

No. 803,773.

PATENTED NOV. 7, 1905.

C. M. MARCOM.  
WAGON BRAKE.

APPLICATION FILED DEC. 13, 1904.

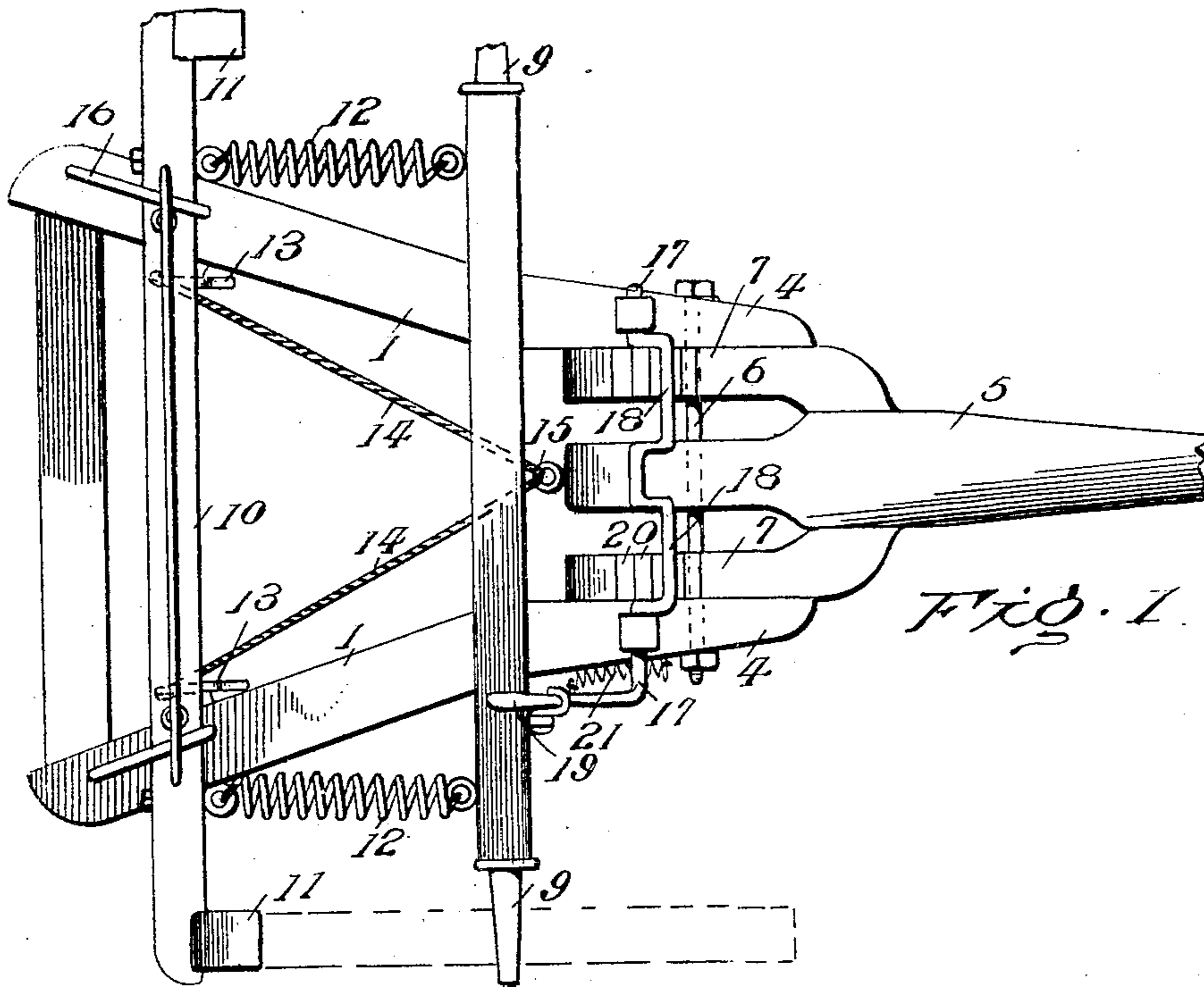


Fig. 1.

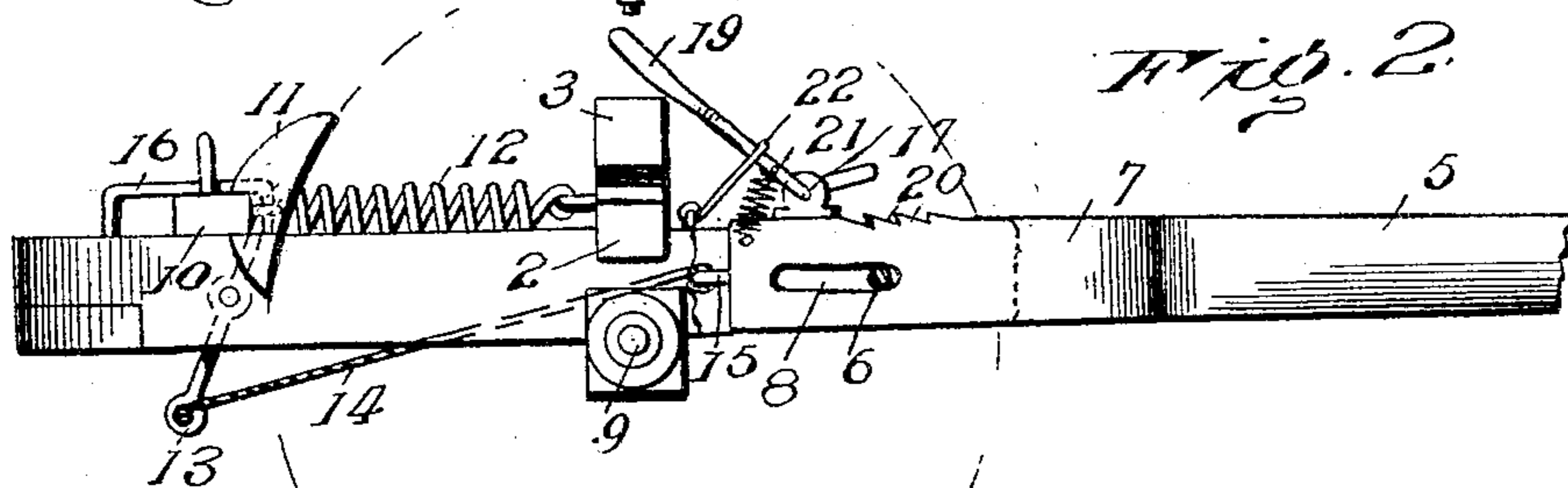


Fig. 2.

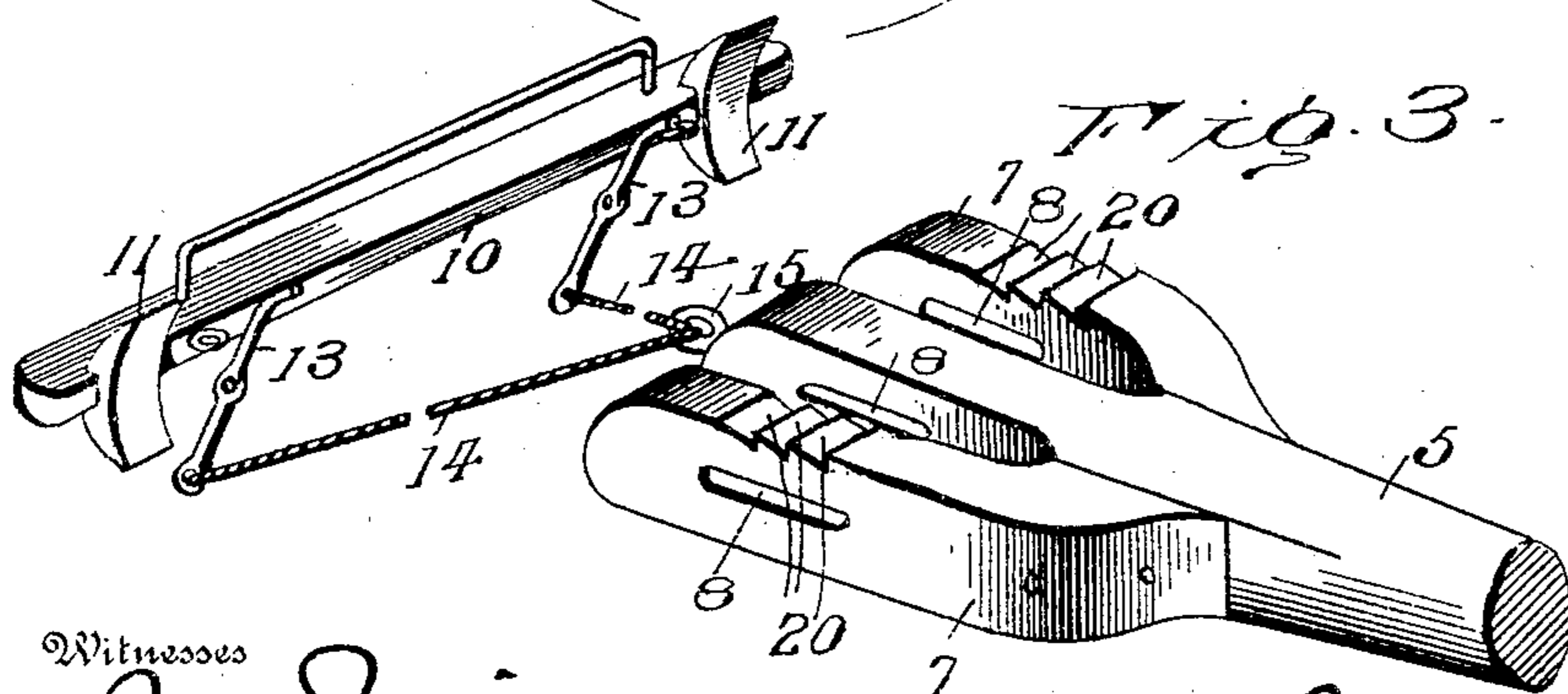


Fig. 3.

Witnesses

J. M. M. M.  
W. M. Woodson

Inventor

C. M. Marcom

By

R. H. Racy, Attorneys

# UNITED STATES PATENT OFFICE.

CLAUDE M. MARCOM, OF DOYLE, INDIAN TERRITORY.

## WAGON-BRAKE.

No. 803,773.

Specification of Letters Patent.

Patented Nov. 7, 1905.

Application filed December 13, 1904. Serial No. 236,724.

*To all whom it may concern:*

Be it known that I, CLAUDE M. MARCOM, a citizen of the United States, residing at Doyle, in the county of Chickasaw, Indian Territory, have invented certain new and useful Improvements in Wagon-Brakes, of which the following is a specification.

This invention embodies an automatic brake for vehicles; and it consists, essentially, in the provision of brake means tending to normally coöperate with the vehicle-wheels and operable by the draft means.

In carrying out the invention the tongue of the vehicle is connected with the brake mechanism, so that under normal conditions as the vehicle advances the brake-shoes are held away from the wheels. As soon, however, as the draft upon the tongue is relieved the shoes are automatically forced against the wheels to effect the necessary braking action.

The invention resides, further, in special lock means for the tongue to so hold the latter that in backing the vehicle or in traveling down grade the brakes will not be actuated when there is no draft upon the tongue.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings.

While the invention may be adapted to different forms and conditions by changes in the structure and minor details without departing from the spirit or essential features thereof, still the preferred embodiment thereof is shown in the accompanying drawings, in which—

Figure 1 is a top plan view showing the front truck of a vehicle and the several parts which are included in the brake mechanism. Fig. 2 is a side elevation of the structure shown in Fig. 1. Fig. 3 is a perspective view of a rear end portion of the tongue and the brake-beam, the operative connections between these parts being more clearly brought out.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The structure shown in Fig. 1 represents a truck of a construction which is commonly in use, and, specifically describing the same,

the numerals 1 designate the hounds, upon which is mounted a transverse beam 2, carrying a bolster 3. The mounting of the bolster 3 is of any approved type, this not being essential to the invention.

The front end portions of the hounds 1 are extended forwardly, as shown at 4, and the tongue 5 of the vehicle is mounted upon a transverse bar 6, carried by the extensions 4 aforesaid. The rear extremity of the tongue 5 is provided with side members 7, spaced therefrom and receiving the bar 6, the connection between the tongue and the wagon-body being made more rigid by this construction.

The bar 6, upon which the tongue 5 is mounted, passes through longitudinal slots 8 in the side members 7 and the rear extremity of the tongue, and this admits of a certain amount of longitudinal movement of the tongue with reference to the hounds 1, or, in other words, a slidable connection between the tongue 5 and the wagon-body is secured. The axle 9 is suitably secured to the hounds 1 beneath the same, and the front wheels of the vehicle are mounted upon said axle in the usual manner, said wheels being shown in dotted lines where illustrated. Upon the upper sides of the hounds 1, adjacent the rear ends thereof, is mounted a brake-beam 10, which carries the usual shoes 11, applied thereto in any suitable manner. Springs 12 connect the end portions of the beam 10 with the transverse bolster-beam 2, and said springs normally tend to hold the brake-shoes 11 of the beam 10 in contact with the wheels adjacent. Mounted upon the hounds 1 and pivoted to the inner sides thereof adjacent the brake-beam 10 are levers 13, connected at their lower ends by flexible connections 14 with the rear extremity of the tongue 5, as shown at 15. The upper ends of the levers 13 are curved slightly toward the tongue 5 and engage the front of the brake-beam 10, as shown most clearly in Fig. 3 of the drawings.

From the foregoing description it will be noted that when the vehicle is traveling the draft upon the tongue 5 exerts a pull upon the connections 14, which actuates the levers 13, so that the upper ends of the latter are forced rearwardly. The above movement of the levers 13 forces the brake-beam rearwardly also, and the brake-shoes 11 are thereby held away from the adjacent wheels of the truck.

As soon, however, as the pull upon the draft or tongue 5 is relieved, as when stopping the draft-animals of the vehicle, the springs 12 pull the brake-beam 10 forward, causing the  
5 brake-shoes 11 to come into contact with the wheels, thereby applying the brakes to assist in stopping the vehicle. The brake-beam 10 is guided upon the hounds 1 by means of suitable guide members 16, the latter comprising  
10 U-shaped rods attached to the upper sides of said hounds so as to receive the end portions of the beam 10.

In certain instances it is necessary to lock the brake-beam 10 with the shoes 11 away  
15 from the wheels, as in backing the vehicle, and for this purpose lock means is utilized which consist principally of a transverse shaft 17, mounted upon the extensions 4 of the hounds 1 and provided between its ends  
20 with cranks 18. The shaft 17 is provided at one end with a lever 19, by which it may be actuated in order to rock the shaft to cause the cranks or rocker members 18 to engage the members 7 of the tongue 5. The mem-  
25 bers 7 are provided upon their upper sides with a plurality of transverse recesses 20, adapted to receive the members 18 of the shaft 17 in order that the tongue may be locked positively from any rearward sliding  
30 movement upon the member 4. The lock means aforesaid is applied usually in backing the vehicle and is also used when the vehicle is moving down grade, if necessary. A spring 21 coöperates with the lever 19 to normally  
35 force the members 18 of the shaft 17 in engagement with the members 7. A hook 22, however, is adapted to engage the lever 19 to hold the cranks 18 away from the members 7 and permit free and automatic operation of  
40 the brake-beam 10.

Having thus described the invention, what is claimed as new is—

1. In a vehicle, the combination of a supporting-truck, an axle thereon, wheels, a brake-beam movably mounted upon the truck, shoes 45 secured to said brake-beam, springs connecting the brake-beam with the axle, a draft-tongue having sliding connection with the truck, levers pivoted to the truck and having an end portion thereof in engagement with  
50 the brake-beam, connections between the opposite ends of the levers and the rear end of the tongue, a shaft mounted transversely of the truck, cranks projected from the shaft between its ends, and a lever extending from  
55 one end of the shaft, the tongue being provided with a plurality of transverse recesses to receive the cranks of the shaft when the latter are engaged with the tongue.

2. In a vehicle, the combination of a sup- 60 porting-truck, an axle thereon, wheels, a brake-beam movably mounted upon the truck, shoes secured to said brake-beam, means normally tending to hold said shoes in engagement with the wheels, a draft-tongue having sliding con- 65 nection with the truck, levers pivoted to the truck and engaging the brake-beam adjacent the ends thereof, connections between said levers and the rear end of the tongue, a shaft mounted transversely of the truck, engaging 70 members projected from the shaft for coöperation with the tongue, and means for actuating the shaft.

In testimony whereof I affix my signature in presence of two witnesses.

CLAUDE M. MARCOM. [L. S.]

Witnesses:

A. K. PALLARD,  
T. A. HAM.