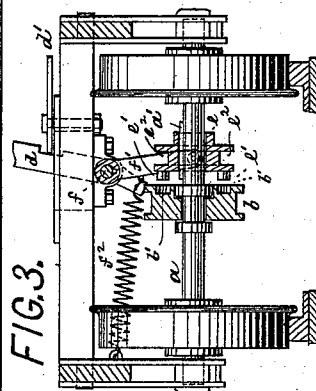
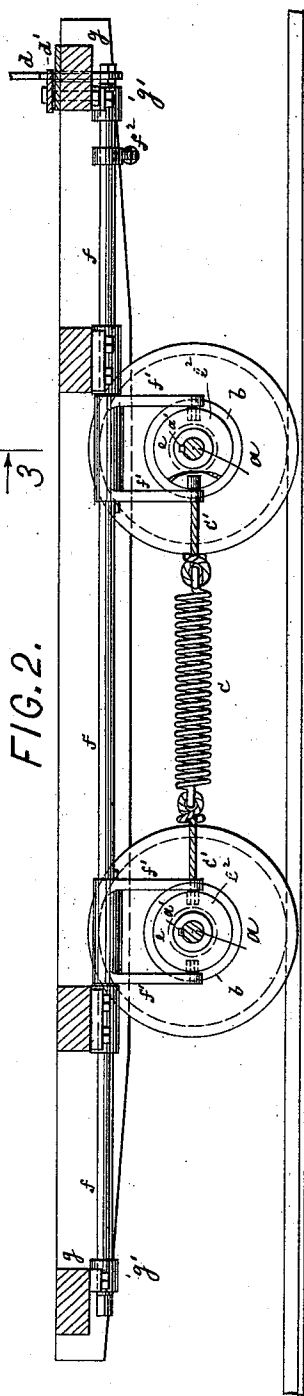
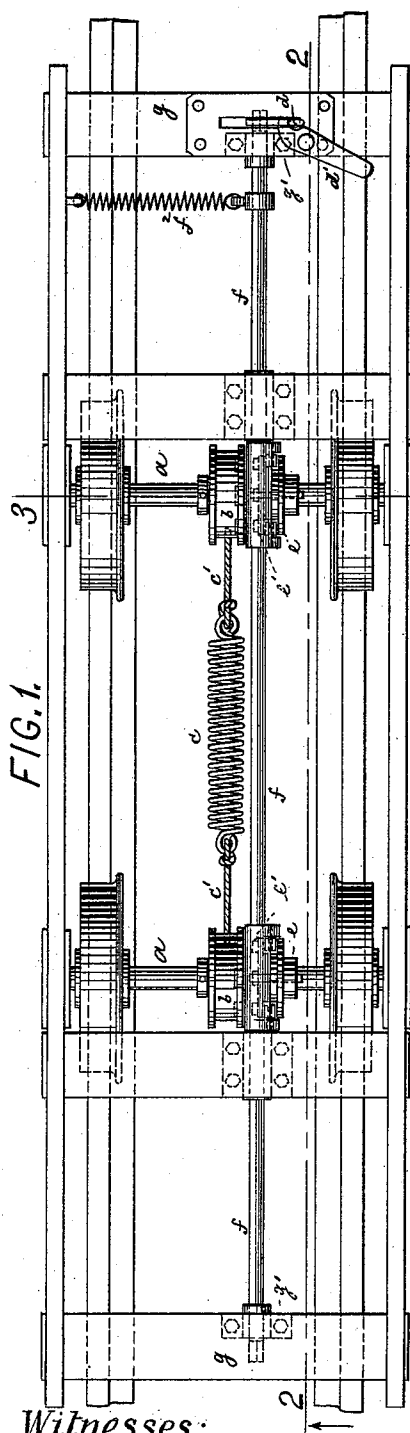


(No Model.)

R. F. COOKE.
BRAKE FOR RAILWAY CARS.

No. 533,054.

Patented Jan. 29, 1895.



Witnesses:
Theodore Becker
William Schuly

Inventor:
Robert F. Cooke
by his attorneys
Boeder & Briesen

UNITED STATES PATENT OFFICE.

ROBERT F. COOKE, OF NEW YORK, N. Y., ASSIGNOR TO EDWARD SANDFORD,
OF SAME PLACE.

BRAKE FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 533,054, dated January 29, 1895.

Application filed October 22, 1894. Serial No. 526,538. (No model.)

To all whom it may concern:

Be it known that I, ROBERT F. COOKE, of New York city, New York, have invented an Improved Car-Brake, of which the following is a specification.

This invention relates to a car brake which permits the car to be stopped quickly and within a short space.

In the accompanying drawings: Figure 1 is a plan of the running gear of a car, provided with my improved brake. Fig. 2 is a vertical longitudinal section on line 2, 2, Fig. 1, and Fig. 3 a vertical cross section on line 3, 3, Fig. 1.

a, a , represent the two axles of a car, upon which are loosely mounted the drums b . These drums are connected with one another by ropes c' , and a joint spring c , or by any other power accumulator. The drums b , are adapted to be locked to their axles a , by a motion of the brake lever d , in the following manner:

Upon each axle a , is mounted a sliding clutch e , provided with prongs e' , that are adapted to engage corresponding sockets b' , of drums b . The clutches e , are made to revolve with the axles, by means of grooves and feathers a' : They are provided with a grooved rim e^2 , which is permanently engaged by the depending arms f' , of a rock shaft f , hung in bearings g' , of the end sills g . To the end of this rock shaft is secured the brake lever d , which may be locked in its various positions by a pawl d' .

When the car is in motion, the rock shaft is in such a position, that the clutches e , are out of engagement with the drums b , and in

this way the axles a , can turn freely. When however the car is to be stopped, the brake lever is released, whereupon a spring f^2 , will rock the shaft f , and throw the clutches e , into engagement with the drums b . Thus the drums will be keyed to the axles, and both drums will revolve forward, to wind the ropes c' , up, and distend the spring c . The spring, thus distended, will check the revolution of the axles and will thus aid in stopping the car. After the axles have ceased to revolve forward, the spring in contracting will revolve them backward, and thus the car will be slightly backed. When the car is to be again started, the brake lever is rocked to rock the shaft f , and liberate the drums b , from the clutches e , and to consequently liberate the axles from the drums.

It will be seen that with my improved brake, the car can be stopped quickly and within a short space, so that running over accidents may be avoided.

What I claim is—

The combination in a car, of a pair of axles with drums revoluble thereon, a power spring, ropes secured to both ends of the spring and connected to the front and rear drums respectively, a pair of clutches engaging the drums, and a lever for operating the clutches, all being so constructed that when the clutches engage the drums, the ropes are simultaneously wound upon both drums to brake both axles, substantially as specified.

ROBERT F. COOKE.

Witnesses:

WILLIAM SCHULZ,
F. V. BRIESEN.