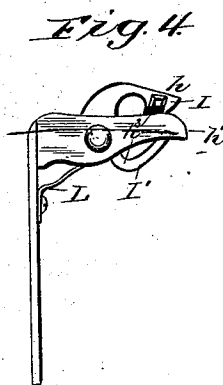
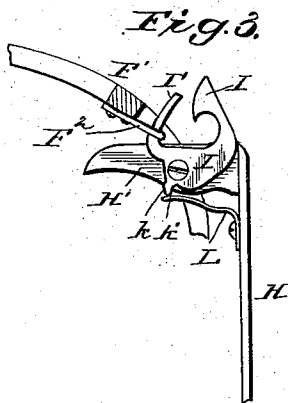
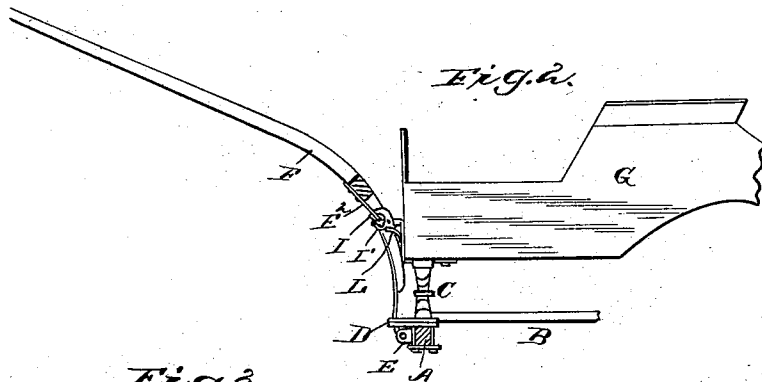
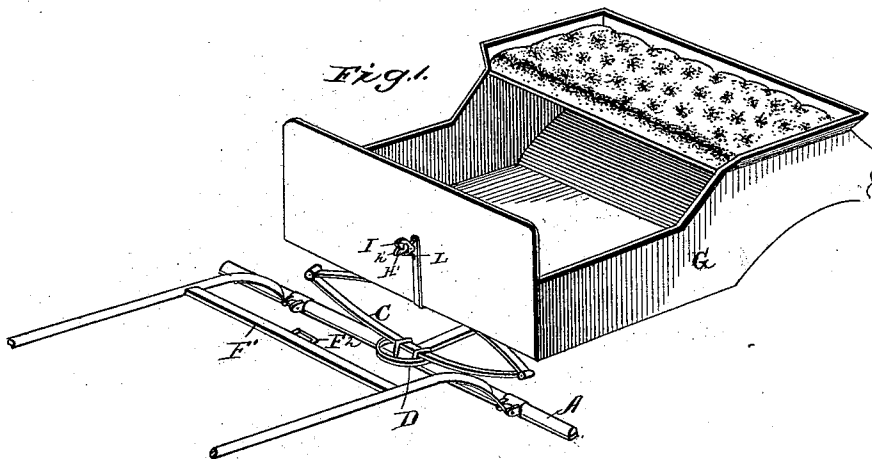


(No Model.)

S. D. WEBB & G. T. JACOBS.
THILL SUPPORT FOR VEHICLES.

No. 512,344.

Patented Jan. 9, 1894.



Witnesses
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UNITED STATES PATENT OFFICE.

SAMUEL D. WEBB AND GEORGE T. JACOBS, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNORS OF ONE-HALF TO ANDREW B. WEBB AND REUBEN COX, OF SAME PLACE.

THILL-SUPPORT FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 512,344, dated January 9, 1894.

Application filed April 12, 1893. Serial No. 470,097. (No model.)

To all whom it may concern:

Be it known that we, SAMUEL D. WEBB and GEORGE T. JACOBS, of Washington, in the District of Columbia, have invented new and useful Improvements in Shaft-Supports, of which the following is a full and exact description, reference being had to the accompanying drawings, making part of this specification.

Our invention relates to that class of devices used for holding shafts of vehicles elevated when the same are not in use and known as shaft supports; and our invention consists in a novel construction of suspending device adapted to positively lock and hold the shafts elevated, acting automatically in the action of raising the shafts and to unlock and release the same automatically when the shafts are to be lowered.

Our invention further consists in a novel construction of oscillating locking hook with means to control its movements, and a throw off arm acting to release the shafts from engagement with the locking hook.

It further consists in the combination with a loop or bar adapted to be rigidly secured to the cross bar of the shafts, of an oscillating hook adapted to be connected to the vehicle body provided with a stop to engage the hook support, and a throw off or releasing arm rigidly connected or formed integral with the hook, acting to guide the bar on the shafts out of the path of the hook and by the engagement of the bar therewith to return the hook to its position of rest or into position to act when it is desired to again suspend the shafts, and to certain novel features in the construction and arrangement of parts all as hereinafter set forth.

In the accompanying drawings Figure 1 is a perspective view of the front part of a vehicle showing the manner of applying the device thereto. Fig. 2, is a side elevation of the front of a vehicle showing the shafts elevated.

Fig. 3, is a side elevation of the locking device showing the position it assumes when the shafts are being lowered. Fig. 4, is a similar view taken from the opposite side to

Fig. 3, with the parts in the position of rest or that assumed when ready to engage the shafts.

A, represents the front axle of the vehicle; B, the reach; C, the front spring; D, the fifth wheel and E, one of the clips to which the shafts F, are connected, and G, the vehicle body all of which parts are constructed in any usual or preferred manner.

To the cross bar F', of the shafts, and centrally thereof, is connected a loop F², which is secured to the lower face of the cross bar by means of screws or bolts passing through the arms thereof and in such position that the loop portion shall extend out slightly in rear of the bar and which loop will be hereinafter referred to.

H is a bar or bracket which has projecting from it at or near the upper end an arm H', and pivotally secured to the arm H', is a head I, which is mounted on the arm to oscillate, the forward movement of which is limited by means of a lug or projection h, extending from the side face thereof engaging the upper face of the arm H', as shown in Fig. 4, and the backward throw or movement being limited by the engagement of the rear end of the head with the bracket.

Extending from the head on one side of the pivot is a hook portion I, and extending from the opposite side of the pivot is what is termed a throw off or release arm I', which curves up in front of the hook portion forming in connection with the hook portion a substantially angular slot in the head. The forward end of the arm H' is made in curved form as shown at h', which curve is formed substantially in the arc of a circle of which the thill bolt is the center, and the end of the hook portion is formed on a reverse curve, and the parts are located in such position relatively to each other that when the head is at the extreme forward throw the two shall form a V shaped notch, with the hook portion closed by the arm as shown in Fig. 4.

Projecting from the head on the opposite side to the arms is a locking lug having locking faces k, k', formed at right angles to each

other, and secured to the face of the bracket is a flat spring L, bent forward to engage the locking faces, the one *k*, when the head is thrown forward and the other *k'*, when thrown backward and held under the action of said spring in being oscillated forward and back consequent to the heel or point of angle at the junction of the locking faces riding over the spring, or in the spring passing from engagement from one to the other of said faces and acting in such manner as to retard the movement of the head sufficiently to allow the loop to escape from the hook and then act to throw the head forward into its position of rest for reaction. The device thus constructed is connected to the vehicle so that the arm H' shall project out from the dash board as shown in Fig. 1. and in the position of rest. Now when it is desired to elevate the shafts and hold them in such elevated position the attendant takes hold of the shafts raising the same and as they are moved backward the loop D, traveling in the path of the curved face of the arm H', is guided thereby into the notch and acts against the curved face of the hook portion of the head, raising the same sufficiently to allow the loop to be engaged by the hook when by releasing the shafts the loop will draw against the hook and by the weight of the shafts hold the head in its forward position and lock the shafts against any downward pull or strain. When it is desired to lower the shafts the same are grasped and forced backward by which action the head is also thrown backward and into the position shown in Fig 3, when by bringing the shafts forward the loop will travel out of the path of the hook and into engagement with the throw off arm and by a further movement forward act on said arm and cause the hook portion to be drawn forward with it allowing the loop to ride or be guided from off the arm, the head being carried completely forward by the action of the spring passing from one locking face to the other, the spring also serving when the parts are at rest to prevent rattling. The lower face of the lug *h*, is made of wood, rubber or other soft material *h*³, which acts to prevent the two metals coming in contact and thereby prevent rattling in traveling over rough roads and more especially so should the spring become loose.

Having now described our invention, what

we claim as new, and desire to secure by Letters Patent, is—

1. In a shaft supporting device a bracket adapted to be connected with the vehicle body, a hook pivoted and adapted to oscillate relative thereto, a loop or bar adapted to be connected with the shafts, substantially as described whereby the loop or bar is adapted to be engaged by the hook or bracket to hold the shafts elevated and to act upon the hook to oscillate the same to release the shafts from engagement with the hook as set forth.

2. In a shaft support an oscillating head provided with a hook arm, and with a throw off arm, in combination with a loop or bar connected with the shafts adapted to be engaged by the hook as the shafts are raised to lock the same, and to engage the throw off arm in depressing the shafts to release the same from the hook, substantially as and for the purpose set forth.

3. In a shaft support, the combination with a loop or bar adapted to be connected with the cross bar of the shafts, of an oscillating hook mounted on an arm or bracket adapted to be connected with the vehicle body, a stop on the hook to engage the arm or support, and a throw off arm rigidly connected with the hook, arranged and operating substantially in the manner and for the purpose set forth.

4. In a shaft support, an oscillating hook mounted on a bracket extending from the vehicle body, a throw off arm formed integral with the hook, a stop on the hook to engage the bracket, a spring adapted to engage stop faces on the oscillating hook, and an arm or loop connected with the cross bar of the shafts, all combined and operating substantially as and for the purpose set forth.

5. In a shaft support, the arm or bracket having the oscillating hook mounted thereon in combination with a stop on the hook provided with a cushioned face to engage the arm or bracket, substantially as and for the purpose set forth.

In testimony whereof we have hereunto set our hands this 11th day of April, A. D. 1893.

SAMUEL D. WEBB.
GEORGE T. JACOBS.

Witnesses:

R. H. TAYLOR,
R. B. CASON.