(No Model.)

W. H. TALLMAN.

CAR BRAKE.

No. 566,814. Patented Sept. 1, 1896.

Fig. 1.

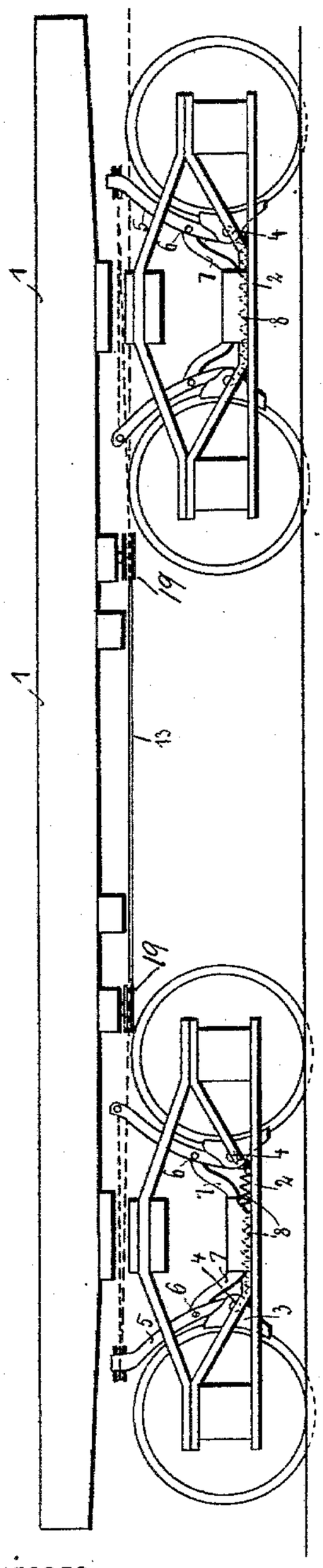
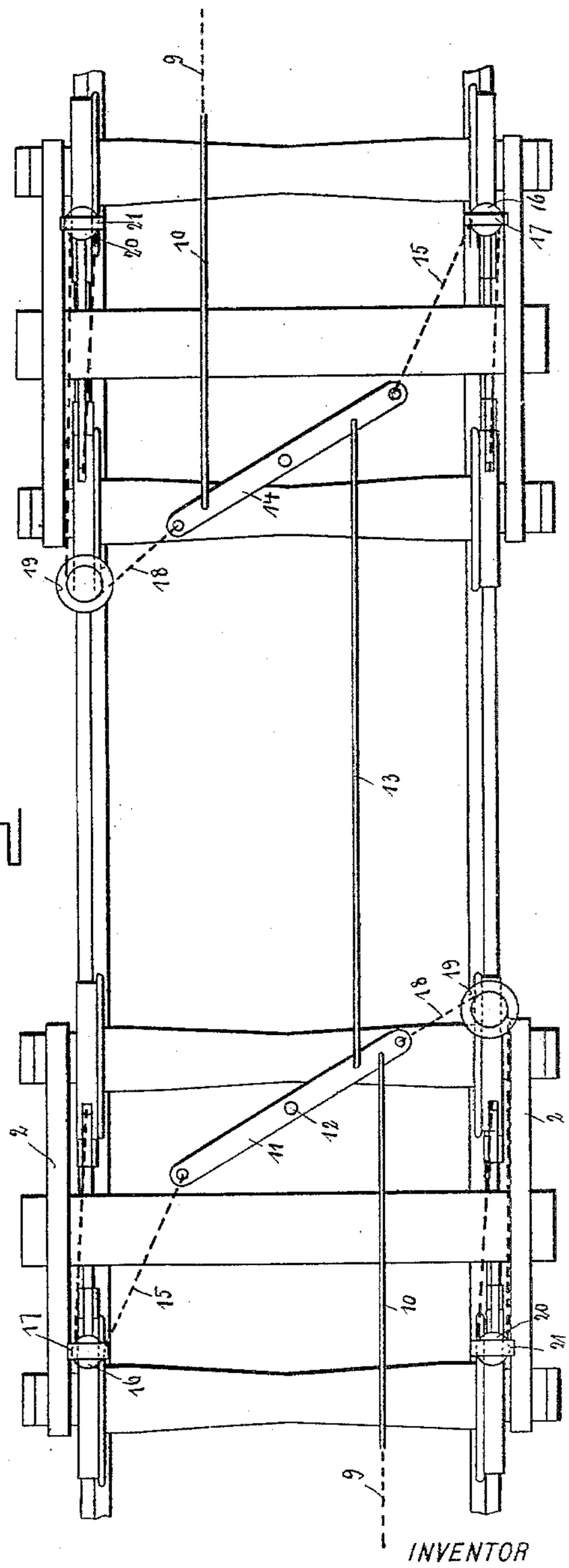


Fig. 2.



WITNESSES:

Joseph Trasi

H. J. Levis

INVENTOR

Walter H. Tallman

BY

C. D. Levis

ATTORNEY.

UNITED STATES PATENT OFFICE.

WILBER H. TALLMAN, OF McKEESPORT, PENNSYLVANIA.

CAR-BRAKE.

SPECIFICATION forming part of Letters Patent No. 566,814, dated September 1, 1896.

Application filed October 15, 1895. Serial No. 565,716. (No model.)

To all whom it may concern:

Be it known that I, WILBER H. TALLMAN, a citizen of the United States, residing at McKeesport, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Brakes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in car-brakes, and has for its object the provision of novel means whereby the brake-shoes may be easily and readily applied to the wheels and the car brought to a standstill in a comparatively short space of time.

The invention has for its further object to construct a brake of the above-referred-to class that will be extremely simple in its construction, strong, durable, and highly efficent in its operation.

With the above and other objects in view the invention consists in the novel construction, combination, and arrangement of parts to be hereinafter more particularly described, and specifically pointed out in the claim.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like figures of reference indicate similar parts in both views, in which—

Figure 1 is a side elevation of a car with my improved brake attached thereto. Fig. 2 is a top plan view of the same with the bottom of the car removed.

In the drawings, 1 indicates the frame of the car; 2, the trucks of the same.

3 indicates the brake-shoes, connected at 4 to a lever-arm 5, said lever-arm being pivoted at 6 to a bracket 7, which is rigidly attached to the trucks 2. At the lower extremity of the lever-arm 5 is arranged a spiral spring 8, connecting the set of lever-arms and serving to normally disengage the brake-shoes from the periphery of the wheel.

The reference-numeral 9 represents the chain connected to the operating-rod 10, said rod being connected to a swivel-arm 11, said arm being pivoted at 12 to the underneath portion of the frame of the car. A connecting-rod 13 is also arranged to said swivel-arm, and is adapted to extend underneath the car and connected to a similar swivel-arm 14.

To the opposite end of the swivel-arm 11 is arranged an operating-chain 15, said chain passing over a pulley 16, arranged to the top of the lever-arm 5. A guide 17 is also arranged at the top of the lever-arm and is adapted to retain the chain in proper position, the free end of the chain being connected to the end of the lever-arm 5 of the opposite shoe. A similar arrangement is provided at the end of the swivel-arm 14 and the parts are numbered the same. At the end of the swivel-arm 11 is secured a chain 18, passing around a pulley 19, said pulley being attached to the underneath side of the frame. The chain 18 extends around a pulley 20, arranged to the top of the lever-arm 5, said lever-arm being provided with a guide 21 for the purpose of retaining the chain in position, the free end of said chain being attached to the lever-arm 5 of the opposite shoe. At the end of the swivel-arm 14 is provided a similar arrangement, the parts being numbered the same.

Operation: The brake-shoes when in their normal position will be away from the periphery of the wheel by reason of the spiral springs 8. When it is desired to apply the brake, the operating-chain is operated in any suitable manner, such as a brake shaft or lever. By this operation the operating-rod communicates motion to the swivel-arm, thus tightening the chain 18 and causing the lever-arms to be drawn together, thereby applying the shoes to the wheel. Simultaneously with this operation the opposite end of the swivel-arm is drawn forward and the chain 15 drawn taut, thereby causing the lever-arms to be drawn together and the brake-shoes applied in a similar manner. The connecting-rod serves to communicate motion to the swivel-arm 14 and a similar operation, as heretofore described, takes place. As the operating-chain 9 is released, the brake-shoes will automatically release themselves from the wheels by reason of the spiral springs 8.

It will be noted that various changesmay be made in the details of construction of my improved brake without departing from the general spirit of my invention.

I claim—

In a car-brake, the combination of the pairs of brake-shoes, the spring-connected lever-arms carrying the pairs of brake-shoes, the centrally-pivoted levers connected together at a short distance from one end and connected to the brake-wheel shaft, chains connected to diagonally opposite ends of said centrally-pivoted levers and passed first around pulleys on the car-body frame and then around pulleys arranged one upon one lever-arm of each pair thereof and connected finally to the other lever-arm of the latter, and other chains connected to also diagonally opposite ends of said centrally-pivoted levers and passed around pulleys arranged one upon one lever-arm of each pair of the remaining diagonally opposite pairs of lever-arms and connected to the other of said lever-arms substantially as and for the purpose set forth.

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

WILBER H. TALLMAN.

Witnesses:
ALBERT J. WALKER,
H. J. LEVIS.