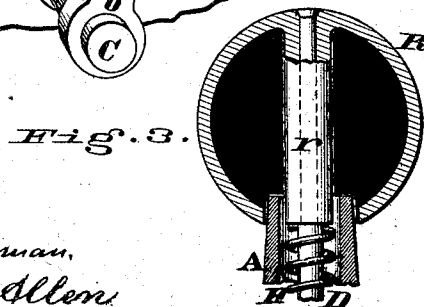
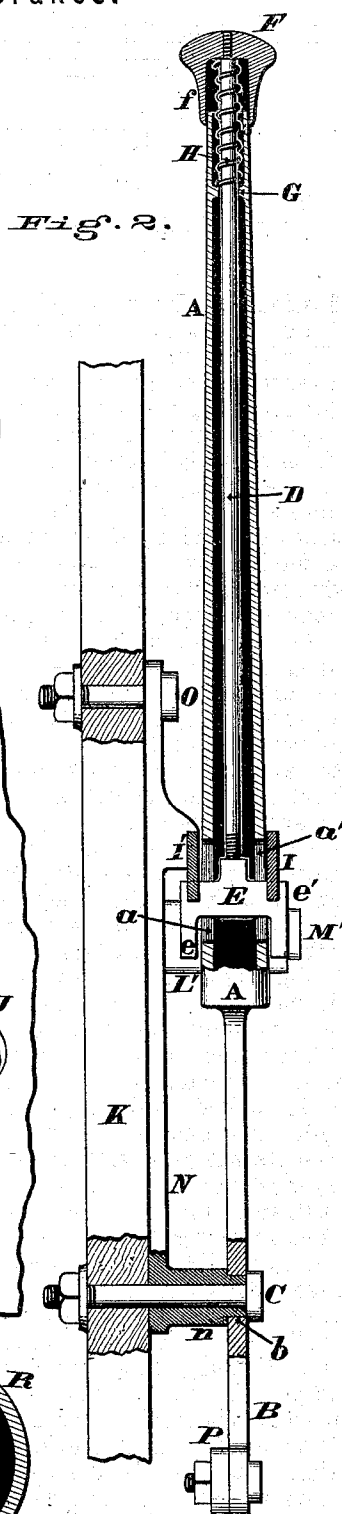
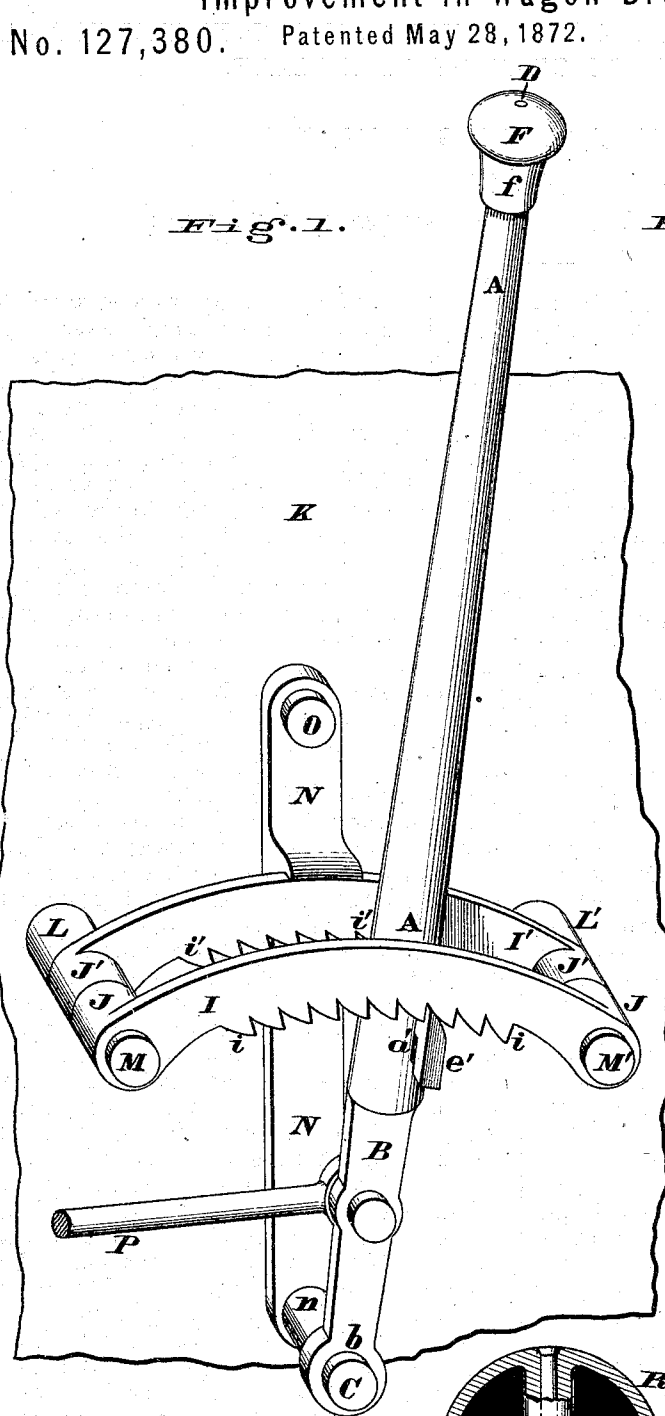


D. T. SNELBAKER.
 Improvement in Wagon-Brakes.
 No. 127,380. Patented May 28, 1872.



Attest.
 Jas. H. Layman,
 Walter Allen.

D. T. Snelbaker
 By Knight Bros.
 Attys.

UNITED STATES PATENT OFFICE.

DAVID T. SNELBAKER, OF CINCINNATI, OHIO, ASSIGNOR TO HIMSELF AND
MICHAEL T. DELORAC, OF SAME PLACE.

IMPROVEMENT IN WAGON-BRAKES.

Specification forming part of Letters Patent No. 127,380, dated May 28, 1872.

Specification of an Improved Wagon-Brake, invented by DAVID T. SNELBAKER, of Cincinnati, Hamilton county, Ohio.

This invention relates to an arrangement of devices for throwing the shoes or rubbers of the brake proper in or out of lock and for maintaining them securely in either of these positions; and the principal member of the appliance consists of a tubular handle or lever, within which is fitted a rod whose lower end carries a duplex pawl, capable of being engaged with two similar segment ratchets, that are attached to the body of the wagon or other vehicle. These pawls are depressed, so as to be disengaged from the ratchets by simply pressing upon a cap or knob that is attached to the upper end of the aforesaid rod, and the pawls are thrown into gear with the ratchets by a suitable spring within the tubular handle, to which latter is connected the rod that operates the shoes or rubbers.

Figure 1 is a perspective view of a wagon-brake embodying my improvements, the rod that connects with the shoe being shown as attached to the lever above its fulcrum, so as to adapt the device to the left-hand side of the vehicle. Fig. 2 is a vertical section of the device with the aforesaid rod attached to the lever below its fulcrum, so as to be applied to the right-hand side of a vehicle; and Fig. 3 is a section of a modified form of the cap or knob that is applied to the upper end of the operating-lever or handle.

A represents the tubular handle or lever, whose lower portion takes the shape of a flat bar, as at B, and has an eye, *b*, wherewith said lever is fulcrumed upon stud *n*, and retained in position by the bolt C. This hollow lever is traversed axially by a rod, D, whose lower end is screwed into a plate, E, from which project laterally two wings, *e e'*, which act as pawls, as more clearly shown in Fig. 1. The upper end of rod D is attached in any suitable manner to a holder, cap, or knob, whose sides *f* fit snugly around the lever A, without bearing tightly against the same. Interposed between this cap and an annular flange or lugs, G, on the inside of the lever, is a spring, H, whose stress tends to elevate the rod D, and consequently maintains the pawls in gear with the ratchets. These pawls play in slots *a a'*

of the lever. I I' represent two separate plates or castings, having on their lower edges ratchet-teeth *i i'*, that are arranged on an arc of a circle concentric with the fulcrum C. The ends of these plates terminate in bosses J J', that maintain said plates a sufficient distance apart to permit the lever A vibrating between them. Interposed between the rear rack I' and the body K of the vehicle are washers L L'. Bolts M M' serve to unite the plates I I' J J' and washers L L' with the wagon-bed. Cast with the rear rack I' is a brace, N, from whose lower end projects a stud-shaft, *n*, upon which is fulcrumed the portion B of the lever A, and the bolt C traverses said stud in the manner shown in Fig. 2. The upper end of brace N is attached to the wagon by a bolt, O. P is the rod that extends from the lever rearward, for the purpose of actuating the shoes or rubbers of the brakes proper.

The operation of my improved brake will be readily understood by referring to Fig. 2, from which it will be seen that the stress of spring H by exercising an elevating power upon the rod D, maintains the pawls *e e'* in gear with the ratchets *i i'*, and whenever it is desired to bring the shoes or rubbers in contact with the wheels of the vehicle it is effected as follows: The driver by simply pressing upon the cap F, depresses the pawls from the ratchets and then throws the lever a sufficient distance to bring the shoes into action, after which he removes his hand from said cap, when the spring H instantly restores the pawls to their normal condition; and by engaging with the proper teeth of the rack maintain the brake securely in lock for any desired length of time. The brake is unlocked in the manner described.

When the device is to be applied to the left-hand side of a vehicle, so as to be operated by a thrusting or pushing movement of the driver, the rod P that actuates the shoes of the brakes should be secured to the lever A above its fulcrum, as shown in Fig. 1; but when the device is attached to the right-hand side of the wagon, said rod may be connected below the fulcrum, as represented in Fig. 2.

In the modification of the cap, as shown in Fig. 3, it is arranged as a hollow sphere, R, and has a downwardly-projecting stem, *r*, into which the upper end of rod D is secured, and

the retracting spring H bears against the bottom of said stem. As this stem projects some distance below the upper portion of lever A, there is no opportunity for the spring to become jammed when the cap is depressed. Either or any other approved form of cap may be employed, care being taken that it surrounds the handle A in such a manner as to exclude dust or other obstructions from the interior thereof.

Claims.

I claim as my invention—

1. In a wagon-brake, the tubular lever A when provided with an axial rod, D, retracting

device H, and pawls E e', which latter are adapted to engage with two similar segment-racks, I I' i i', substantially as herein explained.

2. I claim an improved wagon-brake, consisting of the holder handle A a' B b, axial rod D, pawls E e', cap F f, projection G, retracting spring H, segment-racks I I' i i', and fulcrum n, or their mechanical equivalents, for the object herein explained.

In testimony of which invention I hereunto set my hand.

DAVID T. SNELBAKER.

Attest:

GEO. H. KNIGHT,
JAMES H. LAYMAN.