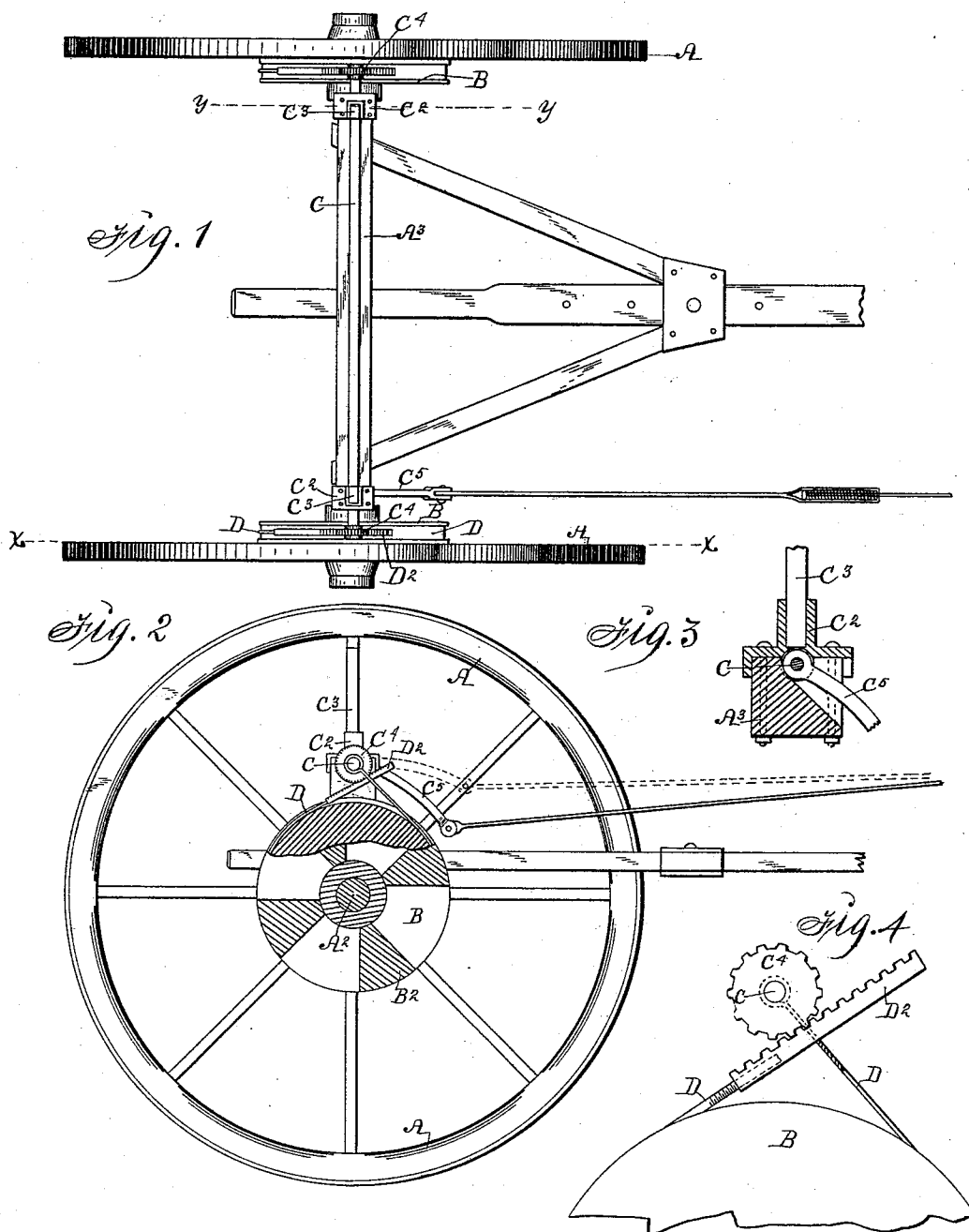


(No Model.)

S. GRIFFIN.
WAGON BRAKE.

No. 495,247.

Patented Apr. 11, 1893.



Witnesses:
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Inventor: Samuel Griffin,
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UNITED STATES PATENT OFFICE.

SAMUEL GRIFFIN, OF AUDUBON, IOWA.

WAGON-BRAKE.

SPECIFICATION forming part of Letters Patent No. 495,247, dated April 11, 1893.

Application filed May 16, 1892. Serial No. 433,099. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL GRIFFIN, a citizen of the United States of America, residing at Audubon, in the county of Audubon and State of Iowa, have invented a new and useful Wagon-Brake, of which the following is a specification.

My object is to provide strong and durable means for applying friction to the hubs rather than the tire of wagon wheels.

My invention consists in the construction of a drum adapted to be fixed to the hubs of a wagon, in the construction of a metal band to engage the said drum and in the construction and application of the means for tightening the said metal band on the drum as required to restrict or prevent the rotation of the wheel of the wagon as hereinafter set forth, pointed out in my claims and illustrated in the accompanying drawings, in which:

Figure 1 is a top or plan view of a wagon truck with the brake device applied thereto. Fig. 2 is a side elevation of the same. Fig. 3 is an enlarged vertical sectional view through the line $x-x$ of Fig. 1. Fig. 4 is an enlarged detail view of the means for tightening the metal band on the drum.

Referring to the accompanying drawings the reference letter A designates the wheels, A^2 the axle and A^3 the bolster supported upon the said axle.

B B are drums having flat peripheries, which may be provided with flanged edges and which are secured to the wheels by being placed on the hubs thereof with the projections B^2 interposed between the spokes of the wheels.

It will be obvious that various modes of securing the drums to the wheel might be substituted for the one shown and that metal or other suitable material could be used in their construction.

C designates a rock shaft having its bearings in the under side of the cast metal sockets C^2 which are adapted to support the standards C^3 and which are fixed to the bolster A^3 . The said rock shaft is provided with the pinions C^4 C^4 on its ends, which are in vertical alignment with the drum B. C^5 is a lever secured to the said rock shaft and connected with means for operating it, which means

may be a lever or any other common device, such as are now in common use.

D is a metal band of a width approximating that of the drum B. Its one end is bifurcated and pivotally secured to the rock shaft on opposite sides of the pinion C^4 . It is then passed around the said drum and its other end has formed or fixed thereto a rack D^2 which is extended through the said bifurcated end of the band D and held in engagement with the pinion C^4 by means of its own resiliency.

It will now be obvious that when the lever C^5 is operated as indicated by dotted lines in Fig. 2 the pinion C^4 will be rotated and the rack D^2 advanced, which it will be seen will tighten the band D upon the drum and restrict or prevent the rotation of the wheels, by the application of a minimum of power to the operating lever.

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

1. An improved wagon brake comprising a drum mounted on one of the hubs of the wagon wheel, a flexible metal band upon said drum and having a rack on one end and a pinion to engage said rack on the other end and means for rotating said rack to tighten the metal band.

2. An improved wagon brake, comprising drums fixed to both the hubs of the wheels of one of the trucks thereof, a rock shaft extended parallel with the axle of the wheels, a pinion fixed to each end of the said rock shaft, two metal bands each bifurcated at one end and attached to the said rock shaft on opposite sides of the pinions, passed around the said drums and each provided on its remaining end with a rack adapted to mesh with the said pinions and pass between the bifurcated ends of the said bands, and means for operating the said rock shaft substantially as set forth.

3. The combination with a flexible band adapted to encircle and engage a drum or wheel to restrict its rotation, of a pinion mounted on one end of the band and a rack adapted to mesh therewith formed on or fixed to the other end thereof and means for operating the said pinion.

4. An improved brake device, comprising a rock shaft extended into alignment with the drum or wheel to which the device is applied, a pinion fixed to the said rock shaft, a flexible metal band bifurcated at one end, connected with the said rock shaft on both sides of the said pinion, extended around the said drum or wheel and provided on its remaining end with a rack adapted to mesh with the said pinion and to pass between the bifurcated ends of the band and means for operating the rock shaft substantially as set forth.

5. In a wagon brake in which a rock shaft is extended parallel with the bolster of one

of the trucks of a wagon the combination 15 with the said rock shaft of the combined, metal, sockets and bearers, secured to the said bolster near its ends, and each provided with a socket in its top adapted to admit and support a standard and a bearing formed in- 20 tegral with its under surface to admit the said rock shaft, substantially as and for the purposes stated.

SAMUEL GRIFFIN.

Witnesses:

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