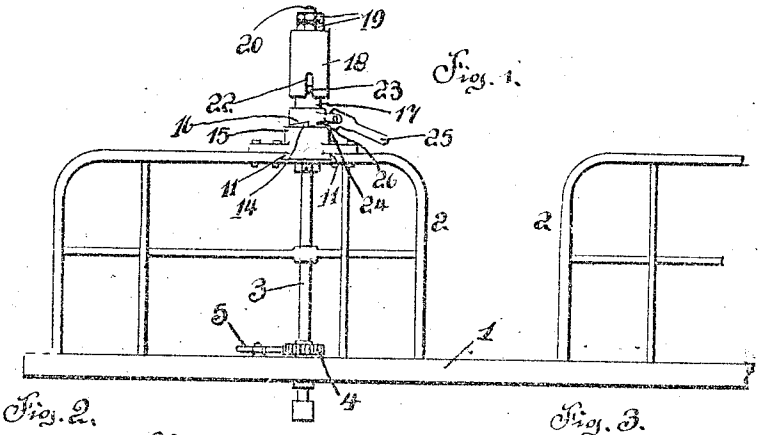
No. 838,249. PATENTED DEC. 11, 1906.

S. J. HANLIN.

BRAKE HANDLE.

APPLICATION FILED AUG. 17, 1906.



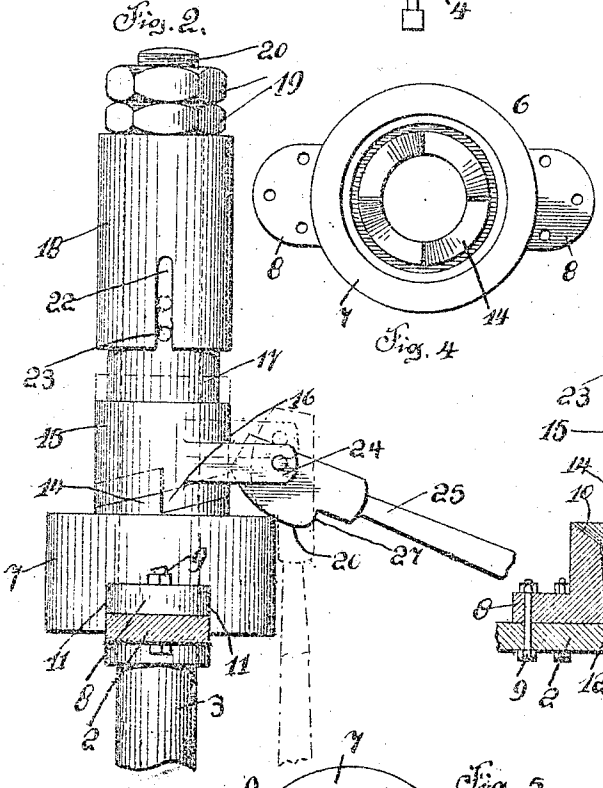
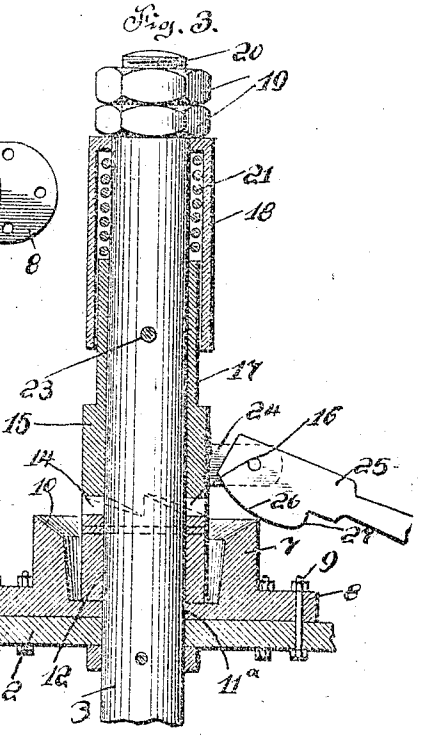
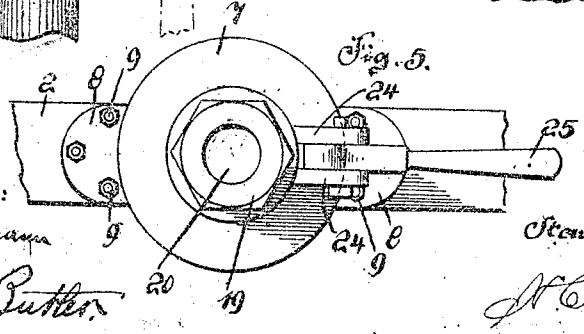


Fig. 4.





Witnesses:
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UNITED STATES PATENT OFFICE.

STEWART J. HANLIN, OF ALLEGHENY, PENNSYLVANIA.

BRAKE-HANDLE.

No. 838,249. Specification of Letters Patent. Patented Dec. 11, 1906.

Application filed August 17, 1906. Serial No. 331,044.

To all whom it may concern:

Be it known that I, STEWART J. HANLIN, a citizen of the United States of America, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Brake-Handles, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in brake-handles; and the invention relates more particularly to a handle for the brake-shafts of passenger and freight cars.

The object of this invention is to provide a brake-handle wherein ratchet mechanism is employed to assist a brakeman in applying the brakes of a car.

Another object of this invention is to provide a brake-handle that can be folded into a plane parallel with a brake-shaft, and thereby not interfere with passengers passing on and off the platform of a car.

A further object of this invention is to provide a simple, durable, and inexpensive brake-handle that can be easily and quickly manipulated.

With the above and other objects in view the invention consists in the novel construction, combination, and arrangement of parts to be described, illustrated, and claimed.

Reference will now be had to the drawings forming part of this specification, like numerals of reference designating corresponding parts in the several views, in which—

Figure 1 is an elevation of a portion of a car platform and rail equipped with my improved brake-handle. Fig. 2 is an enlarged detail elevation of the brake-handle. Fig. 3 is a vertical sectional view of the same. Fig. 4 is a plan of the ratchet member or base of the handle, and Fig. 5 is a plan of the brake-handle.

In the accompanying drawings I have illustrated a car-platform 1 as having a railing 2 and a vertically-disposed brake-shaft 3, said shaft being journaled in said platform and railing. Upon the lower end of the shaft is wound the brake chain or cable, (not shown,) and above the platform the shaft 3 is provided with a ratchet-wheel 4, which, together with a pivoted dog 5, is employed to lock the shaft from rotation in one direction. These parts are common to the ordinary passenger coach or car and need not be further described.

To put my invention into practice, I provide the railing 2 or a similar support with a ratchet member or base 6, consisting of a collar 7, having diametrically-opposed lugs 8 secured to the railing 2 by nuts and bolts 9. The upper edges of the collar are beveled inwardly, forming an annular ledge 10, and the lower end of the collar is cut away, as at 11, to fit over the railing 2. The collar is provided with a central opening 11^a, through which passes the brake-shaft 3. Secured upon said shaft 3 within the collar 7 is a sleeve 12, having its upper end provided with ratchet-teeth 14, the object of which will presently appear.

Mounted upon the upper end of the shaft 3 is a movable sleeve 15, having ratchet-teeth 16 formed in its lower end and having its upper end contracted, as at 17, to receive a spring-retaining cap 18, which is retained upon the shaft 3 by nuts 19, mounted upon the screw-threaded contracted end 20 of said shaft. A coiled spring 21 is interposed between the upper end of said cap and the end of said sleeve. In order that the sleeve 15 and the cap 18 may rotate in unison, I slot the cap, as at 22, and provide the contracted end of said sleeve with an outwardly-extending pin 23, which protrudes into said slot.

The sleeve 15 is provided with two outwardly-extending parallel pierced lugs 24, between which is pivoted a handle or lever 25, having a beveled edge 26, forming a shoulder 27, adapted to rest upon the ledge 10 when the handle is in an inoperative position. When in this position, the ratchet-teeth 16 of the sleeve 15 are elevated above the teeth 14 of the sleeve 12 and the spring 21 is compressed within the cap 18.

To rotate the shaft 3, the handle 25 is raised to a horizontal position, permitting the sleeve 15 to descend upon the sleeve 12. The handle 25 is then moved back and forth, and at each retractile stroke of the handle the sleeve 15 recedes to obtain a fresh grip upon the sleeve 12. During this operation the pivoted dog 5, carried by the platform 1, is manipulated by the brakeman's foot to prevent a backward rotation of the shaft 3 and the sleeve 12 while a fresh grip is being taken by the sleeve 15.

The ratchet member or base 6 can be readily supported from the end of a freight-car to serve functionally the same purpose as when used on a passenger-car.

It is thought that the construction and op-

eration of my improved brake-handle is sufficiently clear to enable those skilled in the art to thoroughly understand the same.

What I claim, and desire to secure by Letters Patent, is—

1. In a brake-handle, the combination with a car having a brake-shaft, of a ratchet member or base carried by said car, a toothed sleeve mounted upon said base and fixed to said shaft, a movable spring-pressed sleeve mounted upon said shaft and adapted to engage said toothed sleeve, a handle pivoted to said movable sleeve and adapted to support said sleeve in an elevated position relative to said toothed sleeve, substantially as described.

2. In a brake-handle, the combination with a brake-shaft and support, of a base carried by said support and surrounding said shaft, a toothed sleeve fixed to said shaft, a spring-pressed sleeve slidably mounted on said shaft and adapted to engage said sleeve to rotate said shaft in one direction, and means foldable parallel with said shaft, to raise said sleeve, substantially as described.

3. In a brake-handle, the combination with a brake-shaft, of a base surrounding said shaft, a toothed sleeve fixed upon said shaft, a movable sleeve carried by said shaft, a handle pivoted to said movable sleeve and having a lug adapted in one position of the handle to engage said base and hold the movable sleeve disengaged from the fixed sleeve, and means to hold said movable sleeve, in engagement with fixed sleeve when being rotated, substantially as described.

4. In a device of the character described, the combination with a vertical shaft, of a base surrounding said shaft, and having an upwardly-extending collar provided with a beveled upper edge, a toothed sleeve fixed on the shaft within the collar, a toothed sleeve movable on the shaft above the fixed sleeve, means acting to normally hold said sleeves in engagement, and a brake-handle pivotally connected to the movable sleeve and having a lug adapted when the brake-handle is in one position to engage with the beveled upper end of the collar and hold the movable sleeve disengaged from the fixed sleeve.

5. In a device of the character described, the combination with a brake-shaft, of a base surrounding said shaft and having a projecting collar, a toothed sleeve fixed on the shaft and inclosed by the collar, a second toothed sleeve movable on the shaft into and out of engagement with the fixed sleeve, spring means for normally holding said sleeves in engagement, and a brake-handle pivoted to the movable sleeve and carrying means which in one position of the brake-handle engages with the collar of the base and holds the toothed sleeves separated, substantially as described.

6. In a device of the type described, the combination with a brake-shaft, of a toothed sleeve fixed thereon, a second toothed sleeve movable on the brake-shaft, a spring bearing against said second-named sleeve and tending to normally hold the same in engagement with the fixed sleeve, a brake-handle pivoted to said movable sleeve, and means comprising a stationary element coacting with a lug on the brake-handle whereby in one position of the brake-handle the said spring is held under compression and the movable sleeve disengaged from the fixed sleeve.

In testimony whereof I affix my signature in the presence of two witnesses.

STEWART J. HANLIN.

Witnesses:
C. KLOSTERMAN,
MAX H. SHOLOVITZ.