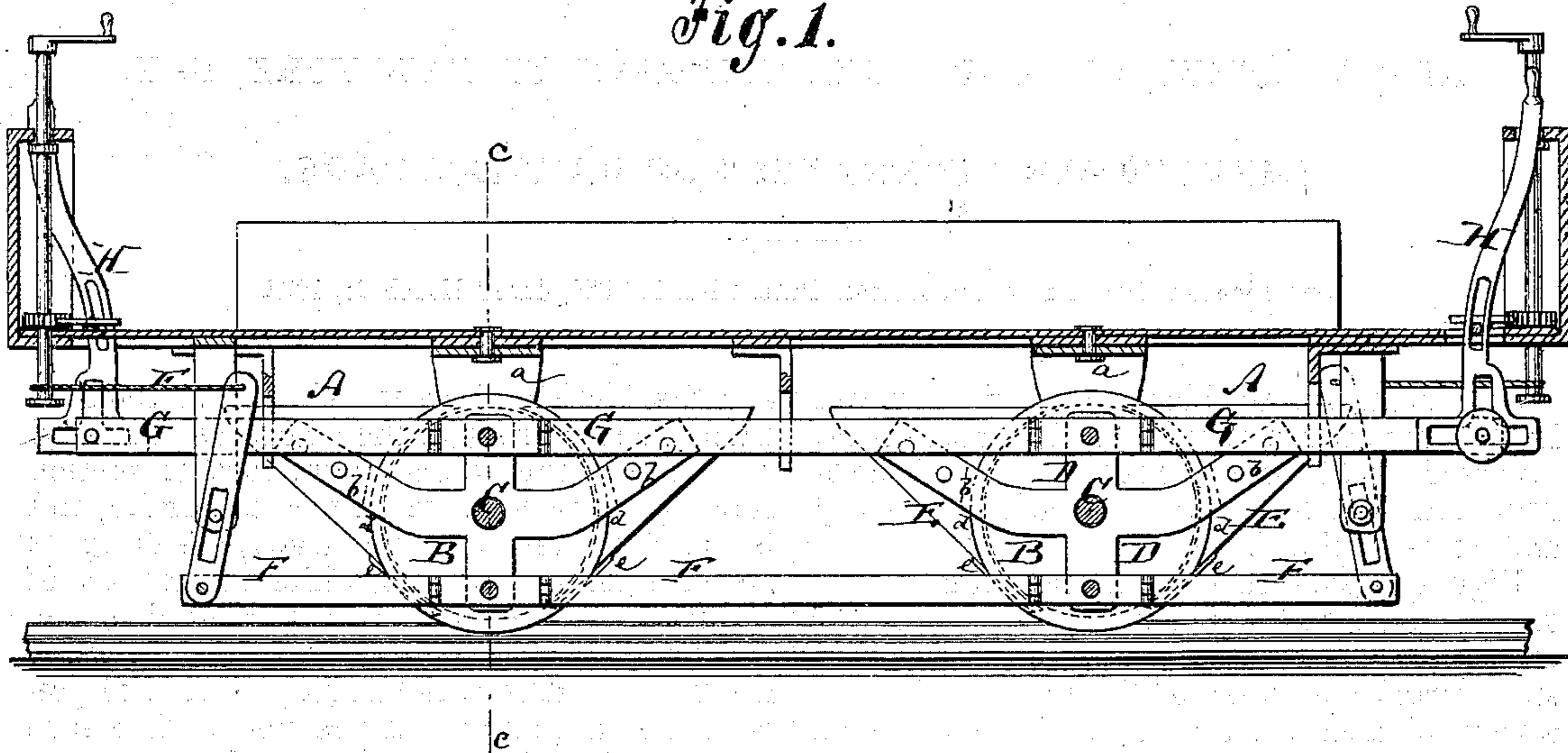
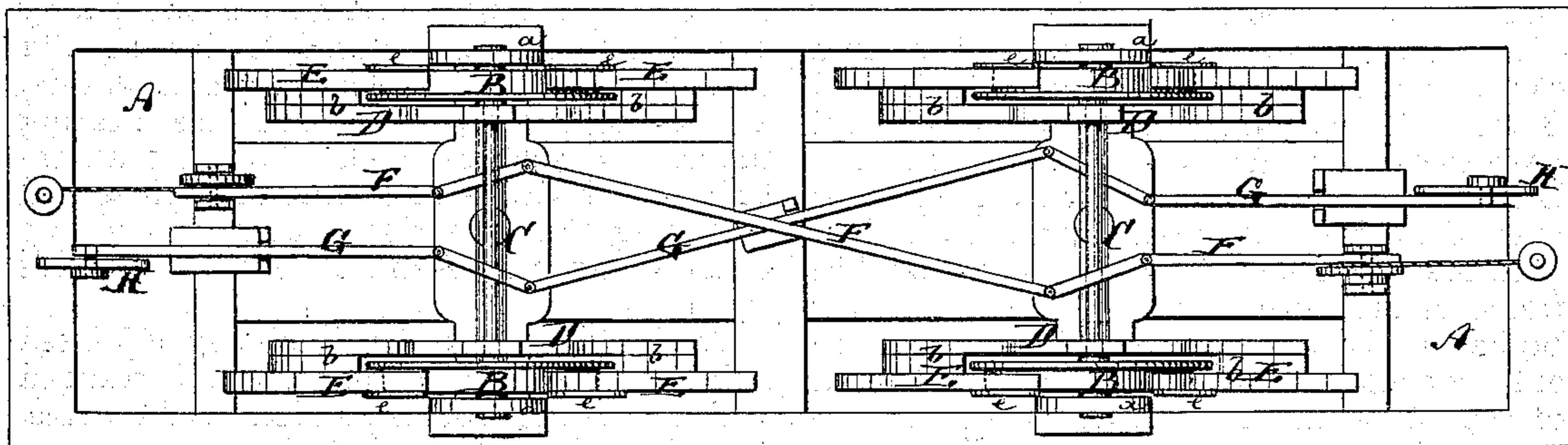


A. TATZEL, Sr., & F. KINN.  
 Improvement in Brakes for Railway Cars.  
 No. 124,985. Patented March 26, 1872.

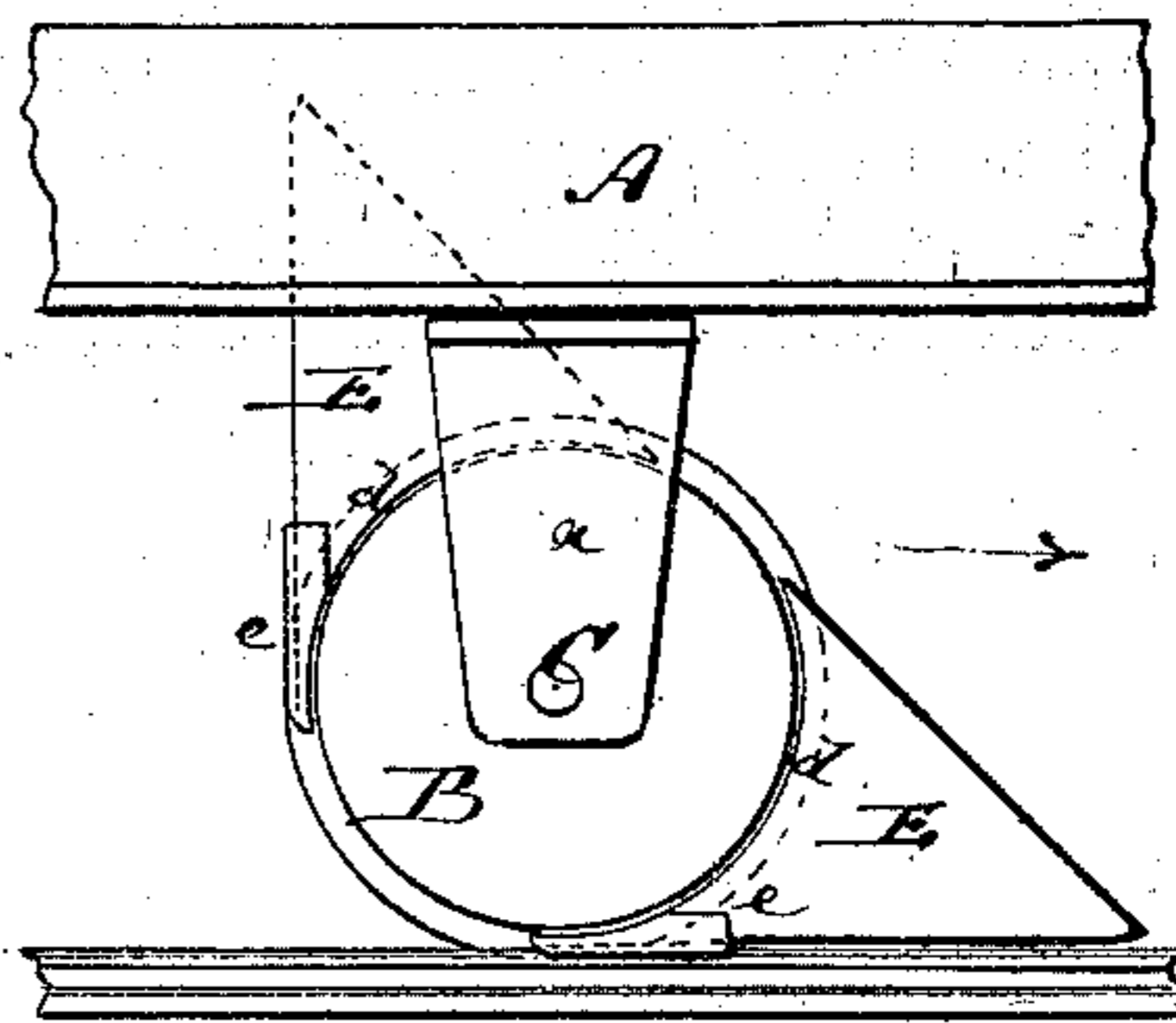
*Fig. 1.*



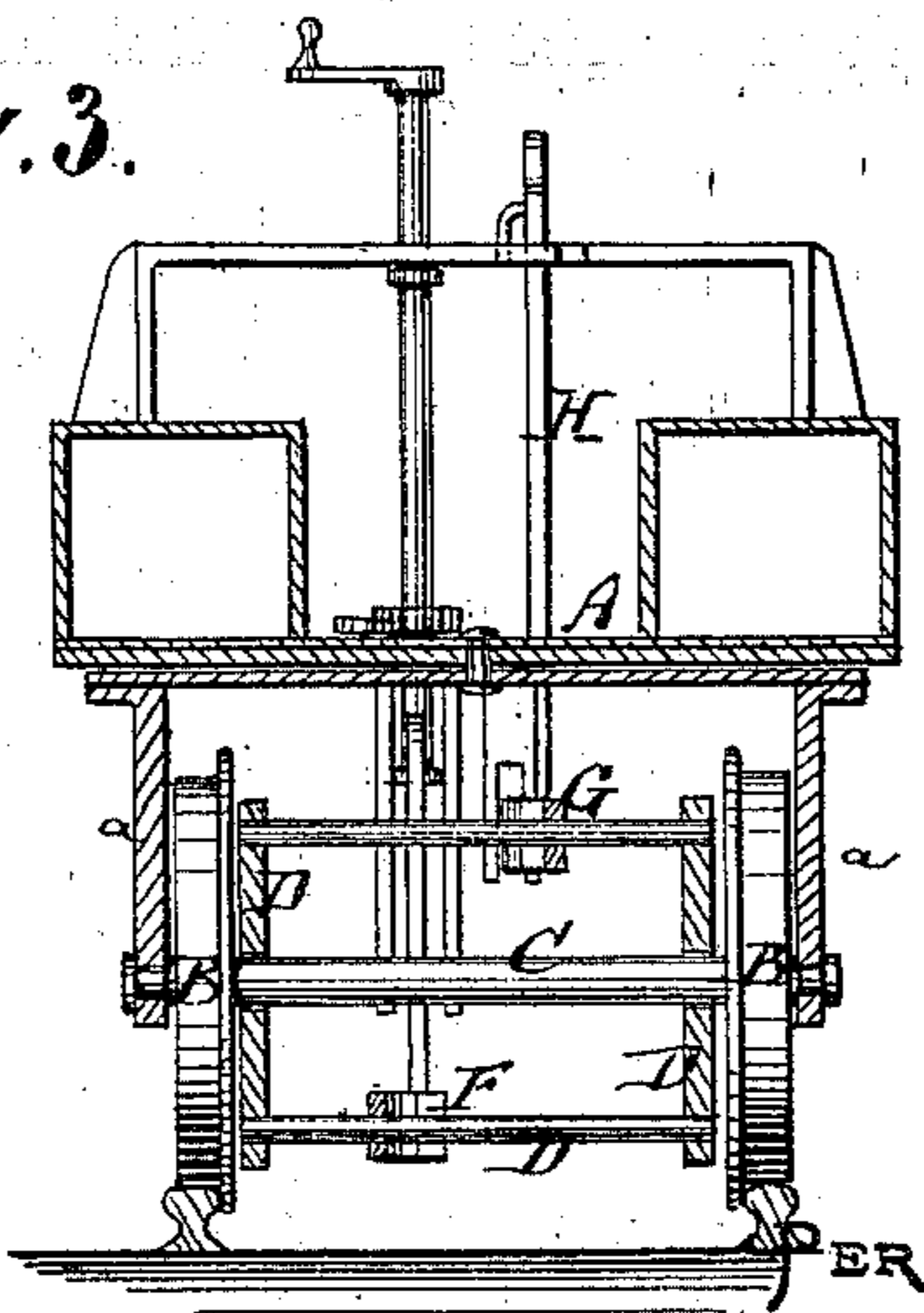
*Fig. 2.*



*Fig. 4.*



*Fig. 3.*



Witnesses:

*A. Bennekenhoff.*  
*Geo. W. Mabee*

Inventor:

*A. Tatzel Sr.*  
*F. Kinn*

*Munnell*  
 Attorneys.

# UNITED STATES PATENT OFFICE.

ANTON TATZEL, SR., AND FRIEDRICH KINN, OF NEW YORK, N. Y.

## IMPROVEMENT IN BRAKES FOR RAILWAY CARS.

Specification forming part of Letters Patent No. 124,985, dated March 26, 1872.

Specification describing a new and Improved Brake and Safety-Guard for Railroad Cars, invented by ANTON TATZEL, Sr., and FRIEDRICH KINN, of New York city, and the county and State of New York.

Figure 1 represents a vertical longitudinal section of a railroad car provided with our improved brake and safety-guard. Fig. 2 is an inverted plan view of the same. Fig. 3 is a vertical transverse section of the same on the line C C, Fig. 1. Fig. 4 is a detail side view of a wheel and guard.

Similar letters of reference indicate corresponding parts.

The invention will first be fully described and then clearly pointed out in the claim.

A in the drawing represents the frame of a car or car-truck of suitable kind and size. B B are the wheels, mounted on axles C C that have their bearings in suitable axle-boxes *a a*. D D are frames, pivoted to or hung upon the axles C C, and connected by arms *b b* rigidly with the brake-shoes and guards E E. The frame cannot swing on the axle to drop the brake on the track, as rods G G, above the axle, connect it with levers H H at both ends of the car, which levers H are locked in suitable manner. In case of an emergency, when the car approaches a place of danger or a person falls in front of the wheels, the front lever H is quickly dropped by the attendant, which allows the rod G to be moved forward and the brake in front of the wheel, by its own weight

and the friction of the wheel, to drop upon the track right in front of the wheel, as indicated in Fig. 4. The wheel in its further motion runs upon the concave part of the brake, and is thereby lifted from the track, spending its power against the shoe, while the motion of the car is speedily but gently arrested by the excessive friction of the brake-shoe on the track. The shoe E is flanged, as at *e*, to prevent it from running off the track. The rods F and G should be jointed, as in Fig. 2, to permit lateral bending, which is necessary when the car runs on a curve.

By the introduction of this invention we believe that many accidents will be prevented to the cars in motion and to persons falling upon the track. The principle of increasing the friction upon the track instead of the wheels, as hitherto, and of, at the same time, clearing the wheels from the track, introduces an entirely novel feature into railroad engineering.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

The brake mechanism, consisting of jointed rods F G and levers H, combined and arranged with brake-shoe frames pivoted on the axles, as and for the purpose described.

ANTON TATZEL, SR.  
FRIEDRICH KINN.

Witnesses:

A. V. BRIESEN,  
T. B. MOSHER.