

(No Model.)

J. K. P. TIMMONS.  
VEHICLE BRAKE.

No. 375,397.

Patented Dec. 27, 1887.

Fig. 1.

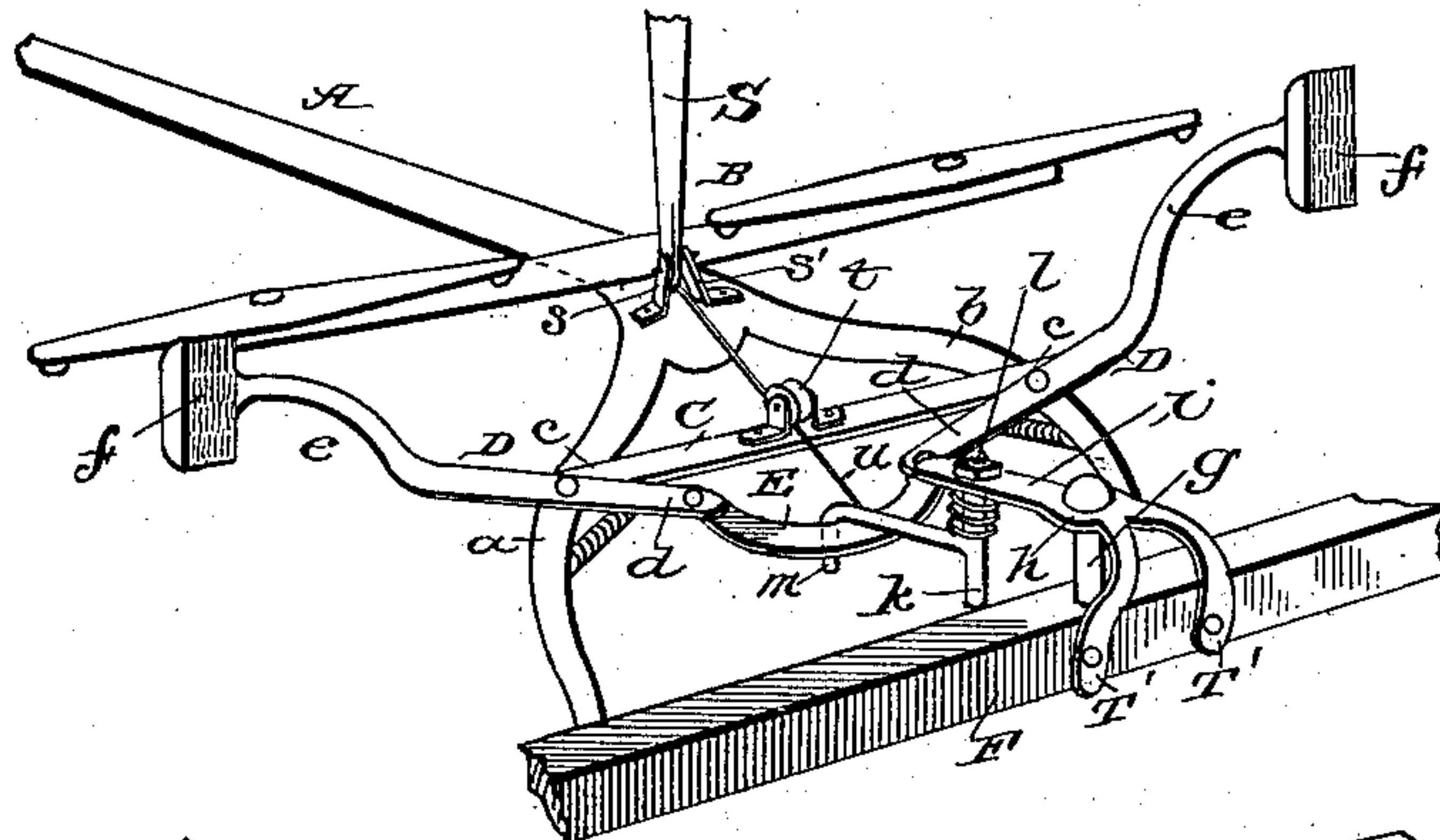


Fig. 2.

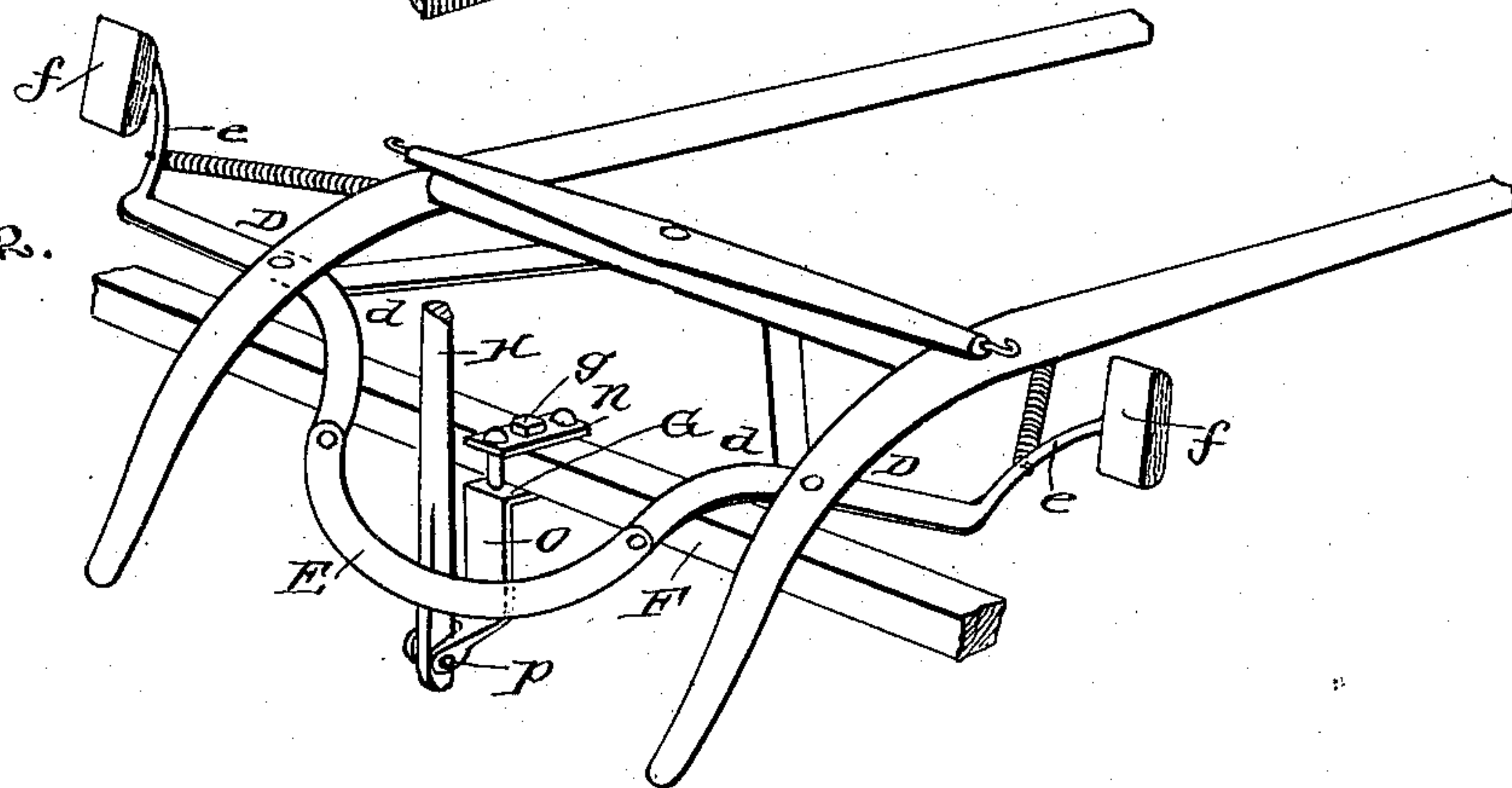


Fig. 3.

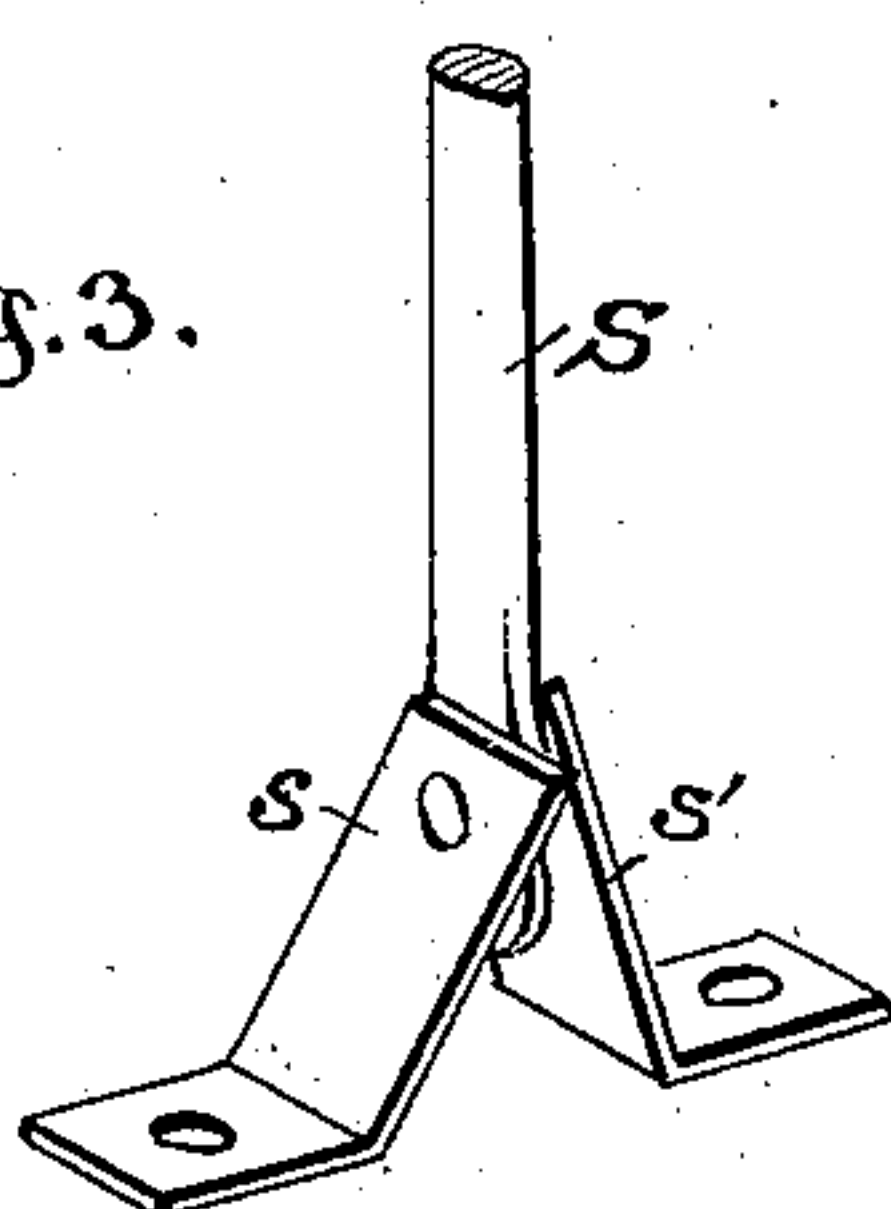
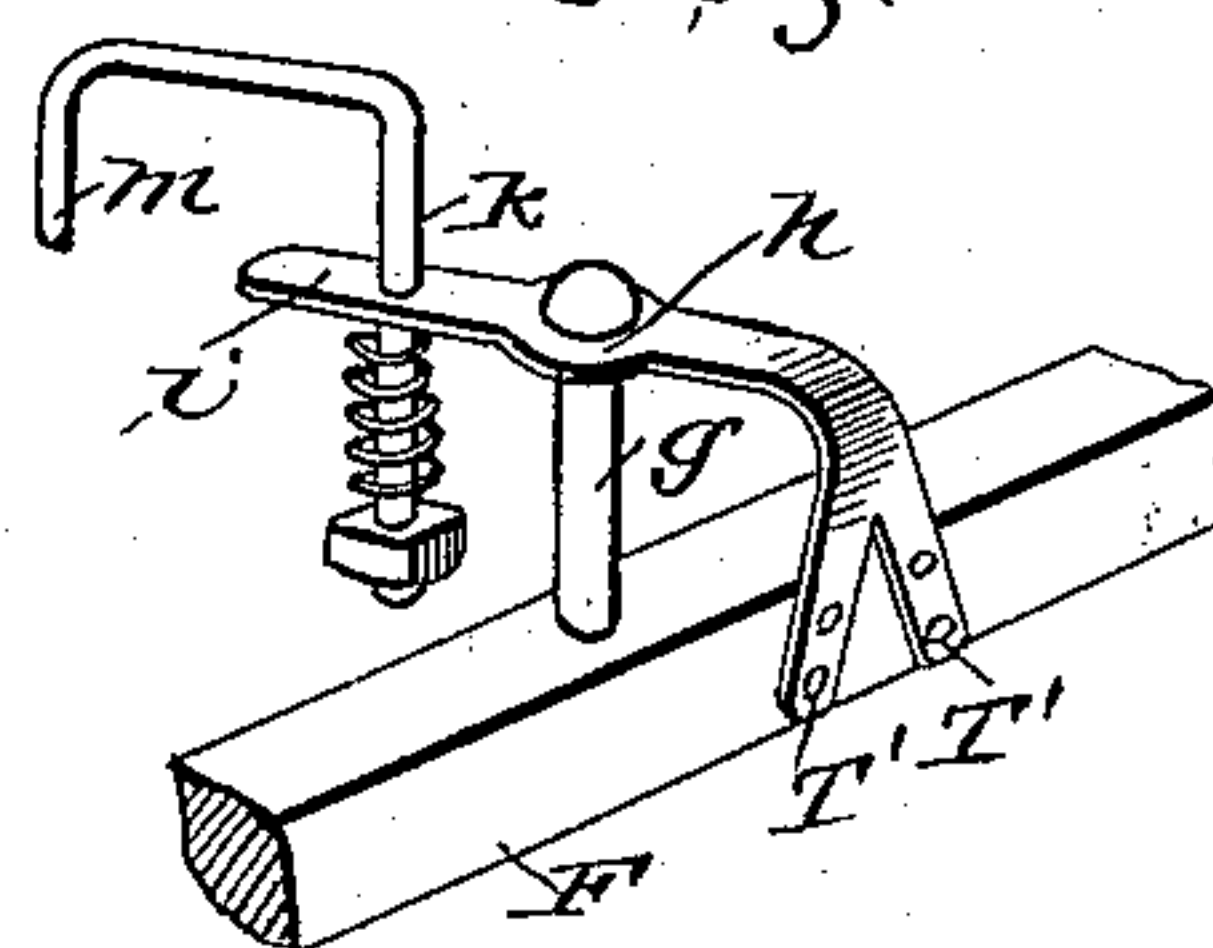


Fig. 4.



Witnesses

Joe. A. Ryan  
millionaire

Inventor

James K. P. Timmons.

By

C. A. Snow & Co.

Attorney



# UNITED STATES PATENT OFFICE.

JAMES K. P. TIMMONS, OF TIMMONS, TENNESSEE.

## VEHICLE-BRAKE.

SPECIFICATION forming part of Letters Patent No. 375,397, dated December 27, 1887.

Application filed August 26, 1887. Serial No. 247,968. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES K. P. TIMMONS, a citizen of the United States, residing at Timmons, in the county of Murray and State of Tennessee, have invented a new and useful Improvement in Vehicle-Brakes, of which the following is a specification.

This invention has reference to brakes for vehicles; and it consists in the improvements hereinafter described, whereby the general construction of the brake is simplified and its efficiency of operation increased.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of a single tongue and adjacent parts having my improvements combined therewith. Fig. 2 is a perspective view showing the application of the improved brake to a construction where a pair of shafts are used. Fig. 3 shows the lever arrangement for applying the brake. Fig. 4 is a detail view of the retaining-hook of slightly-different construction.

By referring to Fig. 1, it will be seen that the tongue A carries the usual doubletree arrangement, B, back of which extends the diverging hounds *a b*. A transverse bar, C, is secured on the hounds, and has its end portions, *c*, extending at either side of said hounds, and to each of which is pivoted the central portion of a bent brake-lever, D, the inner portion, *d*, of which extends substantially parallel with the bar C, while its outer portion, *e*, is curved and carries at its extremity a brake-shoe, *f*. A curved link, E, is pivotally connected at its ends to the inner ends of the brake-levers.

The front axle, F, carries at its upper side the king-bolt *g*, and this king-bolt *g* is embraced by the curved portions *h* upon an arm, *i*, which extends horizontally from the said bolt, the rear portion of said arm being bifurcated to embrace said bolt, as stated, and then terminating in downwardly-curved members *T' T'*, which are secured at the rear of the axle.

The arm *i* is provided with a vertical perforation, in which is hung a vertical member, *k*, of a catch device, the said member having its lower end extending a short distance below the arm *i*, and carrying a nut, *l*, at said end. The member *k* has a hook, *m*, which extends out integrally from said member. A coiled

spring is interposed between said hook and arm *i* and tends to hold the hook down under the arm. Now, when said link E is moved rearwardly, the brake-levers will be operated to throw their shoes away from the wheels, and can be held in such disengaging position by rotating the member *k* in its bearing to cause the hook to take over and engage the link. For positively releasing said brake-levers I have provided the construction shown in Fig. 2, wherein the clip *n*, upon which the king-bolt is mounted, carries at its lower side a plate, G, which has a part, *o*, depending below the axle, and then extends out horizontally, where it is bifurcated, as shown. The bifurcated portion is perforated transversely for the passage of a bolt, *p*, upon which is mounted the lower end of a hand-lever, H. This lever is designed to bear against the foot of the curved link to move so as to operate the brake-levers.

From the foregoing it will be readily seen that the devices are simple, easily applied, and can be readily applied to existing vehicles without any difficulty.

The lever arrangement for applying the brake is that shown in Figs. 1 and 3, wherein two metallic plates, *s s'*, are secured on the tongue or forward portion of the hounds, so as to form a bracket, in which is pivoted a lever, S. The plates are inclined in opposite directions, so as to form braces. Upon the cross-bar C is located a pulley, *t*. A rope or chain, *u*, is connected to the link E, and passes around said pulley *t*, and is connected to the lower end of the lever. This arrangement permits the lever to be moved to its limit in one direction, so that its position will bind it to retain the lever and hold the brakes against the wheels. The extreme movement of the lever in the opposite direction will also hold the lever and serve to maintain the brakes in a disengaged position.

I claim—

1. The combination, in a vehicle-brake, of the tongue or shafts, the brake-levers *e*, the link connecting the inner ends of said levers, means to operate the levers, and the spring-depressed vertically-movable swinging hook to engage the link, substantially as described.

2. In a vehicle-brake, the combination of the tongue or shafts and their hounds, of piv-

oted brake-levers, a link pivotally connecting their inner ends, means for operating said link, and a catch for retaining said link, substantially as described.

5 3. The combination, in a vehicle-brake, of the tongue or shafts and levers, and hounds, brake-levers pivotally connected at their inner ends, brake-shoes, operating means, and a spring-catch, substantially as described.

10 4. The combination, in a vehicle-brake, of the tongue or shafts, hounds, pivoted brake-

levers, front axle having king-bolt and a horizontal arm extending therefrom, and a spring-actuated hook bearing in said arm, substantially as described. 15

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

JAMES K. P. TIMMONS.

Witnesses:

WILLIAM PAXTON,

CHAS. W. HANDY.