(No Model.)

J. W. McHENRY.

HORSE HITCHING DEVICE.

No. 520,608. Patented May 29, 1894.

Fig. 1.

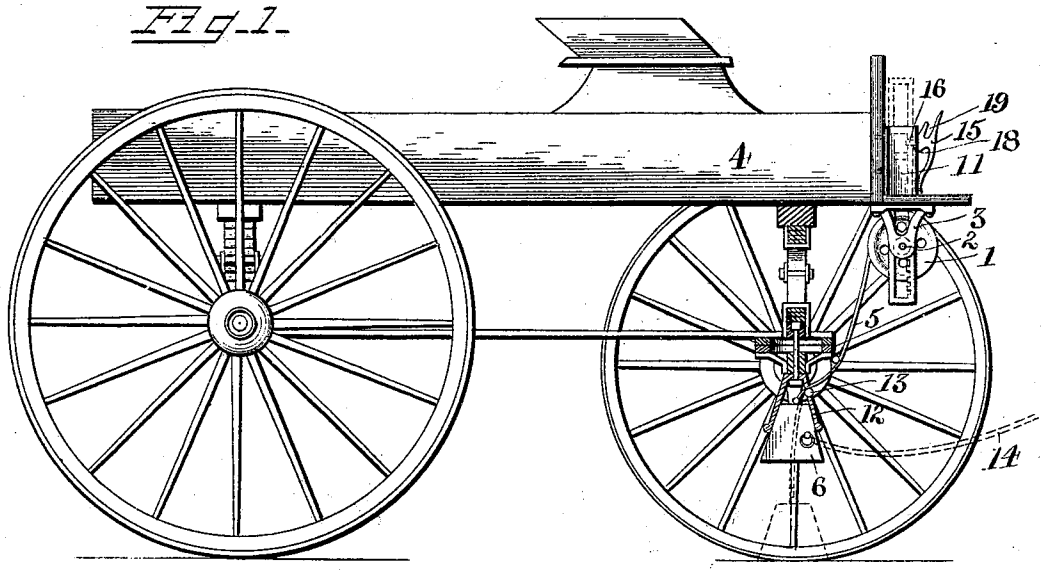


Fig. 2.

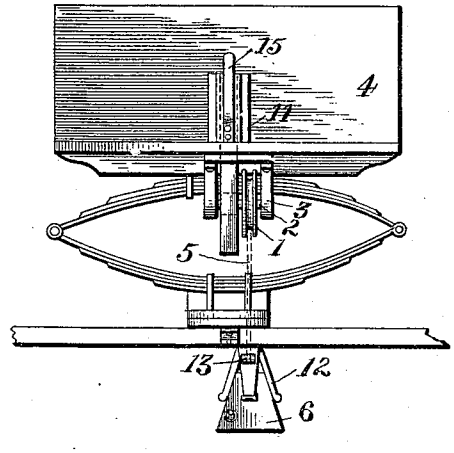
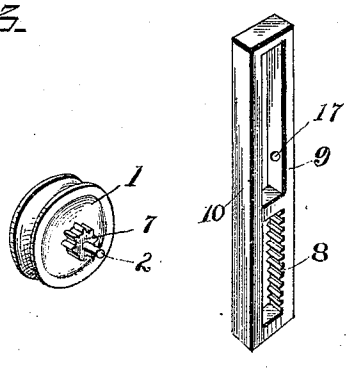


Fig. 3.



Witnesses
Howard D. Orr.
[illegible] Shepard

James W. McHenry
Inventor
by
J. R. Littell
his Attorney

THE NATIONAL LITHOGRAPHING COMPANY.
WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JAMES W. McHENRY, OF ASPEN, COLORADO, ASSIGNOR OF ONE-HALF TO WALTER S. RITCHIE, OF SAME PLACE.

HORSE-HITCHING DEVICE.

SPECIFICATION forming part of Letters Patent No. 520,608, dated May 29, 1894.

Application filed July 31, 1893. Serial No. 482,008. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. McHENRY, a citizen of the United States, residing at Aspen, in the county of Pitkin and State of Colorado, have invented a new and useful Weight-Lifting Attachment, of which the following is a specification.

My invention relates to weight lifting devices of the class designed for the operation and manipulation of hitching weights, also termed, halter or rein weights.

This invention contemplates the provision of a simple, inexpensive, and serviceable attachment adapted for application to vehicles for the purpose of temporarily holding the horse, and whereby such weight may be elevated and sustained in a pendent position beneath the wagon-body when the same is not in use; and furthermore, to provide means whereby the weight may be automatically released by draft upon the driving reins produced by the pull or movement of the horse in starting.

Further objects and advantages of my improvement will appear hereinafter, as the nature of the invention is more fully explained herein, and the novel features thereof are indicated in the appended claims.

Referring to the drawings forming a part of this specification:—Figure 1 is a view of a weight-lifting attachment applied in operative position to a vehicle, the latter being shown in side elevation, and disclosing the weight elevated in full lines, and released in dotted lines. Fig. 2 is a front view of Fig. 1. Fig. 3 is a detail view in perspective of the attachment, with the parts or members thereof disassociated.

Similar numerals of reference designate like or corresponding parts in all the views of the drawings.

1, represents a sheave or pulley carried by a suitable shaft, 2, which is rotatably mounted in bearings formed in the pendent brackets or hangers, 3, secured to the under surface of the bottom of the vehicle body, 4, or to any other stationary part. To this sheave or pulley is fixed one end of a flexible connection, 5, of cord, chain, or similar material in position to be reeled thereupon, and to the other end of the connection is attached the weight 6. Secured to or formed integrally with the sheave is a pinion or spur-wheel, 7, with which meshes a reciprocatory rack, 8, comprising parallel connected side-bars, 9, and 10, the former of which is toothed to engage the pinion. This rack operates in a fixed guide or sheath, 11, which is attached permanently to a fixed part of the vehicle.

12 designates a weight-holder or receptacle of suitable shape, preferably conical, which is fastened to the axle or other part of the running gear in position to receive the weight when elevated, the flexible connection, 5, extending through a suitable guide-opening, 13, therein. The weight is attached also to a halter or hitching-strap, 14, connected to the bridle bit.

In connection with the rack, I employ a locking device, consisting of a spring-tongue, 15, which is fitted at one end to the guide or sheath, 11, and is provided at its free end with a detent, 16, fitting in a perforation, 17, in the front side of the said guide or sheath and adapted to engage a socket, 18, in the rack when such socket is brought into registration therewith by the depression of the rack. Said spring-tongue carries a rein-holder, 19, which is formed by bifurcating the free end of the tongue, as shown.

Normally the weight is in the elevated position shown in full lines in Fig. 1, the rack being depressed and held in place by means of the locking device. To lower the weight into holding position, the catch is released, thus allowing the rack to ascend; and to return the weight to normal elevated position, the rack is depressed, thus revolving the sheave and reeling the flexible connection there-around.

It will be clear that although I have shown the attachment applied to the dash or front end of the wagon-body and arranged to cause the rack to be reciprocated vertically, I do not limit myself to this particular disposition of the parts, as various modifications thereof may be resorted to, in adapting the attachment to various types of vehicles, without

departing from the spirit or scope of the invention, or sacrificing any advantages attained by the same.

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

1. In a device of the class described, the combination, with a weight, of a sheave connected thereto, a pinion carried by the sheave, a reciprocating rack meshing with said pinion, and a spring-pressed rein-operating locking device for engaging the rack, substantially as described.

2. In a device of the class described, the combination, with a weight; of a sheave connected thereto; a reciprocating rack; connections between the rack and the sheave; and a spring-tongue provided with a detent to engage a socket in the rack, and carrying a rein-holder, substantially as described.

3. In a device of the class described, the combination, with a weight; of a sheave connected thereto; a reciprocating rack; connections between the rack and the sheave; a guide or sheath for the rack; and a spring locking device carried by the guide or sheath, and engaging the rack, substantially as described.

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

JAS. W. McHENRY.

Witnesses:
J. F. GOODING,
C. A. GILL.