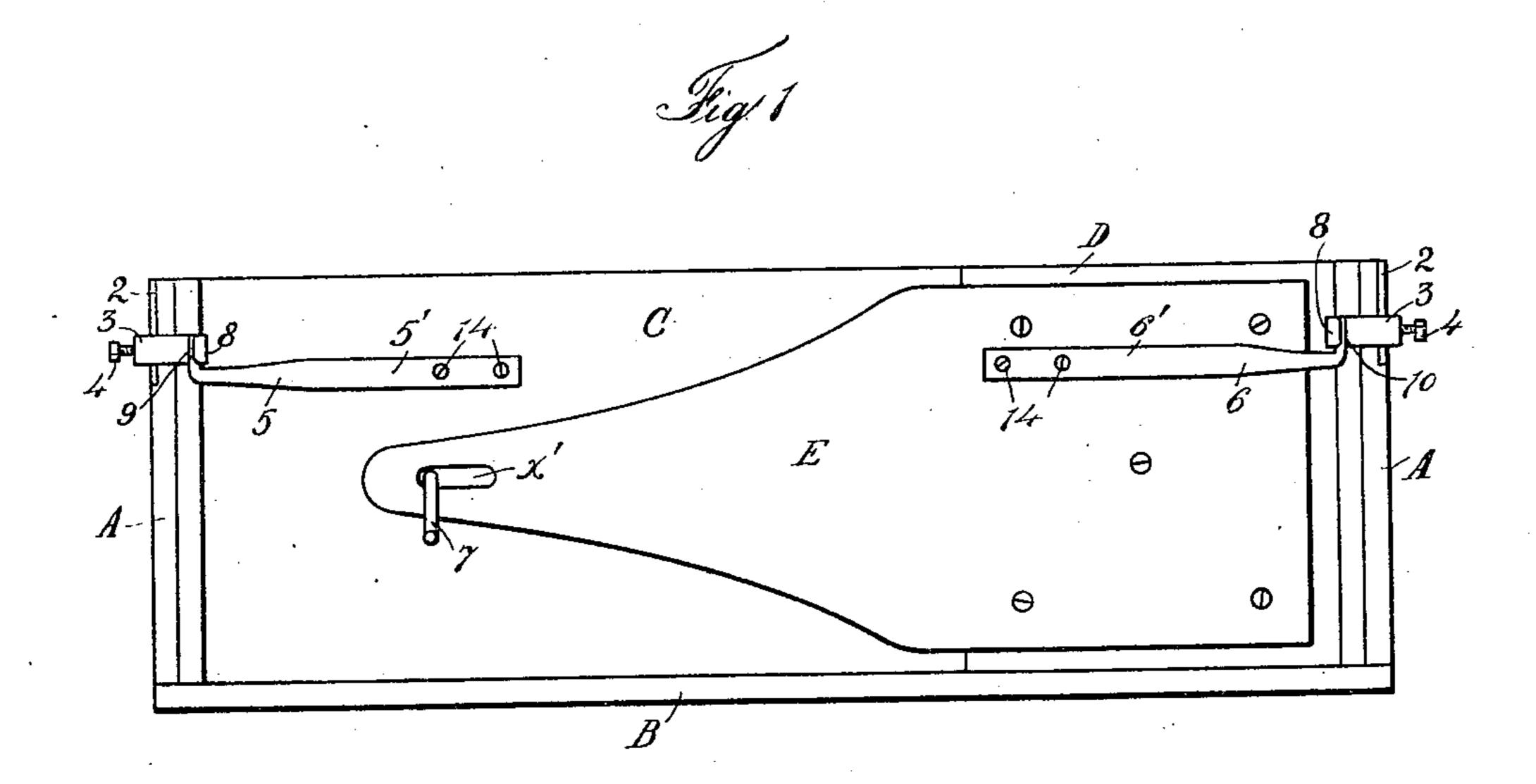
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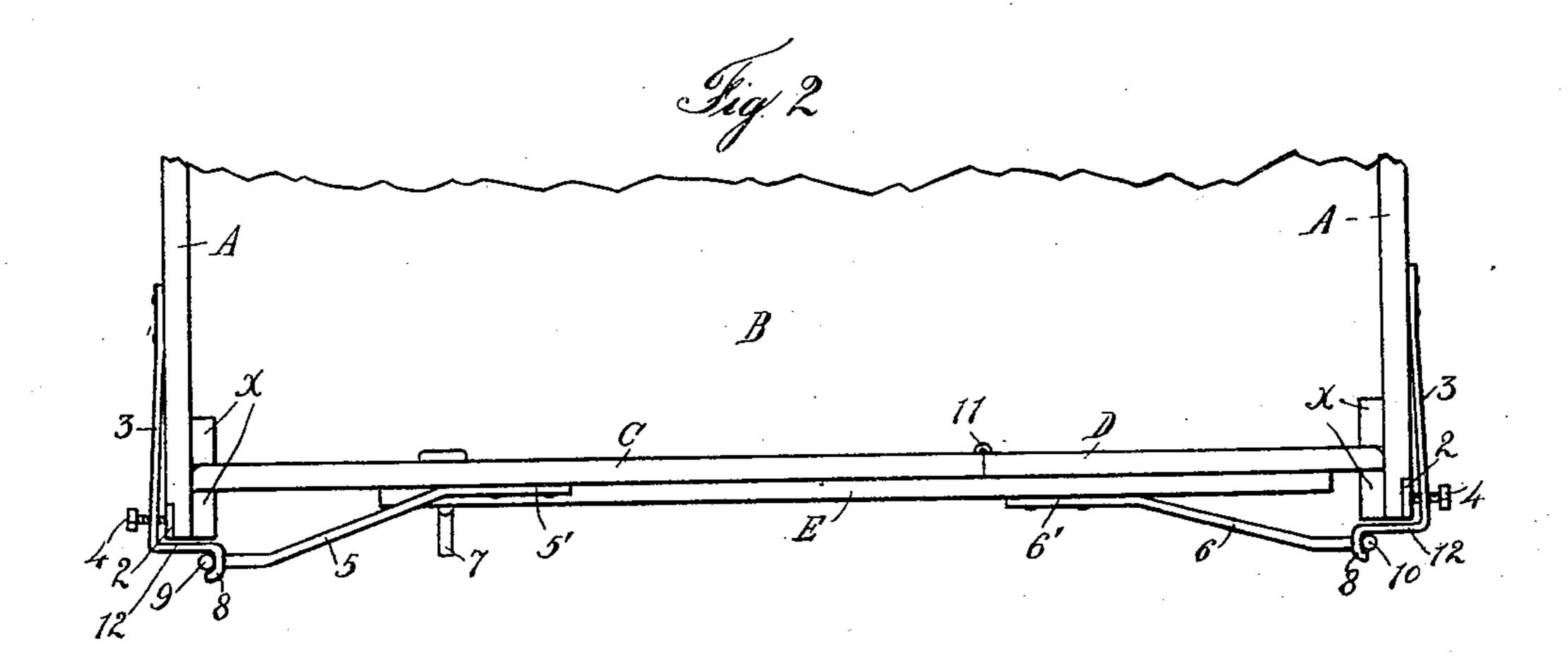
C. L. HARVEY & J. H. NIEMAN.

END GATE.

(Application filed Jan. 21, 1901.)

(No Model.)





WITNESSES: Con Patterson E. J. Davenport INVENTORS:
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CLAUDE L. HARVEY AND JOHN H. NIEMAN, OF PETERSBURG, NEBRASKA.

END-GATE.

SPECIFICATION forming part of Letters Patent No. 681,881, dated September 3, 1901.

Application filed January 21, 1901. Serial No. 44,153. (No model.)

To all whom it may concern:

Be it known that we, CLAUDE L. HARVEY and JOHN H. NIEMAN, residing at Petersburg, in the county of Boone and State of Nebraska, 5 have invented certain useful Improvements in End-Gates; and we do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains 10 to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to a novel end-gate

attachment for wagons.

The object of our invention is to provide an ordinary end-gate with a tension attachment by means of which the end-gate can always be adjustably secured to the sides of the wagon-box, so as to insure a grain-tight 20 connection between the end-gate and wagon sides.

In the accompanying drawings we have shown in Figure 1 a rear view of an ordinary wagon-box provided with our improved end-25 gate attachment, while Fig. 2 shows a top view thereof with portions broken away.

At a suitable point near their ends the sides of an ordinary wagon-box AA, secured to an ordinary bottom B, are provided with the 30 plates 2. These plates are merely strips of iron suitably secured to the upper ends of the wagon-box. Further secured to the sides of the wagon, near the upper edge, are the spring-keepers 3, suitably secured by any 35 suitable means and extending across the plates 2, as shown. These keepers embody a straight portion, the extension 12, and the terminal seatings 8, as is more clearly shown in Fig. 2. These keepers are secured near 40 one end, so that they are permitted a free movement at the opposite end, and are provided with a terminal seating 8. These keepers are preferably made of some spring metal, as steel, and at a suitable point are 45 provided with threaded openings adapted to receive an ordinary screw 4, the screw being adapted to work upon the plate 2, each plate acting as a stop for its screw 4. It will be noticed that the terminal seatings 8 extend 50 at an angle to the section 12 of the keeper i

and that this section is a short distance away from the end of each side-board A, as may be

understood in referring to Fig. 2.

An ordinary end-gate comprising the portions Cand D, united by means of a hinge 11, 55 is made to work between the cleats x, secured to the wagon sides A. The hinge end-gate section D is further provided with the shield E, secured thereto by suitable screws, this shield being provided with a slot x', adapted 60 to receive the crank-arm 7, movably secured within the end-gate section C, as is usual in these hinged end-gates. It should be understood that this end-gate, comprising the parts C, D, E, and 7, forms no part of our inven- 65 tion, as this is an end-gate as used in conjunction with the majority of the ordinary farmwagons.

Secured to the end-gate section C by means of the screws 14 is a spring-ear 5, provided 70 with the upward extension 9, and to the portion E is secured a counterpart ear 6, provided with the upward extension 10. It will be noticed that these ears comprise a flat portion 5' and 6' and an outwardly-extending 75 portion 5 and 6, from which extend at right angles the ears proper, comprising the upward extensions 9 and 10, respectively. These ears are alike in construction and are positioned opposite one another in such a man- 80 ner that they engage the keepers 3, as shown.

When the parts have been properly constructed, the end-gate is inserted, as usual, so that the ears 9 and 10 come within the terminal seatings 8 8. The end-gate is then 85 closed in forcing the end portion E against the portion C and locking the end-gate sections C and D in alinement, as is shown in Fig. 2. The terminal seatings 8 having been engaged by means of the extensions 9 and 90 10 the sides A A of the wagon will be snugly drawn against the end-gate sections C and D, and in order to get a proper tension it is merely necessary to adjust the counterpart screws 4 4 in order to carry outward the 95 keepers 3, so an absolutely grain-tight nonrattling union is formed between the sides A A and the end-gate. The gate-sections C and D are held between the cleats x x, as shown in Fig. 2. 100 Having thus described our said invention, what we claim as new, and desire to secure by United States Letters Patent, is—

In an end-gate attachment of the character described, the combination with an end-gate comprising two hinged sections of extending ears upon opposite sides and extending in outward directions, of two counterpartspring-keepers secured at one end to the sides of a wagon-body, and provided at the opposite end with terminal seatings, said seatings being

adapted to be engaged by said ears in a locked position, an adjusting-screw passing through each keeper, and a plate acting as a stop for said screws, all arranged substantially, as and 15 for the purpose set forth.

CLAUDE L. HARVEY. J. H. NIEMAN.

In presence of— F. Jouvenat, D. L. Jouvenat.