

No. 754,181.

PATENTED MAR. 8, 1904.

M. WOLTZ.
EMERGENCY CAR BRAKE.
APPLICATION FILED DEC. 3, 1903.

NO MODEL.

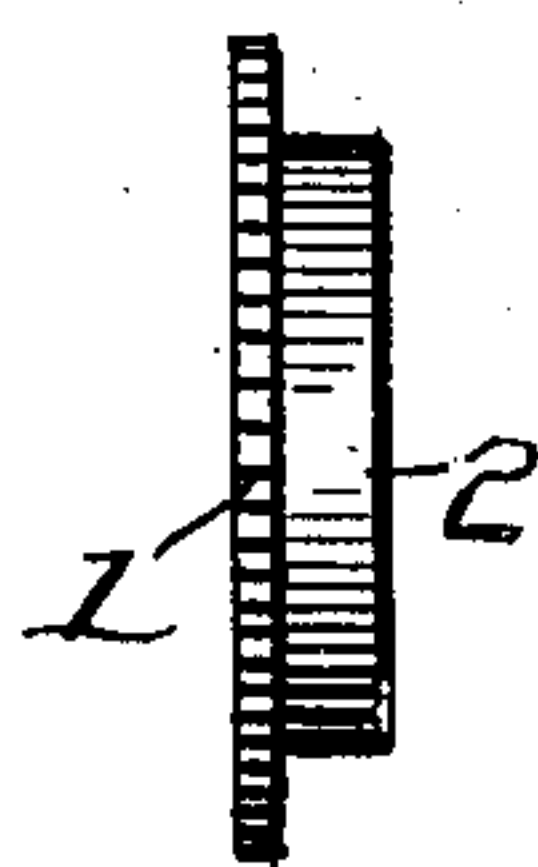
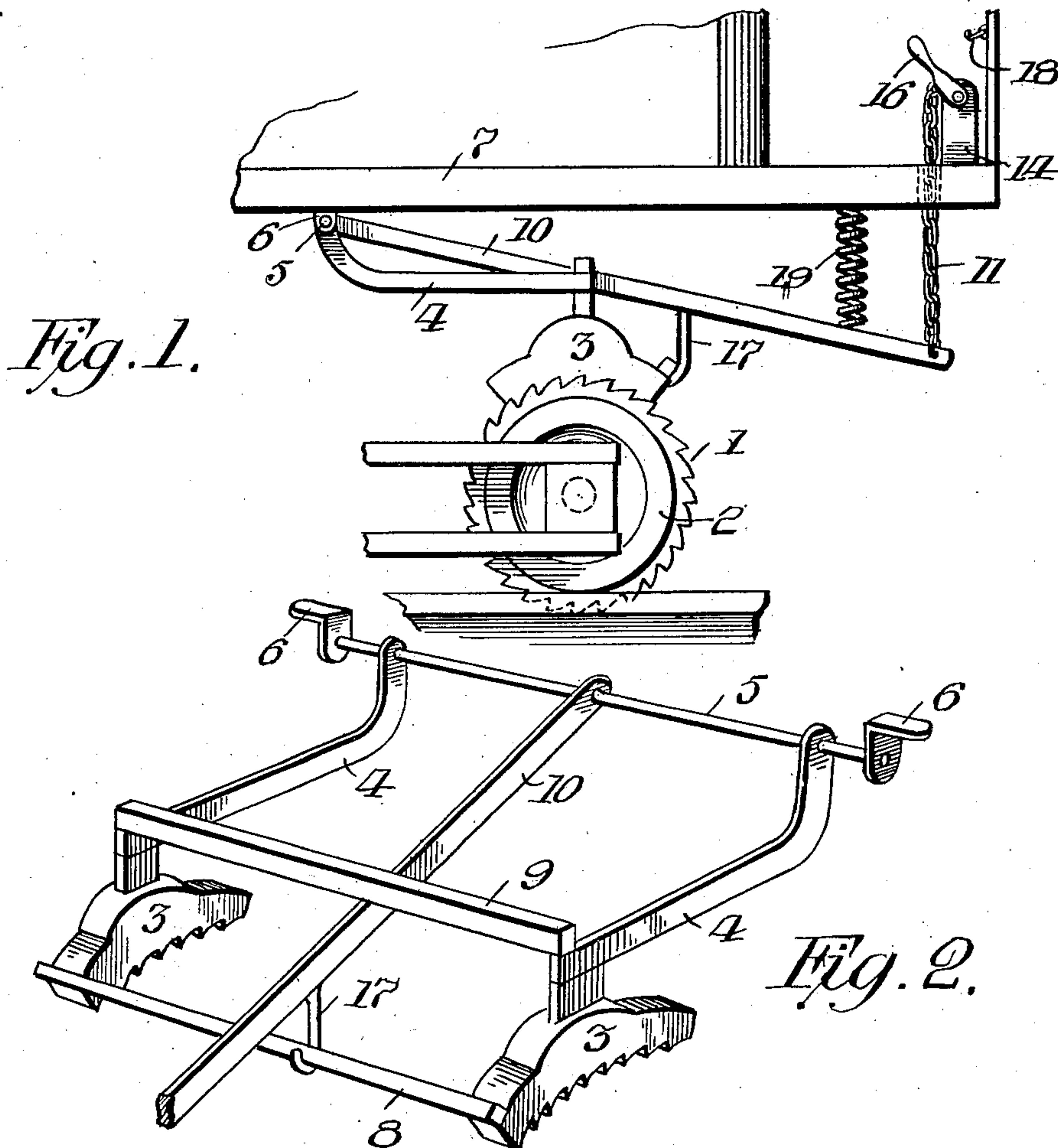


Fig. 3.

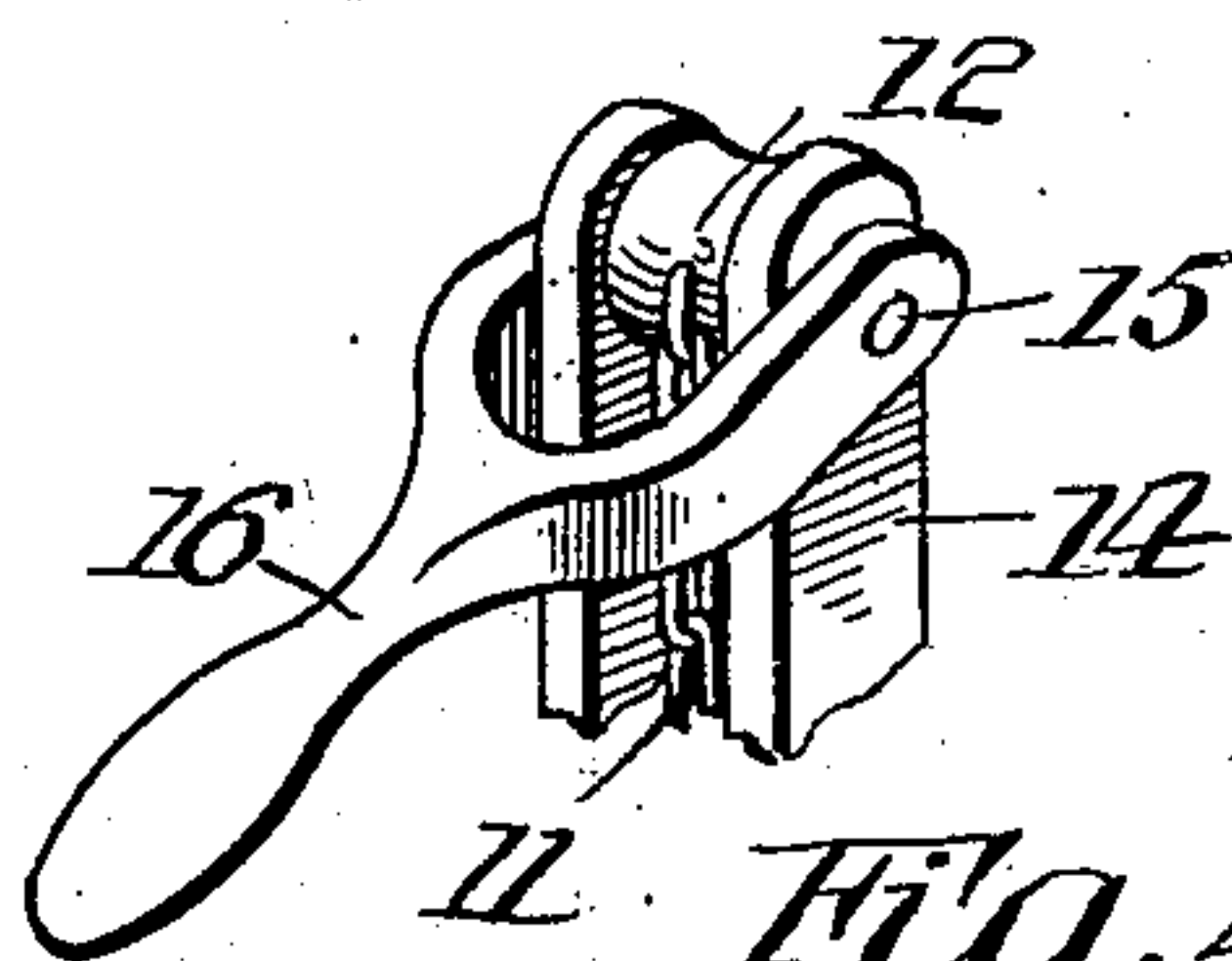


Fig. 4.

Witnesses:
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UNITED STATES PATENT OFFICE.

MICHAEL WOLTZ, OF WILKINS TOWNSHIP, ALLEGHENY COUNTY,
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EMERGENCY CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 754,181, dated March 8, 1904.

Application filed December 3, 1903. Serial No. 183,652. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL WOLTZ, a subject of the Emperor of Austria-Hungary, residing at Wilkins township, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Emergency Car-Brakes, 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 car-brakes, and relates more particularly to that class of brakes known generally as "emergency-brakes," adapted for use only when it is desired to suddenly check the momentum of the car.

Briefly described, the invention embodies the providing of the flanges of the car-wheels with notches or teeth and the employment of toothed shoes adapted to be brought into engagement with the toothed flanges of the wheels, whereby to lock the wheels against revolution when desired.

In describing the invention in detail reference will be had to the accompanying drawings, showing a practical embodiment of the invention, without, however, limiting myself in practice to the exact construction shown and described.

In the drawings, Figure 1 is a side elevation of a part of a car equipped with my improved brake. Fig. 2 is a detached detail perspective view of the brake. Fig. 3 is a detached detail edge view of one of the wheels. Fig. 4 is a detached detail perspective view of a part of the suspending means for holding the brake in its normal or inoperative position.

To put my invention into practice, I provide the flanges 1 of the wheels 2 with teeth, as shown, to be engaged by toothed shoes 3, carried by suspending means, as will be described. These shoes 3 are secured rigidly to the one end of levers 4, which levers at their other ends are apertured to receive therethrough a rod or shaft 5, having its ends journaled in brackets or hangers 6, rigidly secured to the car-body 7. The shoes 3 are connected by a cross-bar 8, and the levers 4 are connected at their free ends by a cross-bar 9, under which passes a lever 10, having its one end received

on the rod or shaft 5 and to its other end is fastened a chain or other flexible connection 11, that passes up through the car-platform and is fastened to a drum 12, mounted in a pair of standards or uprights 14, carried by said car-platform. The shaft 15, which carries the drum 12, has the forked end of a lever 16 mounted thereon, by which the drum is operated. The lever 10 carries a hook 17, which engages with the cross-bar 8. A catch 18 may be provided for holding the brake apparatus normally elevated, and a spring 19, interposed between the car-platform and the lever 10, forces the lever downward when released.

In operation the catch 18 is normally engaged with the lever 16, thus holding the toothed shoes 3 normally out of engagement with the toothed flanges 1 of the wheels. In case, however, it is desired to suddenly check the speed of the car, then catch 18 is detached or disengaged from the lever 16, and spring 19 forces the shoes into engagement with the toothed flanges of the wheels, locking the latter against revolution.

While I have herein shown and described the invention in detail, it will be evident that various slight changes may be made in the details of construction without departing from the general spirit of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In an emergency car-brake, the combination with the car-wheels provided with toothed flanges, of a rod or shaft supported from the car-body, a pair of levers hung on said rod or shaft, toothed brake-shoes carried by said levers, a cross-bar connecting the levers, a cross-bar connecting the toothed shoes, an actuating-lever hung on the rod or shaft, extending under the cross-bar connecting the pair of levers, a hook carried by said lever and engaging the cross-bar connecting the toothed shoes, and means connected to the free end of said lever for holding the toothed shoes normally out of engagement with the toothed flanges of the wheels, substantially as described.

2. In an emergency car-brake, the combination with the car-wheels having toothed

flanges, of toothed brake-shoes held normally
out of engagement with said flanges, means
for supporting said brake-shoes, a cross-bar
connecting said brake-shoes, and a means con-
5 nected with said cross-rod for raising and low-
ering the brake-shoes substantially as de-
scribed.

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

MICHAEL WOLTZ.

Witnesses:

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