

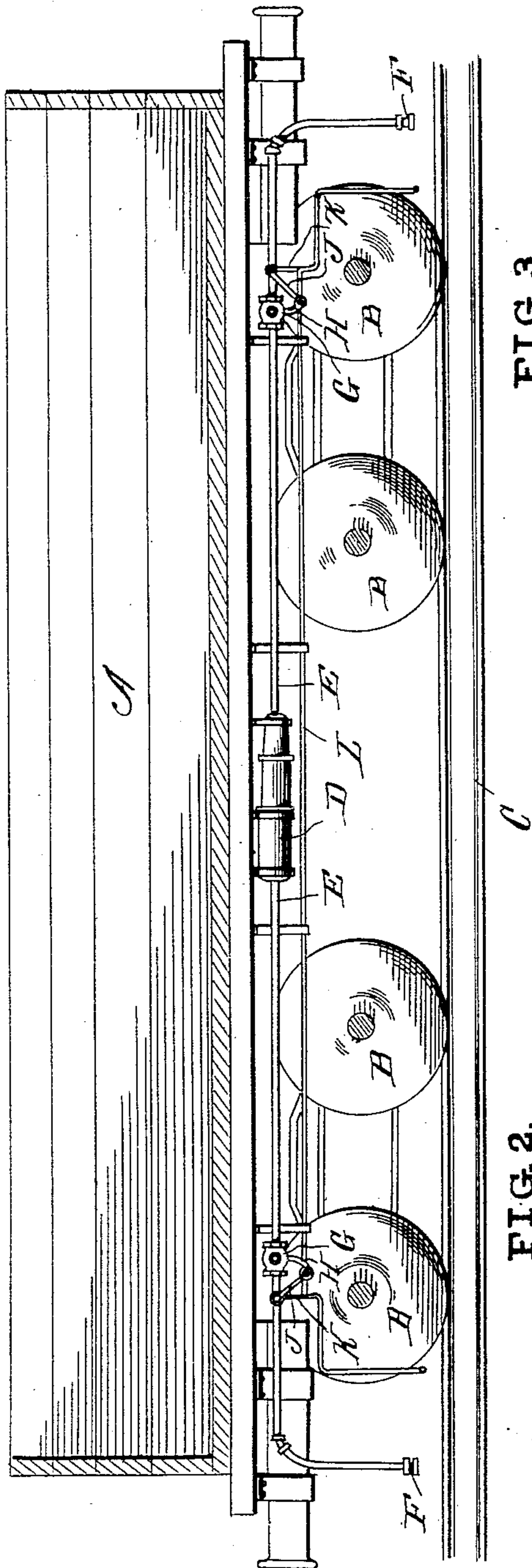
No. 751,678.

PATENTED FEB. 9, 1904.

H. NEUSSER.
AUTOMATIC WHEEL BRAKE.
APPLICATION FILED MAY 16, 1903.

NO MODEL.

FIG. 1.



Witnesses
C. R. Davis.
M. E. Moore.

FIG. 3.

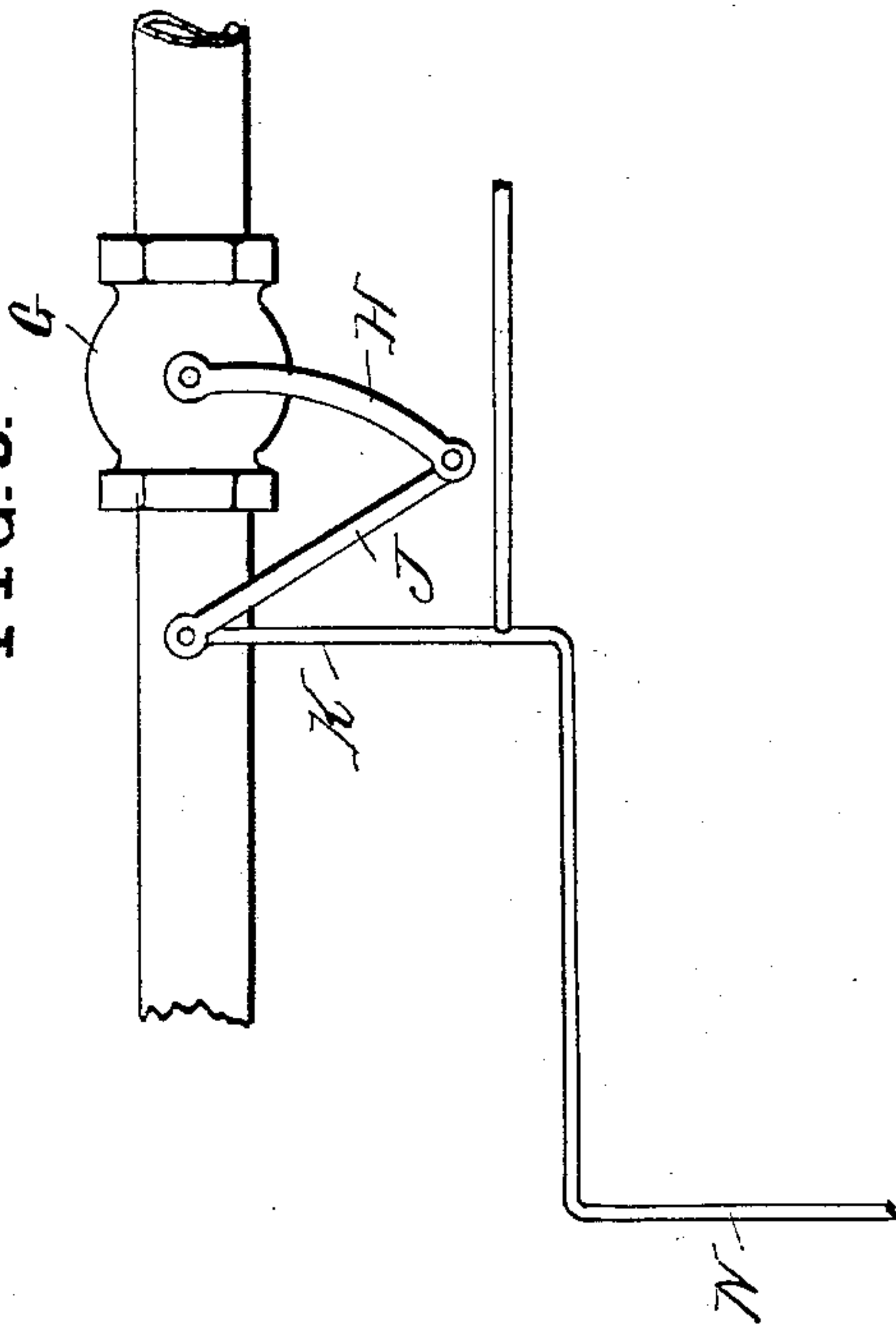
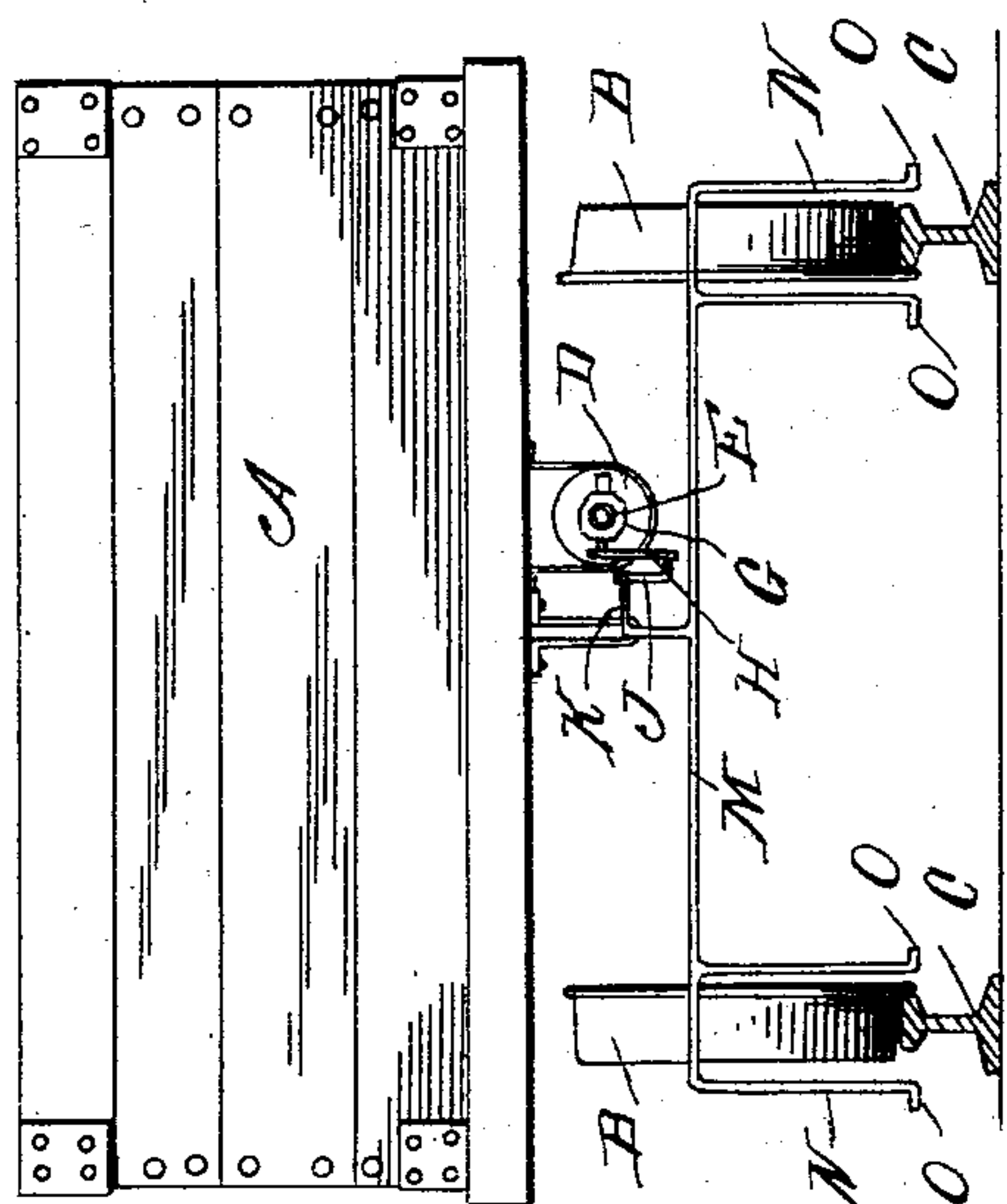


FIG. 2.



Hugo Neusser,
Inventor
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UNITED STATES PATENT OFFICE.

HUGO NEUSSER, OF SAN RAFAEL, CALIFORNIA.

AUTOMATIC WHEEL-BRAKE.

SPECIFICATION forming part of Letters Patent No. 751,678, dated February 9, 1904.

Application filed May 16, 1903. Serial No. 157,338. (No model.)

To all whom it may concern:

Be it known that I, HUGO NEUSSER, a citizen of the United States, residing at San Rafael, in the county of Marin and State of California, have invented certain new and useful Improvements in Automatic Wheel-Brakes, of which the following is a specification.

My invention relates to improvements in automatic wheel-brakes, and refers particularly to a brake for use upon railway-cars for operating in conjunction with the air-brakes; and the object of my invention is the provision of a simple and durable mechanism which can be applied to any car at a small expense and which will operate automatically when the wheels of the car leave the track to allow the escape of air to apply the brakes, and thus absolutely apply the brakes and stop the cars instantly upon their leaving the tracks, and thus avoid the horrible accidents which are constantly occurring.

With this object in view my invention consists in the combination, with the ordinary and well-known air-brake mechanism, of a mechanism for automatically applying the brakes in the event of the car leaving the tracks.

The invention further consists of a mechanism for automatically applying the brakes embodying novel features of construction and combination of parts, substantially as disclosed herein.

Figure 1 represents a central longitudinal sectional view of a car with my mechanism applied thereto, said mechanism being shown in elevation. Fig. 2 represents an end elevation of a car equipped with my mechanism, and Fig. 3 represents a side elevation of a part of my mechanism and the valve and connections.

In the drawings the letter A designates the car, B the wheels thereof, and C the tracks upon which the car travels, these being shown to demonstrate the application of my improvements. Arranged upon the under side of the car is the air-storage tank D, from which leads on opposite sides the air-supply pipes E, which are provided with the couplings or connections F for connecting the pipe throughout

the length of cars, and the pipes are each provided with the valve-casings G, in which are arranged suitable valves (not shown) of any desired construction, and to the valves are connected the upper ends of the links H, to the lower ends of which are connected the lower ends of the links J, and to the upper ends of said links J are connected the angled ends K of the rods L, which rods extend longitudinally under the car and are provided with the cross-pieces M. Depending from each end of the cross-pieces are the pair of forks N, which embrace the wheels and having the feet O arranged adjacent to the rails. This being the construction of my mechanism, the consequent operation is as follows: The parts being in their normal position and the train traveling safely over the rails, the mechanism will be arranged as shown in Figs 1 and 2; but instantly upon either of the sets of wheels leaving the track the forks will contact with the ground or surface, which will tilt said fork, move the rod, and open the valve, which will allow the air to escape and instantly apply the brakes exactly as if the brakes were applied from the cab of the engine. In other words, the mechanism simply applies the brakes in case of the train leaving the tracks and preventing accidents.

My mechanism is of extremely simple, inexpensive, and durable construction, will operate instantly to apply the brakes, and will prove useful, desirable, and practical.

I claim—

In combination with the tank and air-supply pipes leading therefrom, the valves in said pipes, the links connected to said valves, the rod having the upward-extending vertical arms connected to the links and having depending arms arranged in pairs on each side of the rail adapted to strike the ground and open the valves to apply the brakes.

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

HUGO NEUSSER.

Witnesses:

GEO. D. SHEARER,
H. D. DAWLEY.