

(No Model.)

E. M. HOLCOMB & F. E. MILLER.

CAR BRAKE ATTACHMENT.

No. 297,130.

Patented Apr. 22, 1884.

Fig. 1.

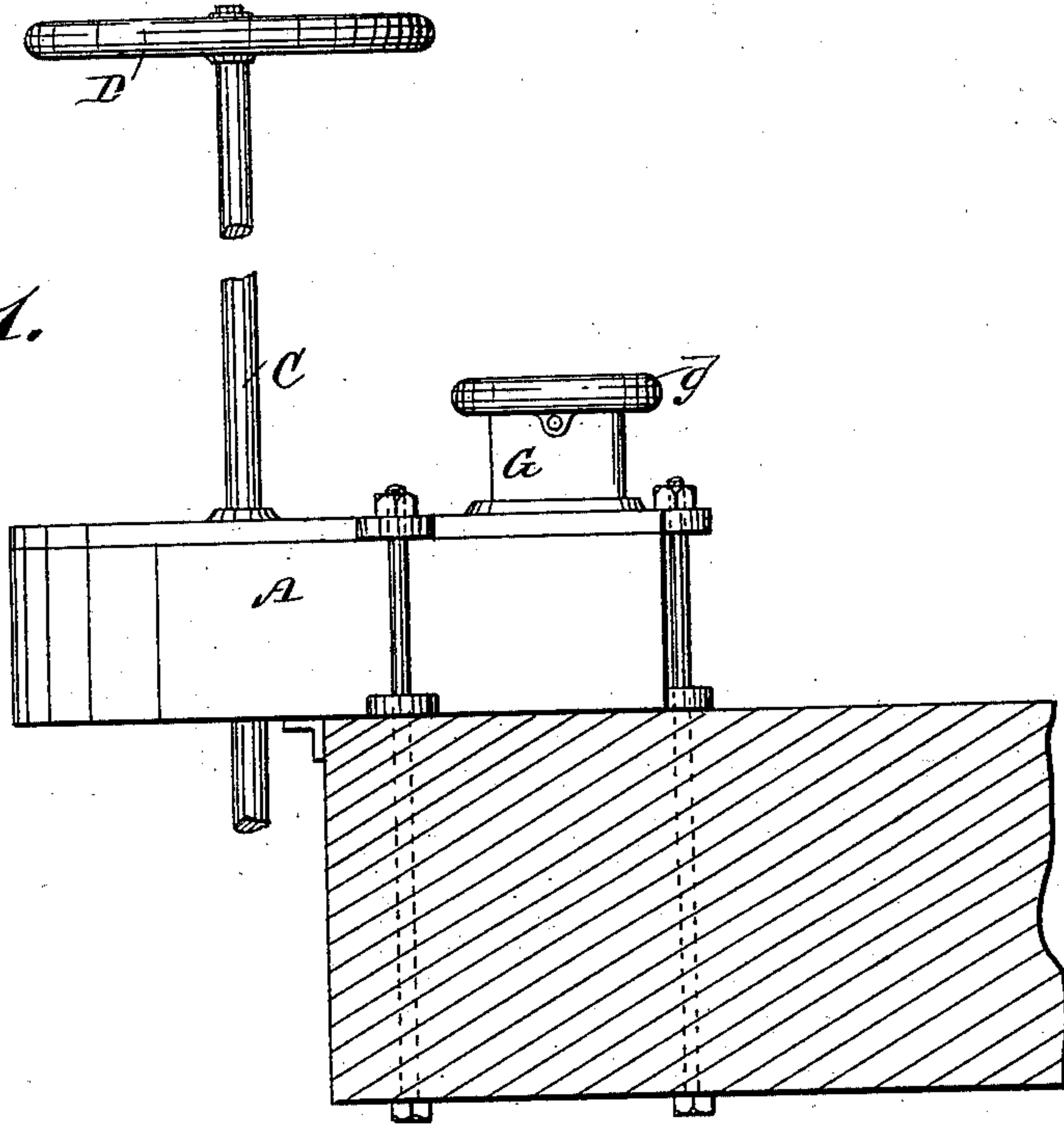


Fig. 2.

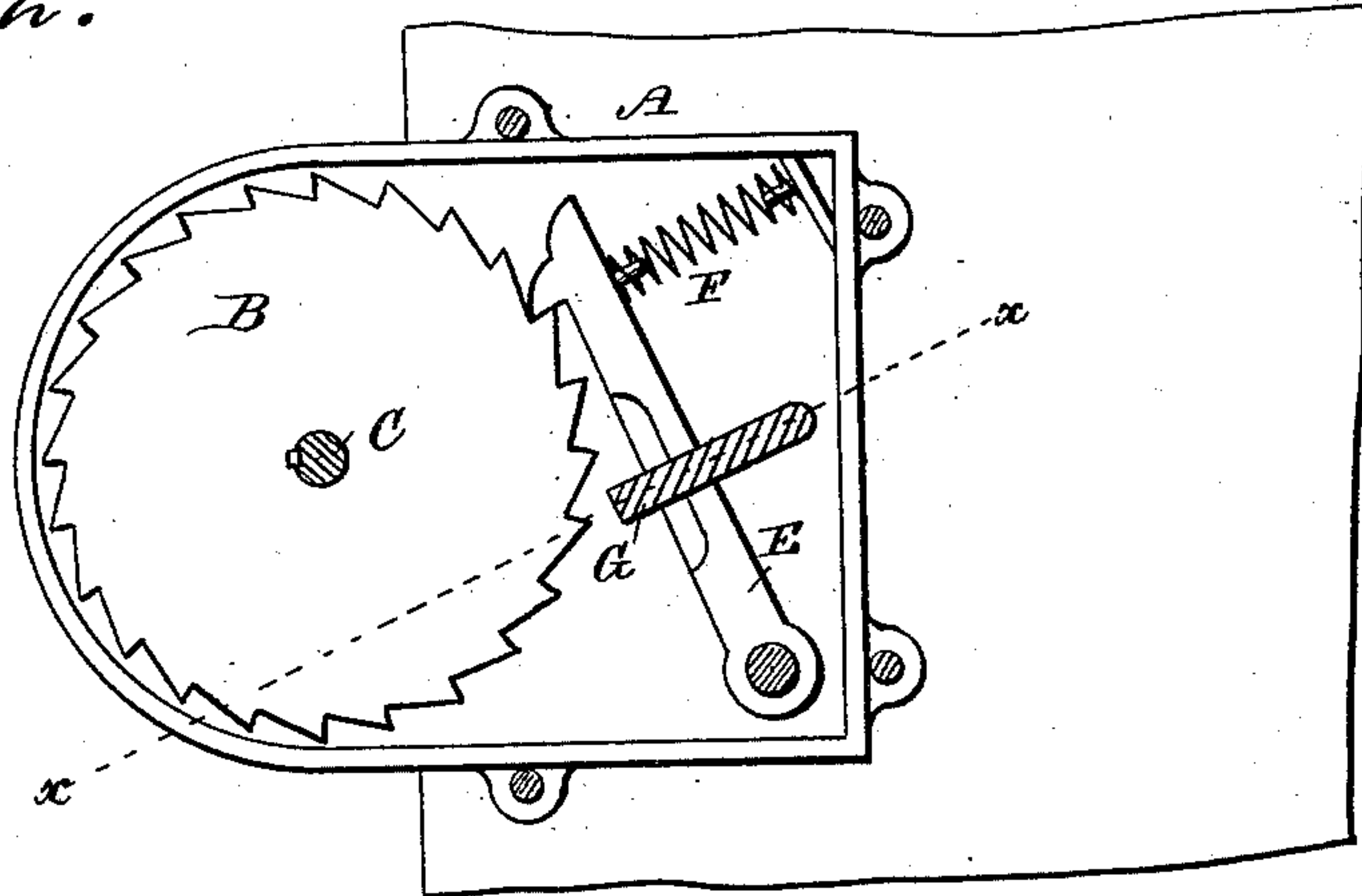
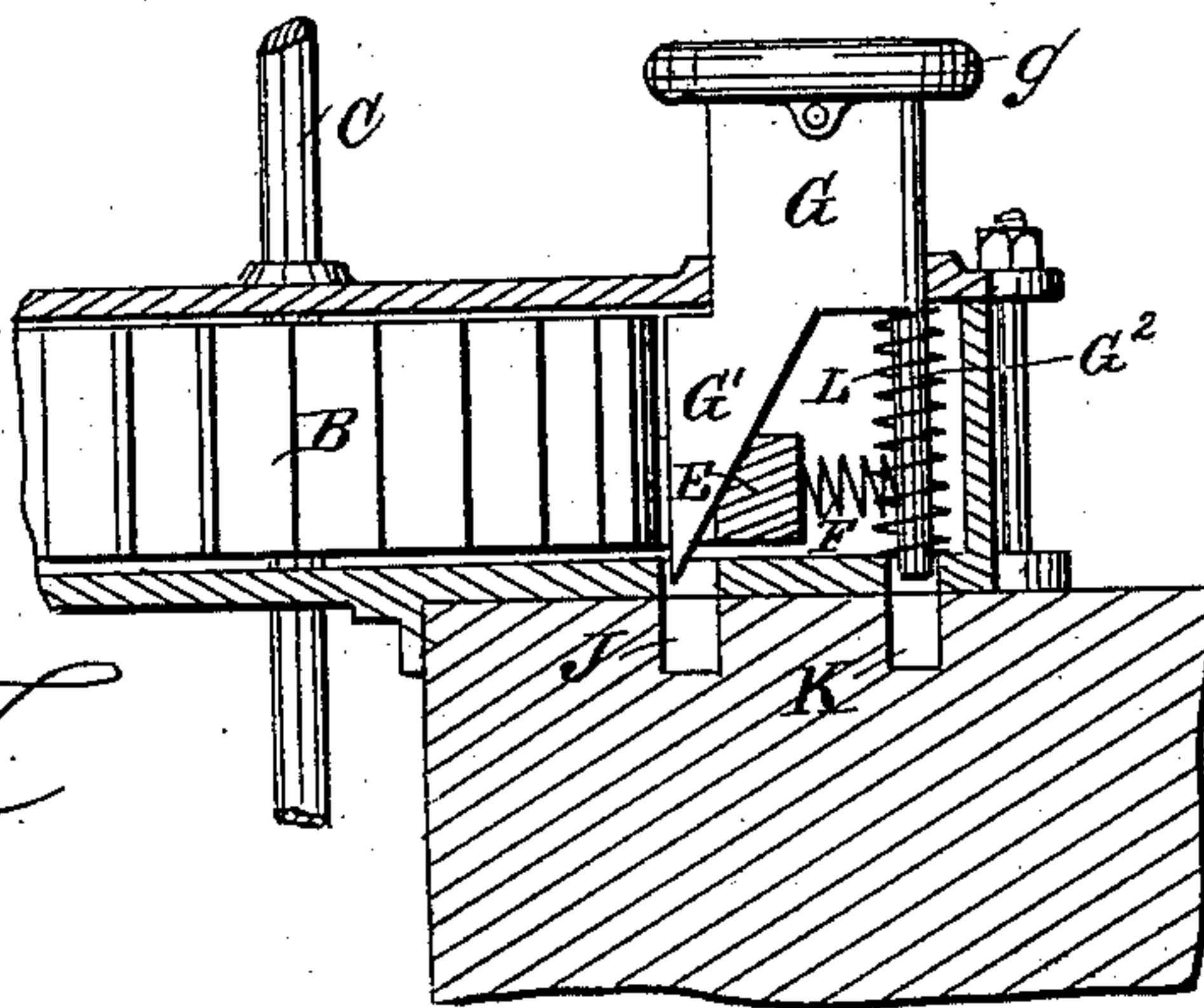


Fig. 3.



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CAR-BRAKE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 297,130, dated April 22, 1884.

Application filed August 27, 1883. (No model.)

To all whom it may concern:

Be it known that we, ELI M. HOLCOMB, of Bay Springs, Charlevoix county, Michigan, and FREDERICK E. MILLER, of Eveline township, Charlevoix county, Michigan, have invented a new and Improved Car-Brake Attachment, of which the following is a full, clear, and exact description.

The object of our invention is to provide a new and improved attachment for protecting the ratchet and pawl of a car-brake from rain and snow, and for facilitating the releasing of the car-brake after the same has been drawn up tight.

The invention consists in the combination, with a ratchet-wheel and a beveled pawl pressed against the wheel, of a vertically-movable plate provided with a downwardly-projecting wedge and a prong surrounded by a spring, which presses the wedge-plate upward. When the plate is pressed downward, the beveled edge of the wedge acts on the beveled edge of the pawl and disengages it from the ratchet-wheel, all the parts being inclosed in a casing to protect them from rain and snow.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side view of our improved attachment for car-brakes, parts being broken away. Fig. 2 is a partly sectional plan view of the same, the top plate of the casing being removed. Fig. 3 is a sectional view of the same on the line *x x*, Fig. 2, parts being broken away.

A casing, A, is secured to the car platform or roof by means of screws or bolts passed through lugs or jaws in the said casing, and in this casing a ratchet-wheel, B, is contained, which is keyed on the vertical brake-shaft C, which passes through the top and bottom of the casing, and is provided with the usual hand-wheel, D, at its upper end. A pawl, E, pivoted in the casing, has its free end pressed against the teeth of the ratchet-wheel by a spring, F, held between the same and a spur, provided for that purpose. A wedge, G', and a downwardly-projecting prong, G², are united with a plate, G, having a flange or top plate, g, at its upper end. The plate G projects through a diagonal slot in the top of the casing, and the bottom of the casing is pro-

vided with a diagonal slot, J, and an aperture, K, through which the wedge G' and the prong G² pass. The beveled edge of the wedge G' is to rest against the beveled side or edge of the pawl E, facing the ratchet-wheel. A spiral spring, L, surrounding the prong G², presses the wedge-plate upward. As the pawl E is always pressed against the ratchet-wheel by the spring F, it at all times locks the ratchet-wheel automatically. If the ratchet-wheel is to be released, the plate G is pressed downward by the foot, and the beveled edge of the wedge, acting on the beveled side of the pawl, forces the pawl from the ratchet-wheel, which is thus disengaged. As soon as the pressure is removed from the plate G, the spring L forces it upward, and the spring F presses the pawl against the ratchet-wheel again.

The casing A, containing the ratchet-wheel, pawl, wedge, and spring, protects them from rain and snow, and prevents their being clogged by dust, cinders, &c.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. The combination, with a ratchet-wheel and a spring-pressed pawl having a beveled side, of a vertically-sliding and spring-pressed plate having a wedge-shaped projection resting against the beveled side of the pawl, substantially as herein shown and described.

2. The combination, with the ratchet-wheel B, the spring-pressed pawl EF, having a beveled side, and the casing A, inclosing the same, provided with a slot in its top and a slot and aperture in its bottom, of the plate G, provided with the wedge G' and prong G², and the spring L, substantially as herein shown and described.

3. The combination, with a ratchet mounted on a brake-shaft and contained in a casing, of a pawl pressed against the edge of the wheel by a suitable spring, and a plate held to move vertically in the casing and provided with a wedge adapted to act on the pawl, and with a downwardly-projecting prong surrounded by a spring for pressing it and the plate upward, substantially as herein shown and described.

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Witnesses:
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