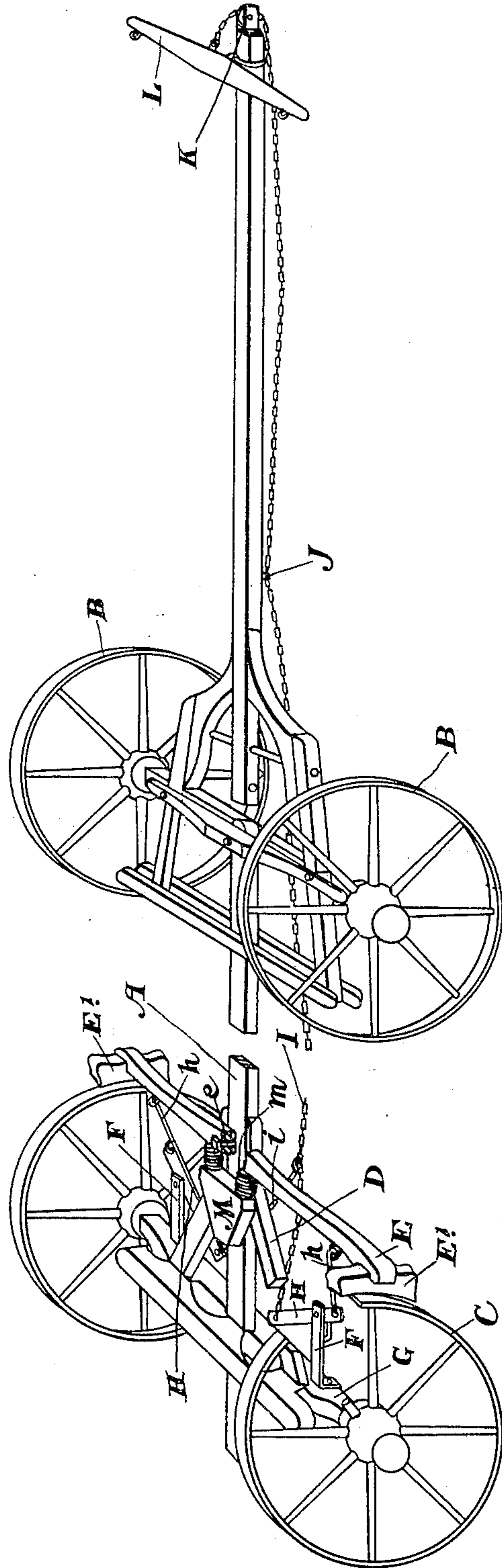


No. 801,527.

PATENTED OCT. 10, 1905.

J. KRUG.
AUTOMATIC VEHICLE BRAKE.

APPLICATION FILED FEB. 13, 1905.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOHN KRUG, OF CHESLEY, CANADA.

AUTOMATIC VEHICLE-BRAKE.

No. 801,527.

Specification of Letters Patent.

Patented Oct. 10, 1905.

Application filed February 13, 1905. Serial No. 245,407.

To all whom it may concern:

Be it known that I, JOHN KRUG, manufacturer, a subject of the King of Great Britain, residing in the village of Chesley, in the county of Bruce, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Automatic Vehicle-Brakes, of which the following is a specification.

My invention relates to improvements in automatic vehicle-brakes; and the object of my invention is to devise a brake of this class which will be automatically applied to the wheels upon the horses stopping or backing and which will be immediately released upon the horses starting forward again; and it consists, essentially, of brake-arms provided with brake-shoes and pivoted above the hounds and reach by a bolt passing through the slot in the reach, levers pivoted on brackets on the axle and connected at one end to the brake-arms and at the opposite end connected by short chains to a chain passing forwardly under the tongue and around a pulley at the front of the tongue or pole to the crosstree to which the horses are attached, springs being provided in order to hold the brake-shoes away from the wheels and the parts being otherwise constructed and arranged in detail as hereinafter more particularly explained.

The drawing represents a perspective view showing my improved automatic brake.

A is the reach, B the front wheels, C the rear wheels, of the vehicle; D, the hounds; E, the brake-arms, which are pivoted on a bolt *e*, extending, preferably, through a slot in the reach, and are provided with end brake-shoes E' E'.

F F are brackets secured to the rear axle G.

H represents levers pivoted on the axle and connected by the links *h* to the brake-arms E E. The opposite ends of the levers H are connected by short chains *i* to the main chain I, which extends forwardly through suitable guiding-eyes J to and around a pulley K, secured in a suitable bracket to the front of the tongue, thence to the crosstree L.

M is a block secured above the hounds, and *m* represents springs, preferably spiral, extending between the block M and the levers and designed to normally hold the brake-shoes E' away from the wheels.

It will now be seen that upon the horses being attached to the vehicle and to the crosstree L that upon the forward pull of the horse the brake-arms E E will remain perfectly loose as the vehicle is drawn from the traces, whiffletrees, and doubletrees, the brake-shoes being held away from the wheels by the springs *m*. Immediately, however, the horses are drawn up by the driver, so as to impede their progress, the pole is pushed forwardly, so that the distance of its front end from the crosstree L increases, consequently shortening up or tightening the chain I and short chains *i*, and thereby pulling on the levers and brake-arms E, so as to apply the brake-shoes.

What I claim as my invention is—

In an automatic vehicle-brake, the combination with the reach; the axles; the wheels, and the tongue, of the brake-arms pivoted at their inner ends to the upper side of said reach by a common bolt; the brake-shoes for said brake-arms adapted to engage the rear wheels; the brackets firmly secured to the rear axle and extending out therefrom; levers pivoted near their outer ends to said brackets and having their longer ends extending toward said reach; the links connecting the short ends of said levers to said brake-arms near their outer ends; short chains connected to the longer ends of said levers; the main chain to which said short chains are connected; a block or portion of the frame on upper side of said reach immediately between which and each of said brake-arms is held a spring and on each side of the pivoting-bolt; the said springs pressing upon said brake-arms so as to normally keep their shoes out of engagement with the rear wheels; the crosstree to which the end of said main chain is connected, and a guiding device on said tongue through which said main chain passes.

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

JOHN KRUG.

Witnesses:

RICHD. J. LILICO,
FLOSSIE McDUGALL.