, and a secondary member 2, connected by hinges 3, the primary and secondary members being equipped, adjacent their ends, with transverse cleats 4.

The primary member 1 is a composite structure, embodying a back plate 5, to the face of which is secured by bolts 6 or the like, a tongue 7, one end of which overlaps the face of the secondary member 2. Upon the outer face of the tongue 7 of the primary member 1, relatively near to the free end of the tongue 7, a transverse handle 8 is secured. There is a groove 9 in the tongue 7, and in this groove 9 is seated an arcuate member 10, the ends of which protrude beyond the end of the tongue 7, as shown at 11. The arcuate member 10 constitutes the striking element of the locking mechanism, and is held in place upon the tongue 7 by means of a cleat 12, secured transversely to the tongue 7, adjacent the free end of the tongue. The arcuate member 10 is further

held in place upon the tongue 7 by means of a strap 14, secured across the intermediate portion of the arcuate member. Moreover, if desired, as shown at 15, the handle 8 may overhang the arcuate member 10, the handle thus constituting a means for maintaining the arcuate member in place in the groove 9 of the tongue 7.

Mounted upon the secondary member 2, is a locking device, adapted to engage with the protruding ends 11 of the arcuate member 10. This locking device consists of a base plate 16, secured directly to the secondary member 2. To that edge of the base plate 16 which is disposed adjacent the free end of the tongue 7, a latch 17 is hinged as shown at 18. The latch 18 is a U-shaped structure, and is provided in its intermediate portion, with an outstanding finger plate 19. The base plate 16 is equipped with an outstanding lug 20, against which the latch 17 may normally rest. In order to maintain the latch 17 in engagement with the lug 20, a helical spring 21 is secured to the base plate 16, the spring 21 being equipped in its intermediate portion with an outstanding finger 22, engaging the intermediate portion of the latch 17, adjacent the outer edge of the latch. The helical portion of the spring 21 is housed beneath a supplemental cover 23, carried by the base plate 16. In the outer portion of the cover 23, there is a notch 24, adapted to accommodate the finger 22.

Presupposing that the device is mounted in place in the wagon box the operation of removing the end gate is as follows. One hand of the operator is placed upon the handle 8, and the other hand of the operator is placed upon the finger plate 19, the latch 17 being thereby swung in the direction of the arrow X, putting the spring 21 under tension, and breaking the engagement between the latch 17 and the protruding ends 11 of the arcuate member 10, it being noted that there are in the latch 17, suitable openings 25, adapted to engage the protruding ends 11 of the member 10. When the latch 17 is thus freed from the ends of the member 10, the end gate may be "broken" at the hinges 3, thus diminishing the effective length of the end gate, and permitting the same to be disengaged from the sides S of the wagon box.

When it is desired to replace the end gate in the wagon box, the handle 8 is seized, and

the tongue 7 of the primary member 1 is swung toward the secondary member 2. Under such circumstances, the protruding ends 11 of the arcuate member 10 will slide
 5 along the latch 17, tilting the latch, until the ends 11 enter the openings 25, whereupon the spring 21 will cause the latch 17 to engage, automatically, with the arcuate member 10, the parts 1 and 2 of the end
 10 gate being thus rigidly locked in alinement. During the operation of inserting the end gate into the wagon box, the latch 17 requires no manipulation, the outstanding lug 20 upon the base plate 16 serving to position
 15 the latch 17 in rectangular relation to the secondary member 2, so that the latch may readily be engaged by the ends of the member 10.

Having thus described the invention, what
 20 is claimed is:—

In a device of the class described, hingedly connected primary and secondary parts, the primary part overlapping the secondary part; an arched member applied to the pri-

mary part, and terminally extended beyond 25 the overlapped end of said primary part; means for holding the arched member upon the primary part; a base plate secured to the secondary part; a latch hinged to the base plate; a spring carried by the base plate 30 and bearing against the latch to hold the same in outstanding position with respect to said secondary part, there being a lug upon the base plate, adapted to engage the latch, to limit the movement of the latch under the 35 actuation of the spring, the lug constituting a means for positioning the latch for engagement with the arched member, when the primary and secondary parts are swung into alinement.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses. 40

WILLIAM A. ROGERS.

Witnesses:

JAMES RUSH,
 J. R. HIATT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."