

No. 850,284.

PATENTED APR. 16, 1907.

R. F. ARMSTRONG.  
VEHICLE BRAKE.  
APPLICATION FILED JAN. 15, 1906.

Fig. 1.

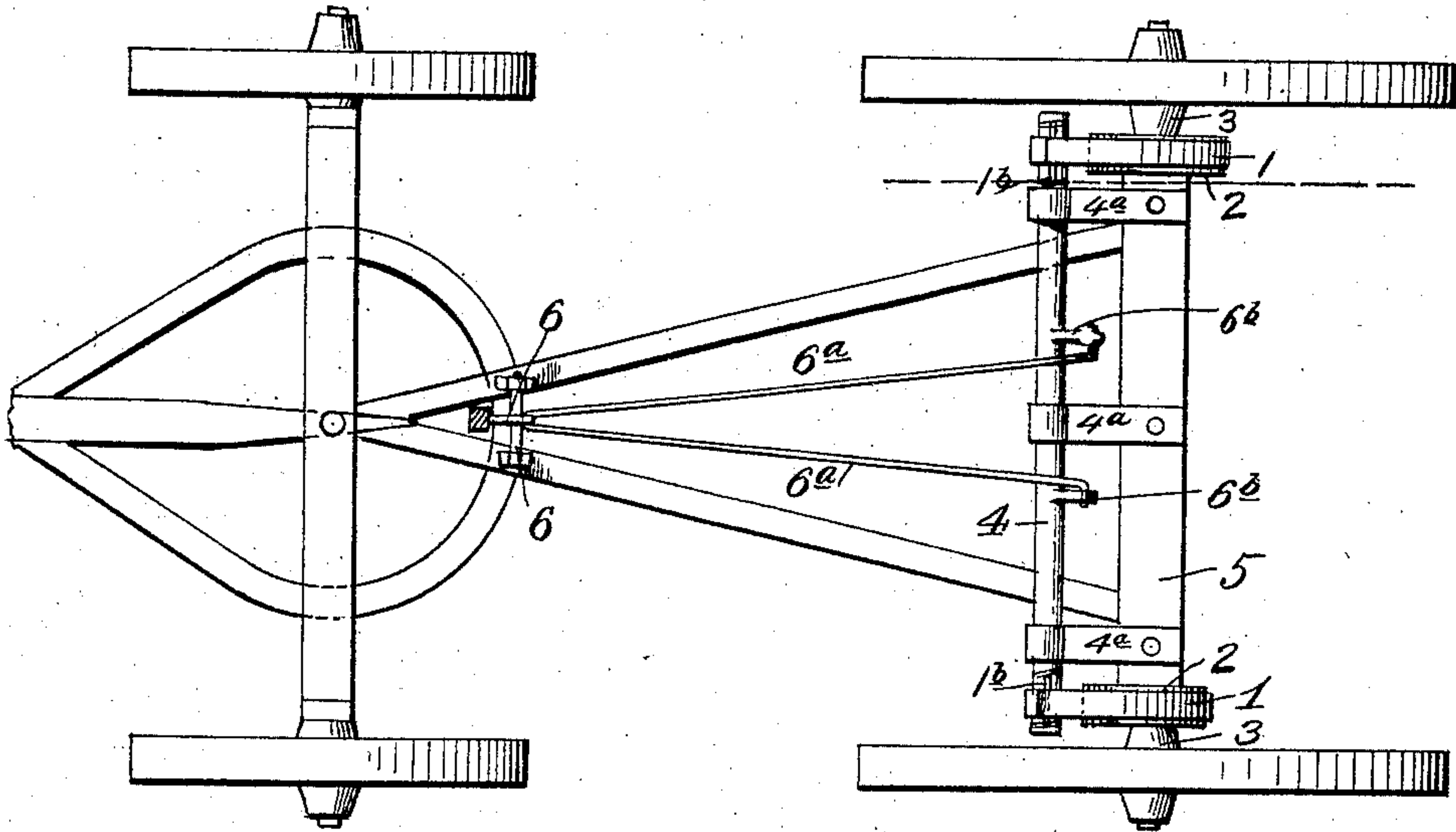


Fig. 2.

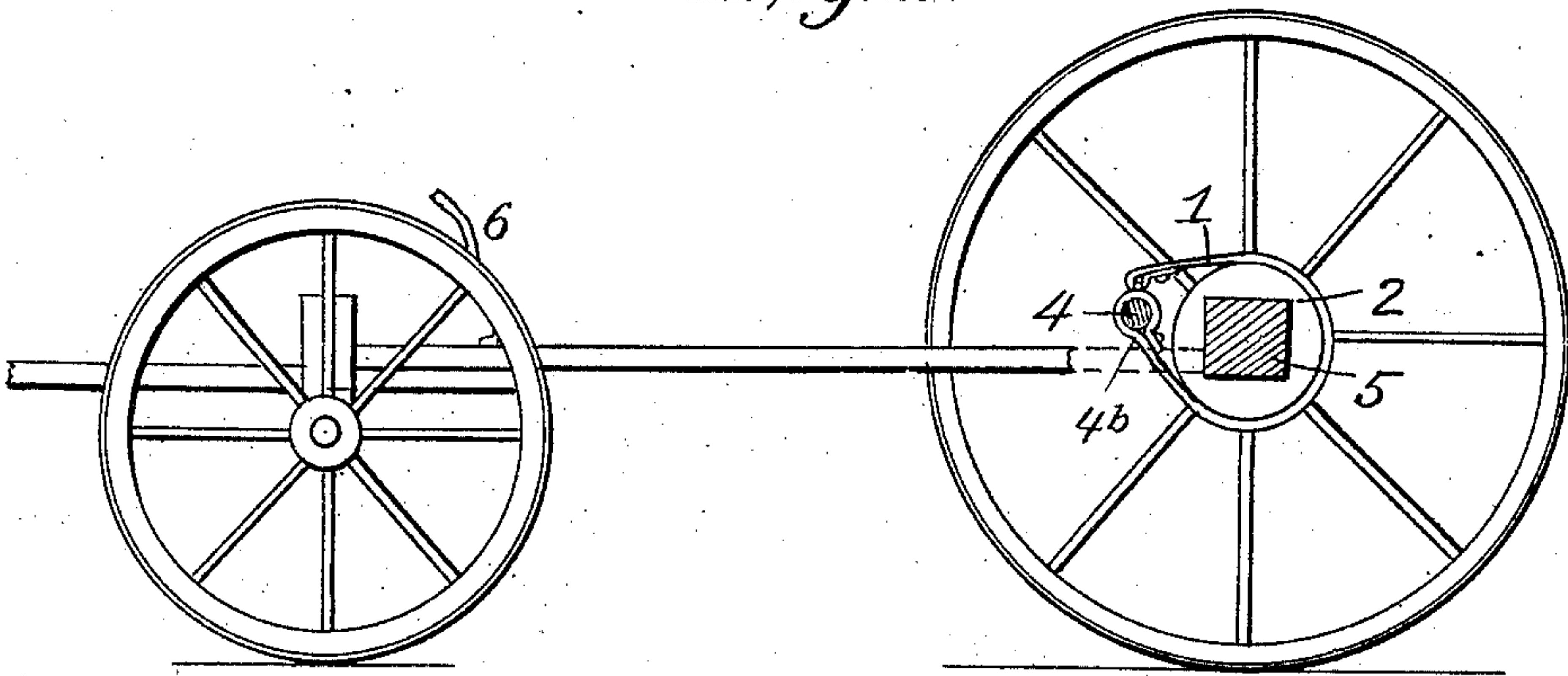
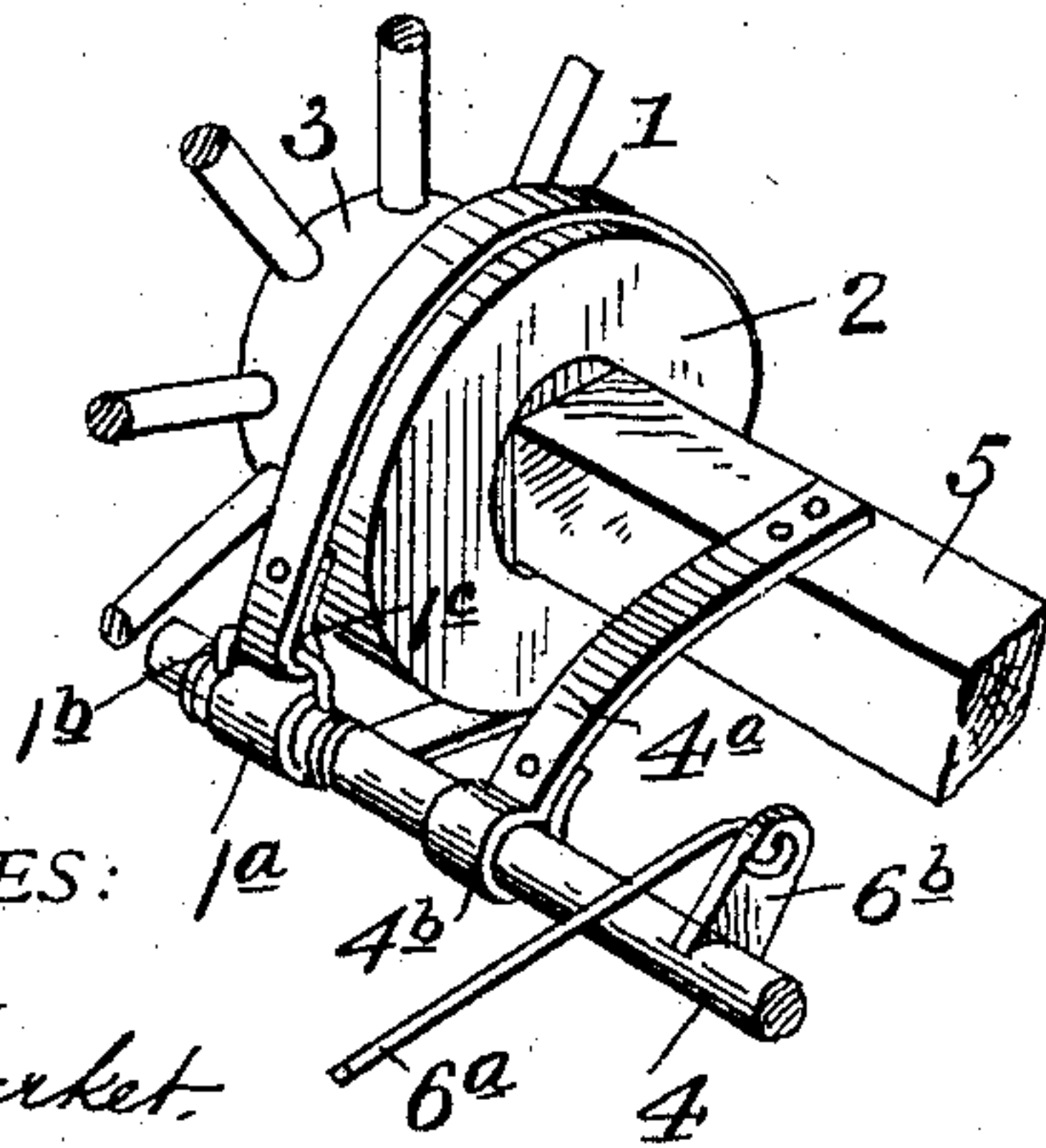


Fig. 3.



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# UNITED STATES PATENT OFFICE.

ROBERT F. ARMSTRONG, OF FREEPORT, OHIO.

## VEHICLE-BRAKE.

No. 850,284.

Specification of Letters Patent.

Patented April 16, 1907.

Application filed January 15, 1906. Serial No. 296,196.

*To all whom it may concern:*

Be it known that I, ROBERT F. ARMSTRONG, a citizen of the United States, residing at Freeport, in the county of Harrison and State of Ohio, have invented certain new and useful Improvements in Vehicle-Brakes, of which the following is a specification.

My invention pertains to improvements in vehicle-brakes.

The object of my invention is to provide for readily applying the brake and for quickly releasing the same and to accomplish these ends in a simple, economic, and effective manner; and it consists of certain structural features substantially as hereinafter fully disclosed, and particularly pointed out by the claim.

In the accompanying drawings, illustrating the preferred embodiment of my invention, Figure 1 is a plan view of running-gear employing the same. Fig. 2 is a vertical longitudinal section produced through the rear axle, &c., viewing the brake in edge elevation. Fig. 3 is a detached perspective showing the principal features of the brake.

In carrying out my invention, I employ duplicate metallic brake straps or bands 1, effective to loosely initially embrace or applied to circular or annular frictional bearings or collars 2, fixed in any suitable way to the wheel-hubs 3 upon their inner portions; and which may be leather or like material of the requisite thickness or bulk. These straps or bands of the suitable character to conform to the requisite impinging as well as yielding action for the intended purpose have each one end firmly looped around a rod or bar member 4, as at 1<sup>a</sup>, near its ends, arranged parallel with and secured to the axle 5, as further later noted. The loops 1<sup>a</sup> are formed by bending or carrying these ends of the straps or bands 1 back upon and riveting or otherwise suitably securing them to the latter, as readily understood. The opposite ends of the straps or bands 1 are brought opposite to the aforesaid ends thereof after having passed the bands or straps around the frictional collars or bearings 2 and suitably connected or looped, as at 1<sup>b</sup>, to the same rod or bar member 4, so as to permit these ends of said straps to "buckle down" or be depressed toward said frictional collars as stress is exerted upon said rod or bar member in applying the brake. The connections 1<sup>b</sup> are preferably constituted of bail-like formations or links passed through loops 1<sup>c</sup>, terminating

said ends of the bands or straps 1, the wires forming said links or bails being preferably passed or inserted transversely through the rod or bar member 4 and finally coiled or wrapped around the latter for effectively securing the same in place.

The connection between the rod or bar member 4 and the axle 5 is effected, preferably, by means of brackets 4<sup>a</sup>, adapted to embrace and secured to the latter and having loop or sleeve formations 4<sup>b</sup>, receiving said rod or bar member and adapted to permit it to freely turn therein, or it may be otherwise supported in position from said axle. It will be noted that as the operator grasps and suitably actuates the lever 6, conveniently arranged for that purpose and connected to rods 6<sup>a</sup>, in turn connected to fixed arms 6<sup>b</sup> of said rod or bar member 4, the straps or bands 1 will be caused by the stress or pressure thus exerted upon said rod or bar to grip or engage the frictional collars or bearings 2 of the wheel-hubs for applying the brake, and of course thereby retarding or arresting altogether the action of the wheels or vehicle. When stress is taken off the bar or rod member 4 by accordingly relaxing hold upon the lever, it is apparent that the braking action is relieved.

It will be observed that in this contrivance the collar encompassing brake straps or bands are drawn or exerted upon, so that their impinging action is effected wholly through the bar or rod member 4 and not by retaining or securing the ends of each strap or band to a fixture and an actuating rod or bar, respectively, as has in some instance heretofore been done, the advantages of the former being obvious.

It is here noted that the bands or straps 1 are designed to be lined with a leather or some elastic material to prevent noise, while the frictional collars or bearings 2 may be secured to the wheel-hubs by three or more set-screws to prevent the warping or distorting of said collars or bearings.

I claim—

A vehicle-brake, employing duplicate brake-straps encompassing wheel-hub collars, hangers or brackets having their inner ends fixed to the vehicle-axle and their outer ends formed into eyes or loops, a shaft or rod received by said eyes or loops and adapted to turn therein and equipped with upstanding fixed bails near their ends, said brake-straps having their lower ends looped

around, and fixed to said rod or shaft and  
their opposite ends loosely connected to said  
bails, and said bails standing astride of the  
points of connection between said rod or  
5 shaft and the first-noted ends of said brake-  
straps.

In testimony whereof I have signed my

name to this specification in the presence of  
two subscribing witnesses.

ROBERT F. ARMSTRONG.

Witnesses:

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