

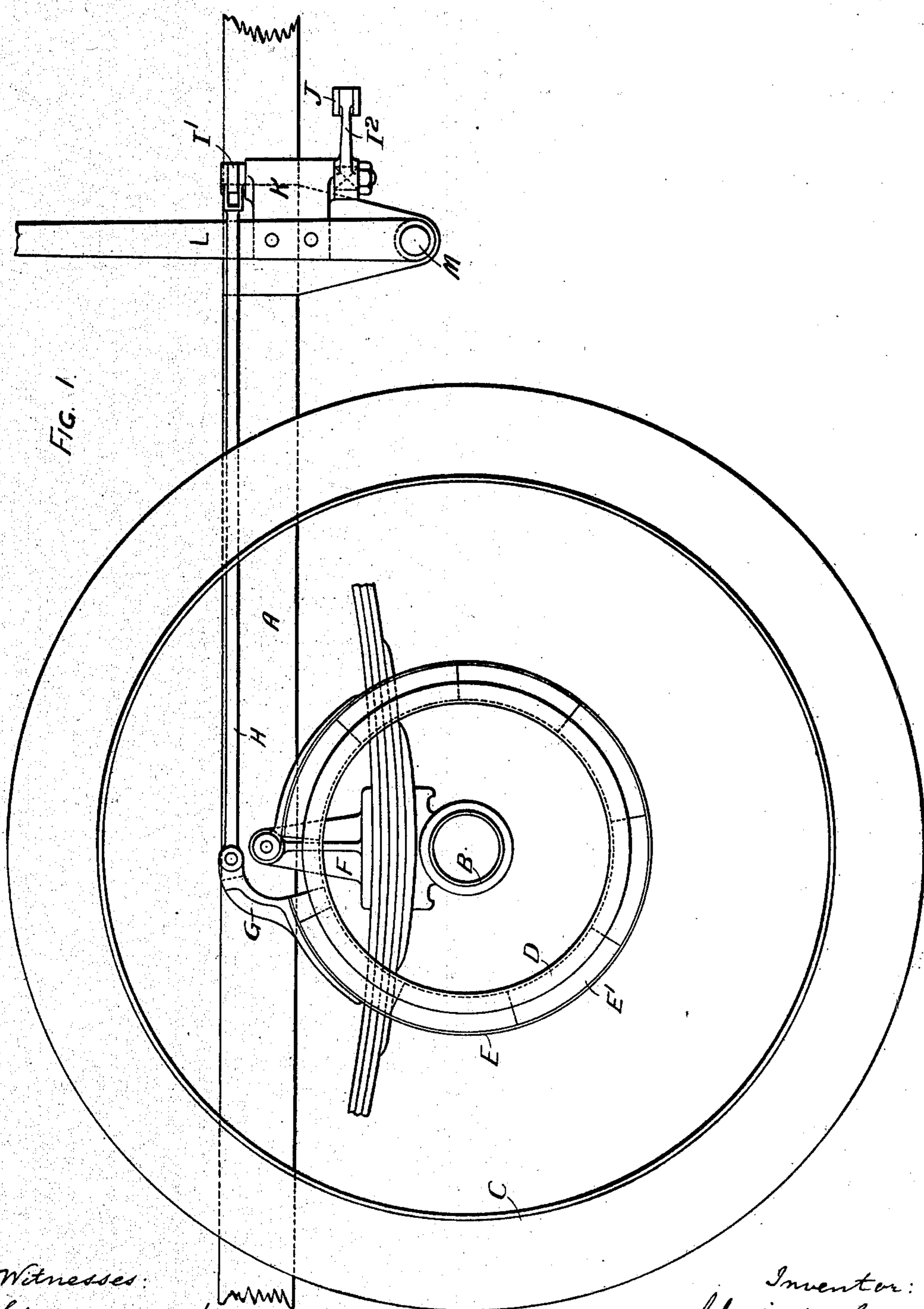
No. 732,846.

PATENTED JULY 7, 1903.

A. GOVAN.  
BRAKE FOR AUTOCARS.  
APPLICATION FILED DEC. 9, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses:

J. W. Vanderhoof  
Helen F. Schleser.

Inventor:  
Alexander Govan,  
By H. de Vos,  
Attorney.—

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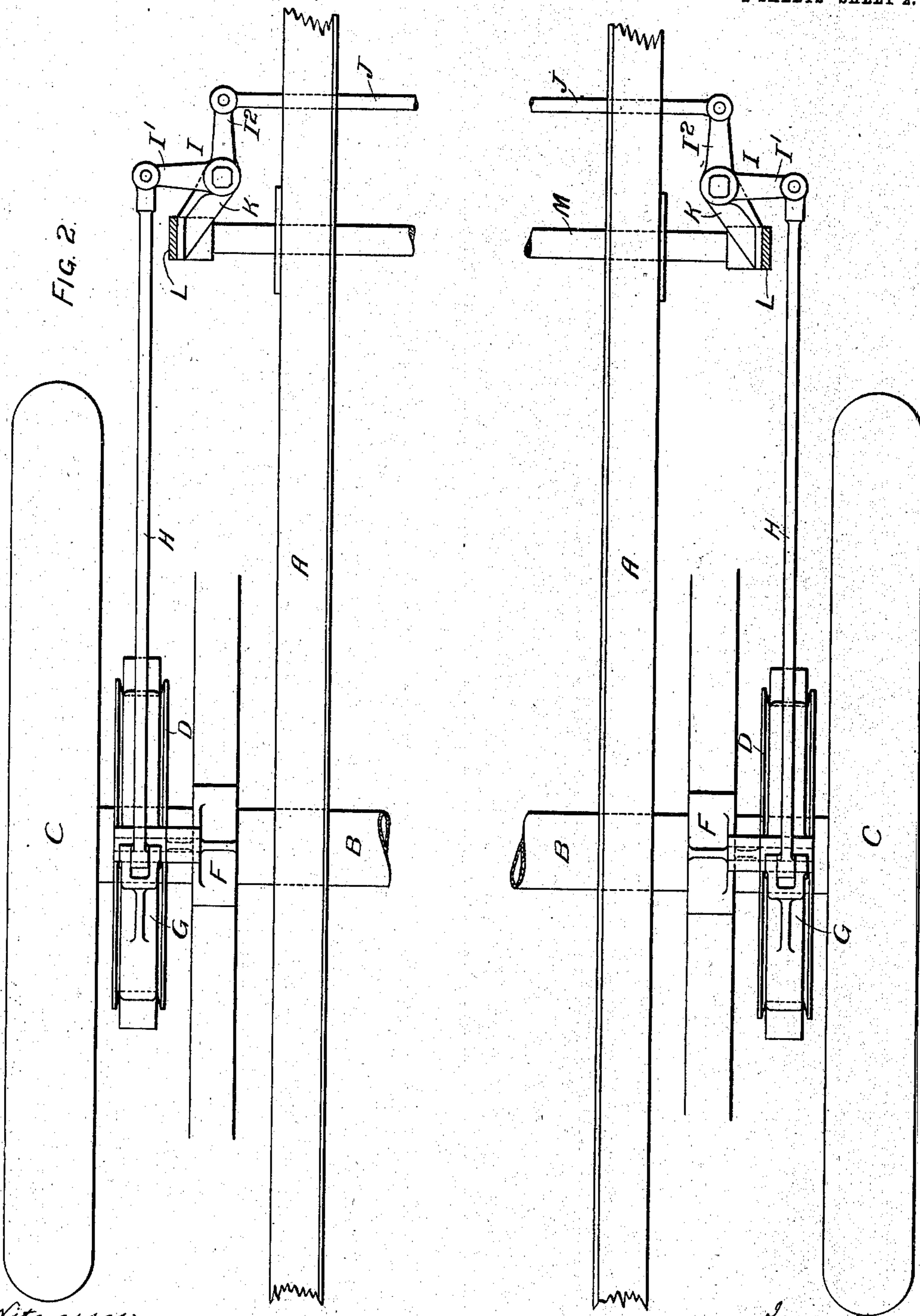
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APPLICATION FILED DEC. 9, 1902.

NO MODEL.

2 SHEETS—SHEET 2.

FIG. 2.



Witnesses:

J. W. Vanderhoof.  
Helen Stacheler.

Inventor:  
Alexander Govan,  
By H. A. de Vos.  
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## UNITED STATES PATENT OFFICE.

ALEXANDER GOVAN, OF GLASGOW, SCOTLAND.

## BRAKE FOR AUTOCARS.

SPECIFICATION forming part of Letters Patent No. 732,846, dated July 7, 1903.

Application filed December 9, 1902. Serial No. 134,491. (No model.)

*To all whom it may concern:*

Be it known that I, ALEXANDER GOVAN, a subject of the King of the United Kingdom of Great Britain and Ireland, residing at 47 Hozier street, Bridgeton, Glasgow, Scotland, have invented certain new and useful Improvements in Brakes for Autocars and other Vehicles, (for which application for patent has been made in Great Britain, No. 12,824, dated June 5, 1902,) of which the following is a specification.

This invention relates to brakes for autocars and other vehicles in which a brake band or block is applied to a wheel or drum at each side of the axle; and it has for its object to provide simple and efficient means for equally distributing the brake-pressure on the two wheels.

The invention is illustrated by the accompanying drawings, in which—

Figure 1 is a side elevation, and Fig. 2 a plan, of part of the framing and axle of a motor-car, showing one modification of the improved brake-equalizing gear.

In the drawings, A represents the framing of the car, and B the axle carrying the running-wheels C, and D the brake wheels or drums.

The brakes employed are preferably of the band type and applied each by a lever-arm, to which may be jointed the ends of the band E, carrying the usual blocks E' and encircling the brake-wheel D. In the arrangement shown in Fig. 1 the one end of the brake-band is secured to a stationary bracket F, while the other end has attached to it an arm G, to which is jointed a horizontal rod or link H, whose opposite end is attached to one arm I' of a bell-crank I. The brake-bands E on each side of the vehicle are thus connected to bell-cranks I, whose inner arms I<sup>2</sup> are con-

nected together by a rod or link J. The bell-cranks I are each mounted on brackets K, secured on the brake-lever handle L or on an upright arm on the rock-shaft M, on which the brake-lever handle is secured. The arrangement is such that on drawing over the lever-handle L, and thus partially rotating the rock-shaft M, the brackets on which the bell-cranks I are mounted have a pull applied to them, and, the inner arms I<sup>2</sup> of the bell-cranks being linked or connected together, the pull is transmitted through their outer arms I' and the connecting rods or links H to the brake-lever arm G, while equality of brake-pressure on both drums or wheels D is insured, owing to the bell-cranks I being free to turn on their centers and the whole constituting an articulated system.

Having now described my invention, what I claim, and desire to secure by Letters Patent, is—

In brakes for autocars and like vehicles the combination with the brake-wheels D, and brake-bands E, of stationary brackets F each securing one end of each brake-band, arms G attached to the other ends of the brake-bands, bell-cranks I, links H jointed at one end to the arms G and at the other end connected to the outer arms I' of the bell-cranks I, a rod J connecting the inner arms I<sup>2</sup> of the bell-cranks I, rock-shaft M, brake-lever handles L secured to said shaft M and brackets K secured to said handles L and supporting the bell-cranks I as shown and described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

ALEXANDER GOVAN.

Witnesses:

WALLACE FAIRWEATHER,  
JNO. ARMSTRONG, Jr.