

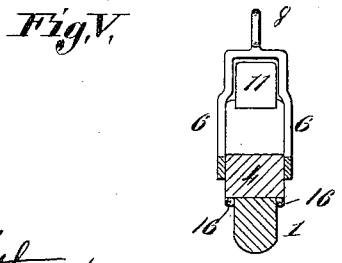
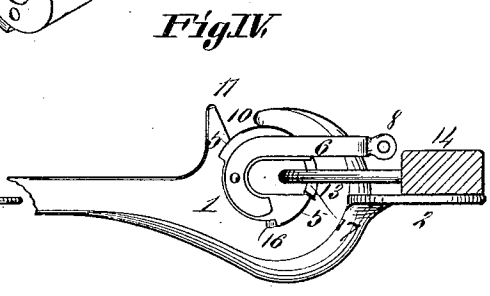
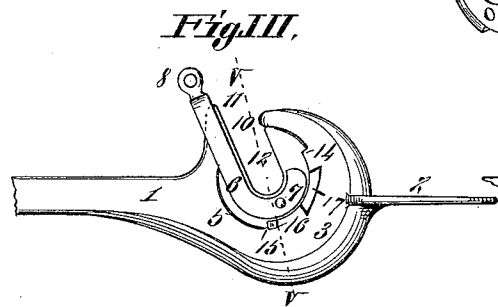
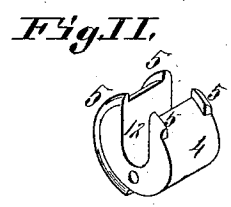
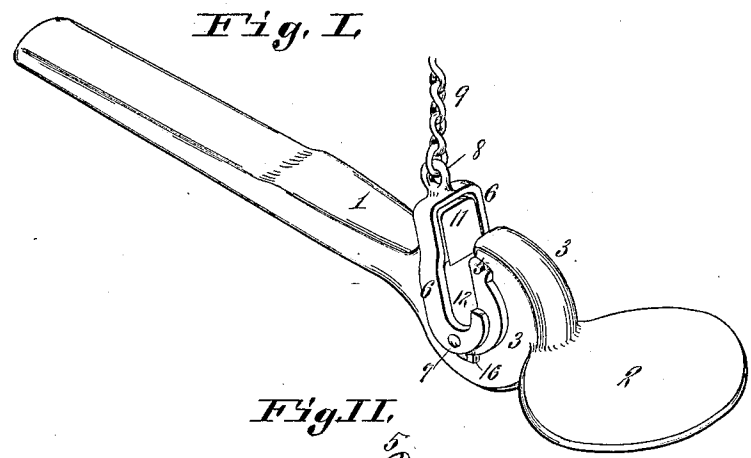
(No Model.)

J. LEFMANN & D. McALLISTER.

DRAW HEAD FOR STREET CARS.

No. 394,777.

Patented Dec. 18, 1888.



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UNITED STATES PATENT OFFICE.

JULIUS LEFMANN AND DANIEL McALLISTER, OF ST. LOUIS, MISSOURI.

DRAW-HEAD FOR STREET-CARS.

SPECIFICATION forming part of Letters Patent No. 394,777, dated December 18, 1888.

Application filed December 16, 1887. Renewed July 23, 1888. Serial No. 281,046. (No model.)

To all whom it may concern:

Be it known that we, JULIUS LEFMANN and DANIEL McALLISTER, both of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Draw-Heads for Street-Cars, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure I is a perspective view of our improved draw-head, showing the lock in its open position. Fig. II is a detached perspective view of the cylinder of the lock. Fig. III is a detail side elevation, showing the lock open. Fig. IV is a similar view, showing the lock closed and the doubletree in place. Fig. V is a section taken on line V V, Fig. III.

Our invention relates to an improved draw-head for street-cars; and our invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Referring to the drawings, 1 represents the body of the draw-head, having a flat table or projection, 2, on its forward end, back of which is an enlargement, 3, recessed to receive a cylinder or drum, 4, having marginal flanges 5, fitting outside the enlargement, as shown.

6 is a bifurcated strap fitting over the upper part of the enlargement 3 and having its lower ends secured to the cylinder at 7. The upper end of the strap is provided with an eye, 8, to which is secured a chain or cord, 9. The recess in the enlargement that receives the cylinder is open at top, as shown at 10, and back of this opening is preferably a projection, 11.

The cylinder or drum 4 has an opening, 12, which may be brought into line with the opening 10 of the enlargement by lifting the strap into the position shown in Figs. I and III. When in this position the staple or clip 13 of the doubletree 14 is passed into the recess 12 of the cylinder through the opening 10, and the cylinder and strap are then turned into the position shown in Fig. IV, and the doubletree is thus locked in position in the draw-head. When it is desired to disconnect the doubletree from the draw-head, all that is necessary is to pull on the chain or cord 9 and

move the cylinder and strap from the position shown in Fig. IV to the position shown in Figs. I and III, and the clip of the doubletree can then be lifted out of the draw-head. It will thus be seen that when the doubletree is in place and the cylinder or drum of the draw-head turned into using position the doubletree will be held from disengagement with the draw-head, and when the doubletree is to be removed the lock can be very easily and quickly turned into a position that will allow the doubletree to be removed.

The flange 5 is notched out from 14 to 15 (see Fig. III) to receive a pin, 16, on the enlargement. When the lock is opened, the shoulder at 15 comes against the projection at 16 and limits the movement of the lock, and when the lock is closed the shoulder at 14 comes against the projection 16 and limits the movement of the lock in the other direction. (See Fig. IV.) When the lock is opened, the strap is in line with the projection 11 of the draw-head, so as to form an elongated incline, against which the clip of the doubletree impinges and is guided in place through the opening 10 to the recess 12 of the cylinder.

The table or projection 2 serves as a rest for the doubletree when the device is in use, as shown in Fig. IV.

17 represents a piece of steel or hardened metal inserted into the head where the clip of the doubletree bears to prevent wearing at this point.

We claim as our invention—

1. In combination with the head having an opening, a cylinder fitting in said opening and having a recess which may be brought in line with an opening in the head to admit the clip of the doubletree, and which may be turned to close the opening in the head and lock the doubletree in place, substantially as set forth.

2. In combination with the head having an opening, a cylinder fitting in said opening and having a recess, and a strap secured to the cylinder for turning it to lock and unlock the doubletree, substantially as and for the purpose set forth.

3. The combination of the head having the opening, cylinder provided with marginal flanges fitting in said head, bifurcated strap secured to the cylinder, and means for limit-

ing the movement of the cylinder, substantially as and for the purpose set forth.

5 4. The combination of the head provided with an opening and a projection, 16, cylinder fitting in the opening of the head and having a notched marginal flange, strap 6, secured to the cylinder, and cord or chain secured to the strap, substantially as and for the purpose set forth.

10 5. The combination of the head having the opening and projection 11, cylinder fitting in the opening of the head, strap secured to the cylinder, and means for limiting the movement of the cylinder to hold the strap in line
15 with the projection 11, substantially as and for the purpose set forth.

6. The combination of the head having the table 2 and opening 12, cylinder fitting in the opening of the draw-head, and means for turning the cylinder to open it, substantially as set forth.

7. The combination of the head and lock, made substantially as shown and described, the head having a wearing-piece, 17, as specified.

JULIUS LEFMANN.
DANIEL McALLISTER.

In presence of—
EDWD. S. KNIGHT,
JOS. WAHLE.