

(No Model.)

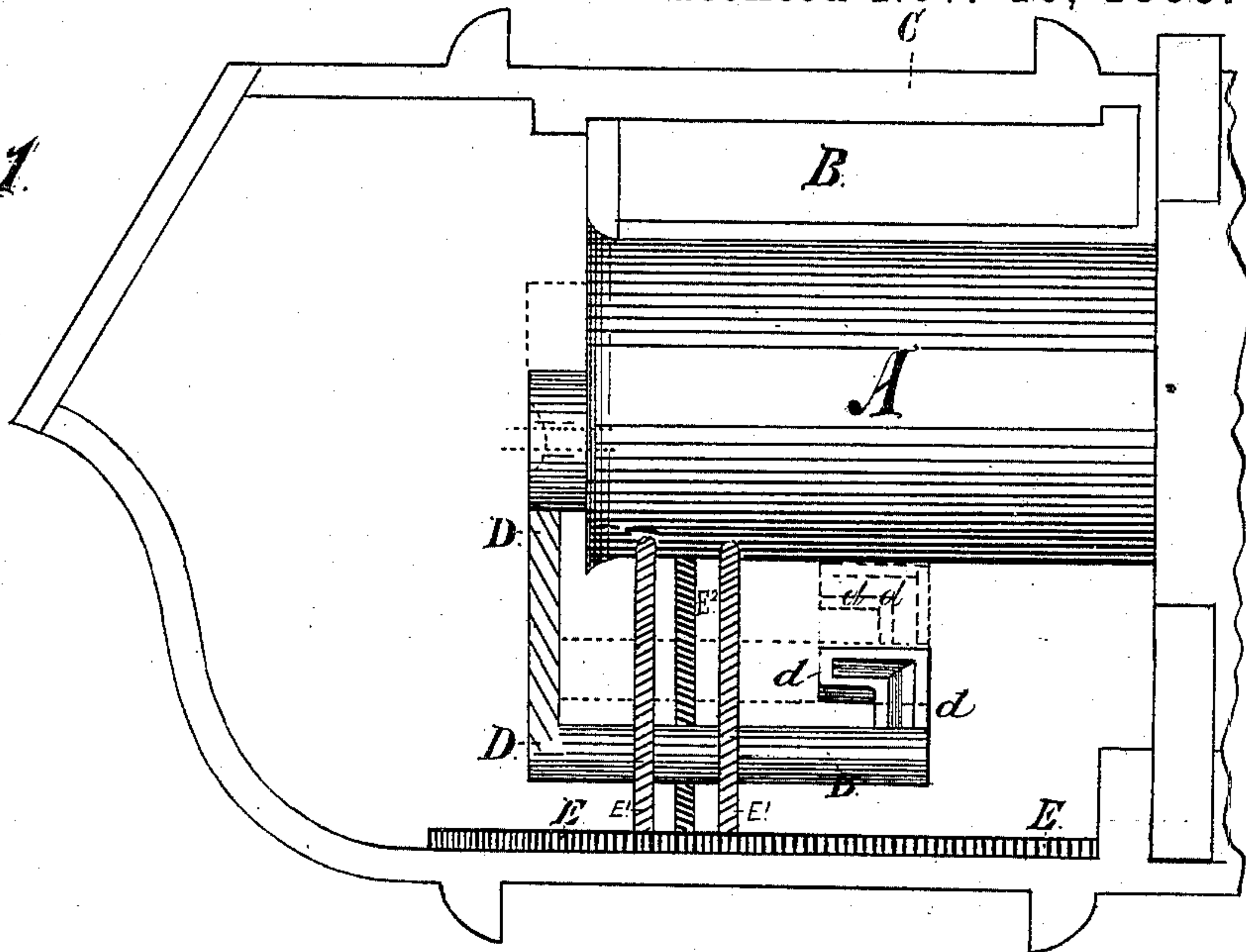
2 Sheets—Sheet 1.

J. C. NICHOL.  
CAR AXLE LUBRICATOR.

No. 330,257.

Patented Nov. 10, 1885.

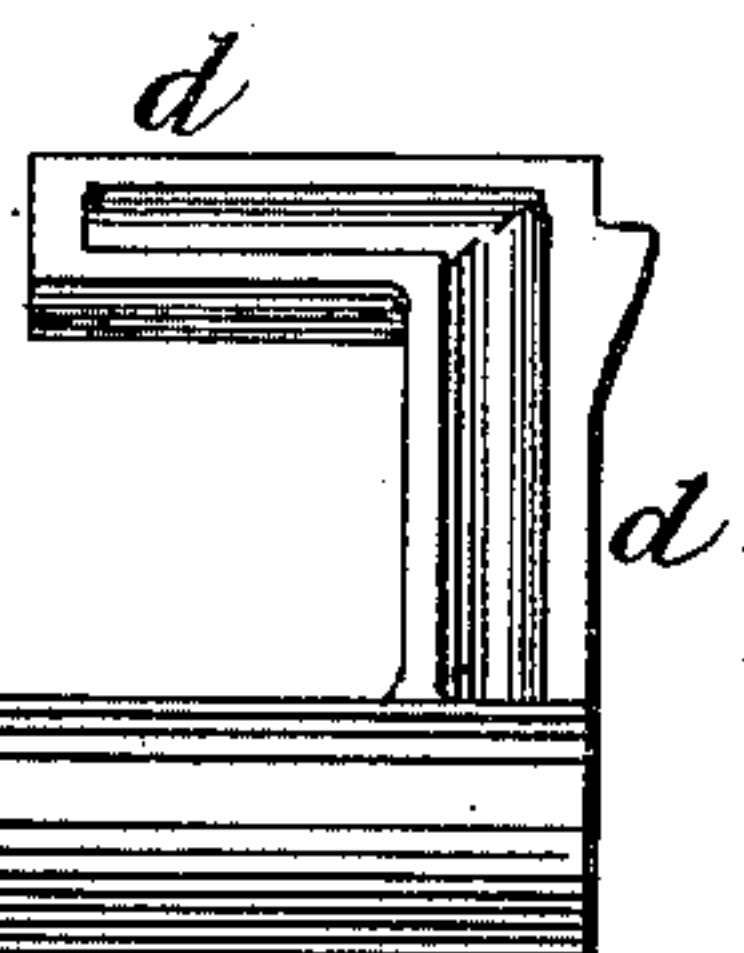
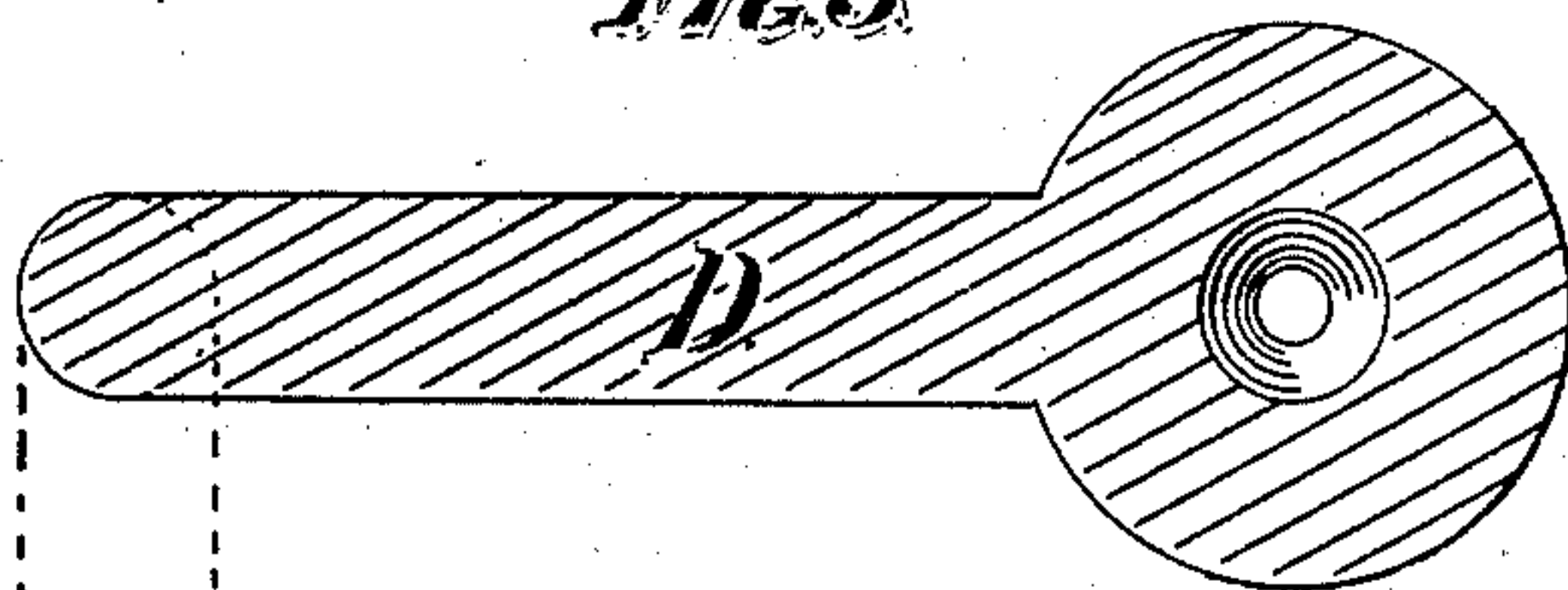
*Fig. 1.*



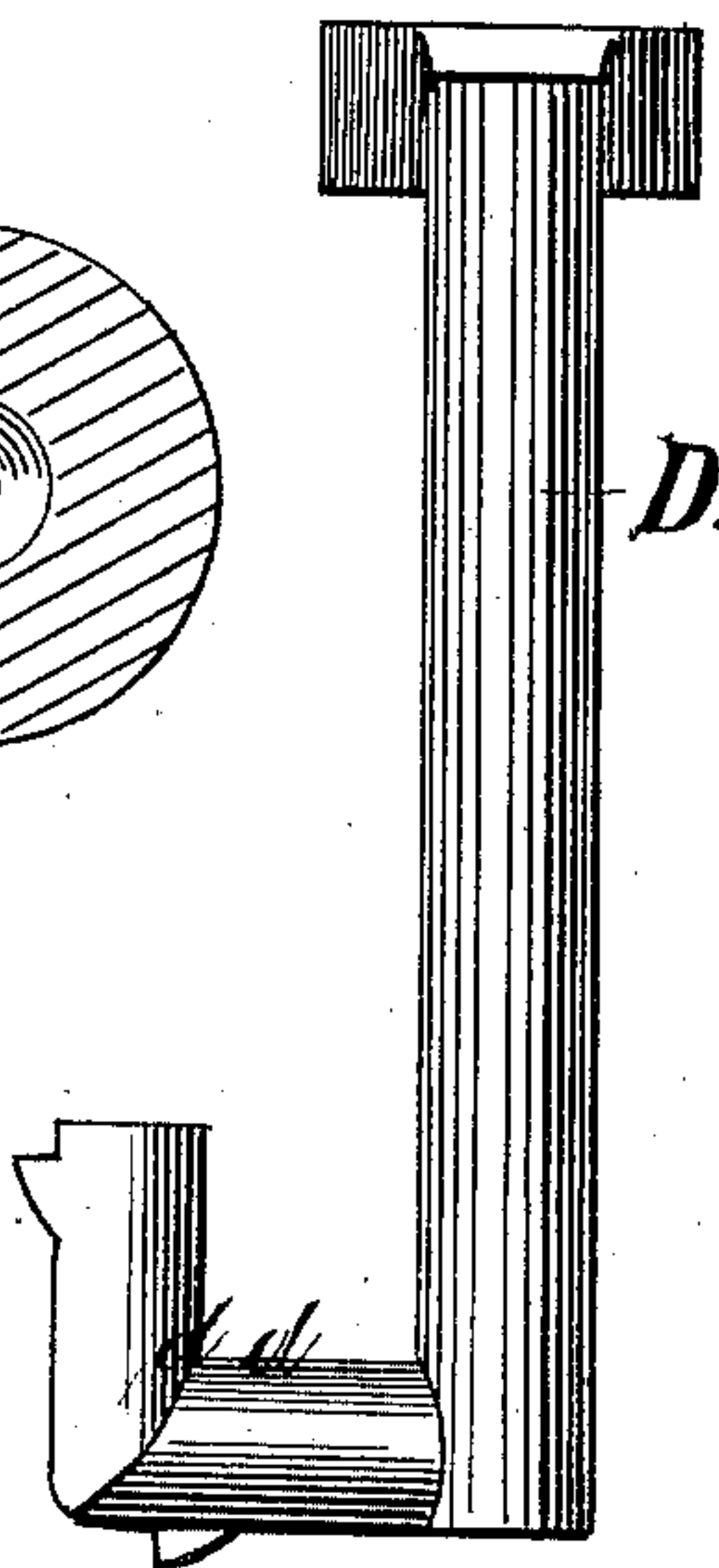
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses  
*Alfred H. King*  
*C. H. Allen*

Inventor  
*J. C. Nichol*  
per *A. R. Bughtred*  
Atty.

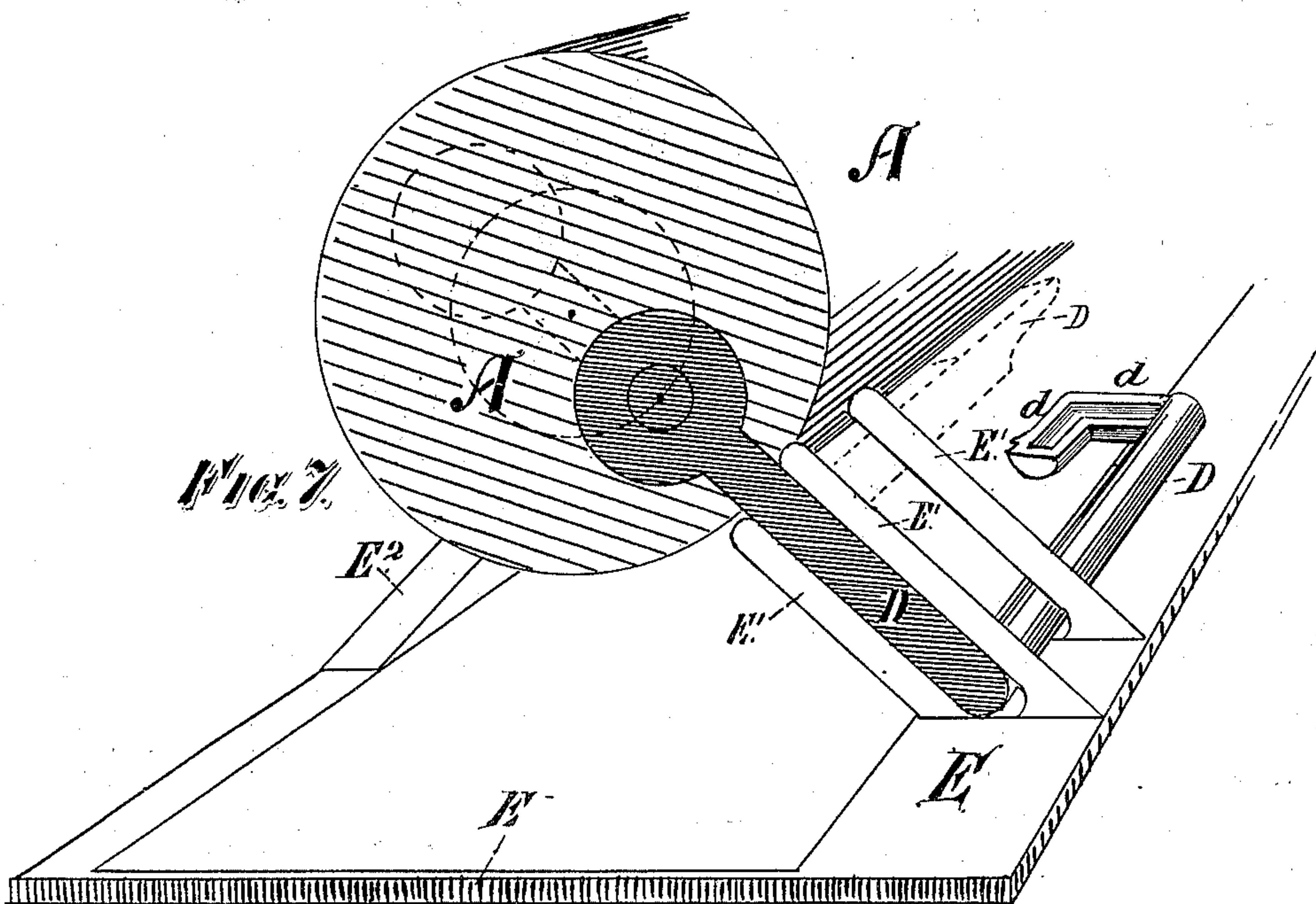
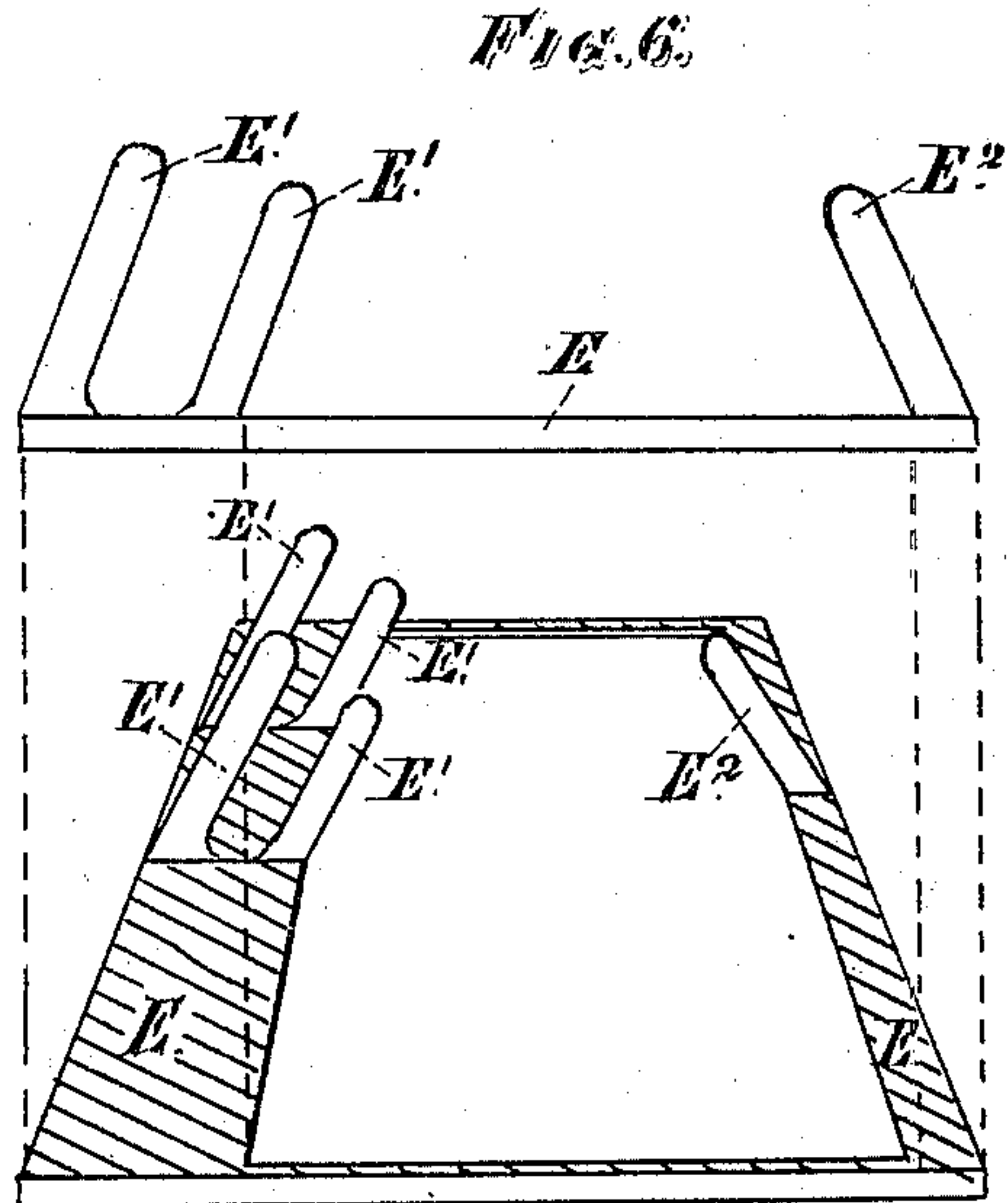
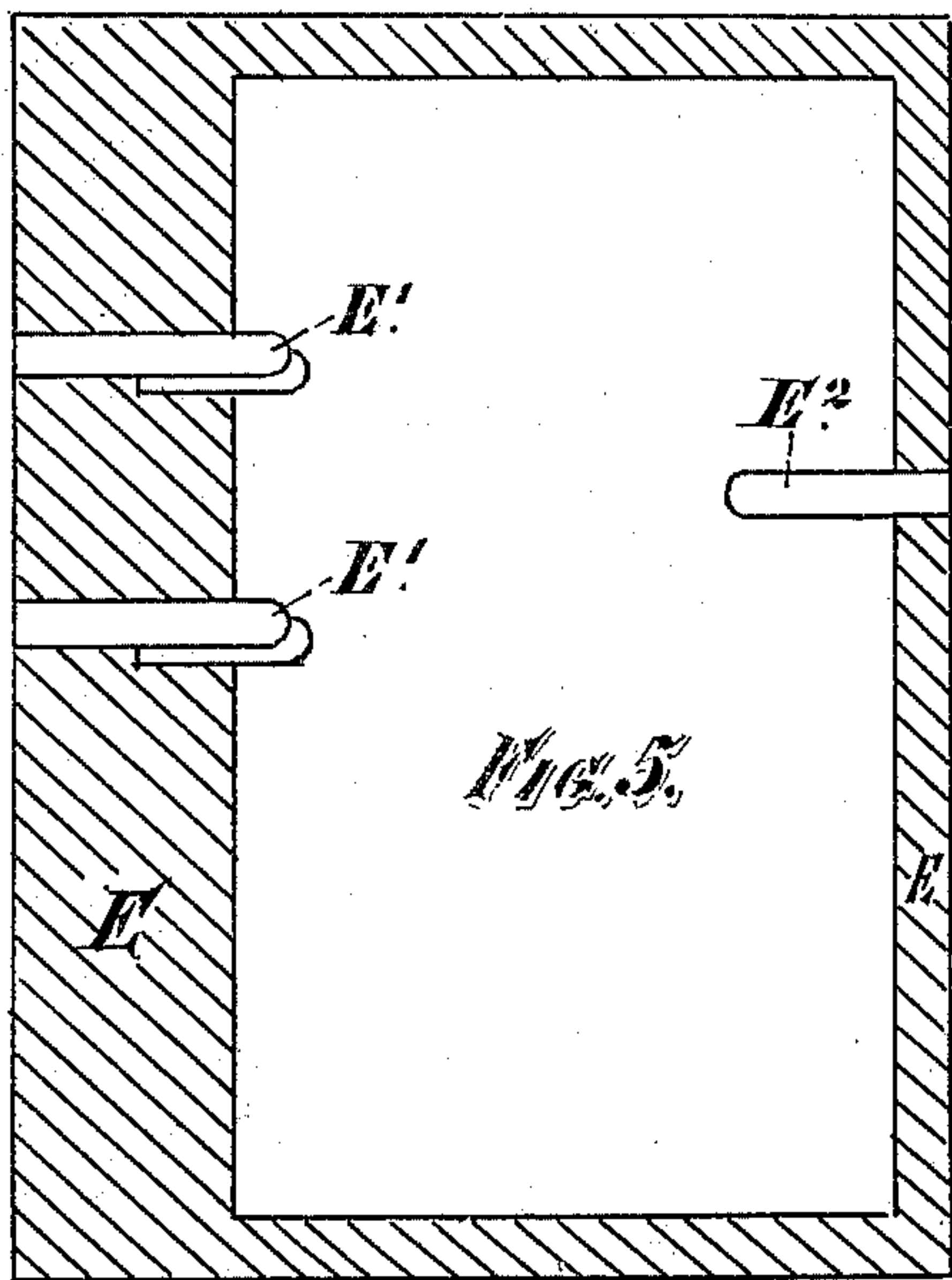
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2 Sheets—Sheet 2.

J. C. NICHOL.  
CAR AXLE LUBRICATOR.

No. 330,257.

Patented Nov. 10, 1885.



Witness  
*Christine*  
*C. Holton*

Inventor  
*J. C. Nichol*  
per *A. R. Oughtred*  
att'y.



# UNITED STATES PATENT OFFICE.

JOHN CHRISTOPHER NICHOL, OF MONTREAL, QUEBEC, CANADA.

## CAR-AXLE LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 330,257, dated November 10, 1885.

Application filed September 10, 1885. Serial No. 176,649. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN CHRISTOPHER NICHOL, a citizen of the Dominion of Canada, residing at the city of Montreal, in the Province of Quebec, have invented a new and useful Lubricator for Car and Truck Axles, which has not been patented in any country, but for which an application was duly made to the Patent Office of Canada on the 28th day of August now last past, 1885, and which, according to my knowledge and belief, has not been in public use or on sale in the United States for more than two years prior to the application in this country, of which the following is a specification.

My invention relates to improvements in lubricators for railway-car and truck axles; and the objects of my improvements are, first, to provide, by means of an arm or lever having one or more paddles or spoons, and attached to the outer end of the axle, and passing into the oil in the housing of the axle and up to the axle at every revolution thereof, constant and effective lubrication of the axle; second, to do away entirely with the necessity for the use of cotton waste or other material in the boxing of the axle; third, to prevent waste of the oil and reduce the quantity used to the smallest possible limit by the repeated use of the same oil for lubrication; and, fourth, to provide, by means of the action of the arm or lever at every revolution of the axle in the oil in the housing, that when a car has stood for hours on a siding in the winter and the oil has become congealed it shall be immediately broken up when the car is put in motion, and while in motion the oil will be constantly kept in a condition of warmth fit for lubrication. I attain these objects by the mechanism in the accompanying drawings, in which—

Figure 1 is a sectional elevation of an axle-box and axle equipped with my invention. Fig. 2 is a side view of the arm or lever as attached to the axle. Fig. 3 is that part of the arm or lever seen when looking toward the front end of the axle. Fig. 4 is a view of

that section of the arm or lever under the axle. Fig. 5 is the frame placed on the bottom of the boxing or housing with the slots and finger. Fig. 6 is the frame placed in position in the boxing or housing with the axle above it. Fig. 7 is an end view of the combination of the axle, the arm or lever, and the frame.

Similar letters of reference indicate like parts throughout the several views.

To the outer end of the axle A, but not in the center thereof, is attached in a secure manner, by means of a bolt or other usual fastening, the iron arm or lever D, leaving full play, however, to the arm or lever D on the bolt or other fastening. The arm or lever D extends beyond the outer surface of the axle A, thence, turning at right angles, it passes underneath the axle A to any distance desired. The end of the arm or lever D beneath the axle is formed in the shape of paddles or spoons *d d*. A piece of wicking or other suitable material may be attached in the hollow of the paddle or spoon for actual contact with the axle A. In the bottom of the boxing or housing C is placed the narrow iron frame E, fitting closely to the outer edges of the boxing or housing C. On one side of the frame E are the two iron slotted guides *E' E'*, extending upward from the frame E in a slanting direction toward but not quite reaching the axle A, and through which the arm or lever D passes, and by which the arm or lever D is prevented from swinging from side to side in the housing C. On one side of the frame E is the finger *E<sup>2</sup>*, extending upward from the frame toward but not quite reaching the axle A. By means of the finger *E<sup>2</sup>* the frame E is prevented from tipping or losing its horizontal position in the boxing or housing C.

The operation of this invention will be clearly understood from the foregoing and the drawings, as it is plain that at every revolution of the axle the paddle or spoon *d d*, forming part of the arm or lever D, will pass down into the oil contained in the housing C, and will carry the oil upward until it comes

into contact with the axle, and will thus perform a continuous and perfect lubrication of that part needing it.

What I claim as my invention, and desire  
5 to secure by Letters Patent, is—

In an axle-lubricator, the lever D, provided with one or more scoops, *d d*, and pivoted to the axle A, as described, combined

with the movable frame E, having the slotted guides E' E' and the finger E<sup>2</sup>, substantially as and for the purpose specified. 10

J. C. NICHOL.

Witnesses:

C. CUSHING,

E. HOLTON.