

H. WINDHOFF.
ROLLER SKID FOR RAILWAY CARS AND SIMILAR VEHICLES.
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1,014,197.

Patented Jan. 9, 1912.

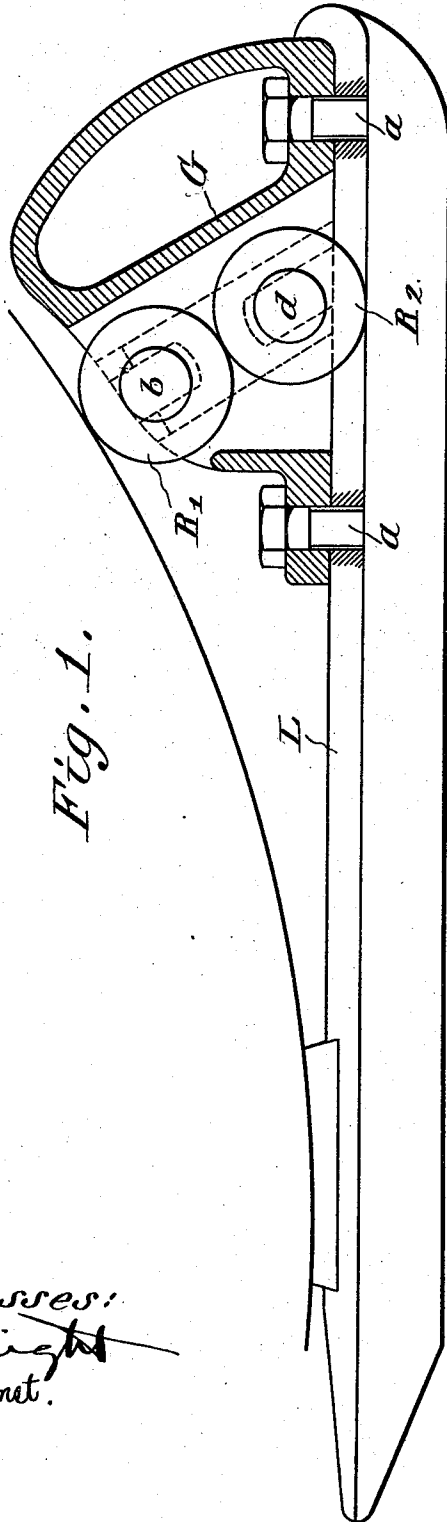


Fig. 1.

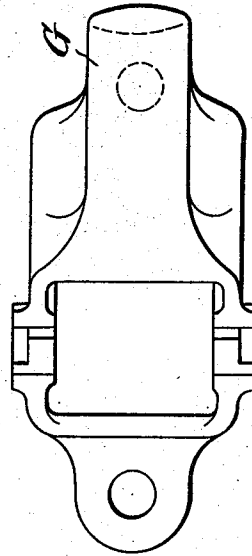


Fig. 2.

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UNITED STATES PATENT OFFICE.

HANS WINDHOFF, OF BERLIN-SCHÖNEBERG, GERMANY.

ROLLER-SKID FOR RAILWAY-CARS AND SIMILAR VEHICLES.

1,014,197.

Specification of Letters Patent.

Patented Jan. 9, 1912.

Application filed May 20, 1910. Serial No. 562,425.

*To all whom it may concern: **

Be it known that I, HANS WINDHOFF, dipl. engineer, a subject of the German Emperor, residing at 8^a Mühlenstrasse, Berlin-Schöneberg, Kingdom of Prussia, Germany, have invented new and useful Improvements in Roller-Skids for Railway-Cars and Similar Vehicles, of which the following is a specification.

10 The present invention refers to a roller skid for railway cars and similar vehicles, with which it is made possible to brake the motion of such vehicles without any shocks. According to the present invention the skid
15 is fitted with two or more rollers, which by the direction of their rotation cause the brake shoe to be drawn out in such a manner, that chiefly the weight of the approaching car is employed for braking, and the
20 momentum of the car either not at all or only partly.

In the accompanying drawing the present invention is exemplified in a constructional form.

25 Figure 1 is a side elevation showing the application of the device to the circumference of a car wheel. Fig. 2 is a top plan view of the same device.

30 The roller skid consists essentially of the sole L, to which a housing G is screwed by means of bolts *a*. In said housing two rollers R, R' are arranged rotatable on pins *b* and *d*, said rollers being in contact with each other and the lower one coming in contact
35 with the rail, the upper one in contact with the car wheel. When the car wheel has run on to the brake shoe, the wheel will meet the upper roller R and would run on over and beyond the same, if said roller did not

revolve and by said revolution transfer the rotation to the lower roller R' in contact with it, whereby the whole brake shoe is made to slide on and slip away. As soon as this occurs the wheel falls back on to the sole L and again produces a brake effect, which will be approximately in proportion to the pressure of the wheel, and by which the momentum will be consumed.

With reference to the constructional form shown it may be mentioned, that the effect
50 will of course remain the same, if instead of the one roller between the rail and the upper roller two such rollers are employed, both of which are in contact with the rail and the upper roller. On the other hand
55 also two rollers may act parallel to each other between wheel and lower roller; it is only necessary that the direction of rotation is maintained for the roller running on the rail. It goes without saying that
60 such a set of two or three rollers may also be repeated in the arrangement. Furthermore in place of rollers also balls, running in cages, may be employed.

I claim:

65 Roller skid for railway cars and similar vehicles, fitted with two rollers in contact with each other, said rollers so arranged and adapted to convert the sliding friction into rolling friction, for the purpose
70 as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HANS WINDHOFF.

Witnesses:

WOLDEMAR HAUPT,
HENRY HASPER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."