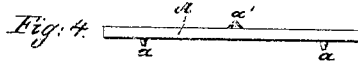
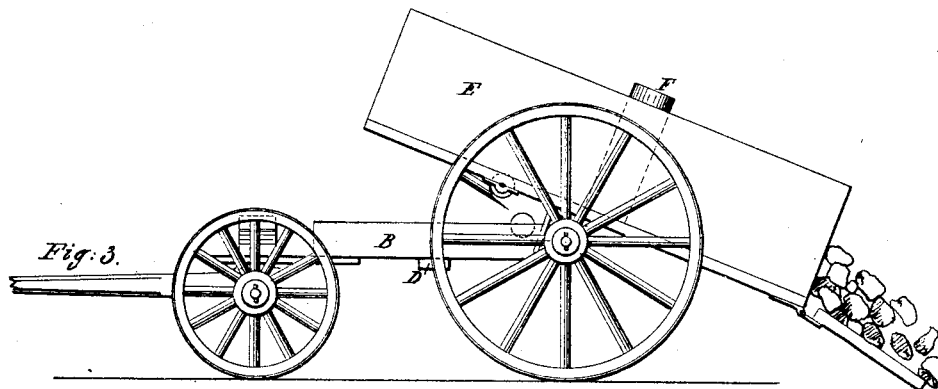
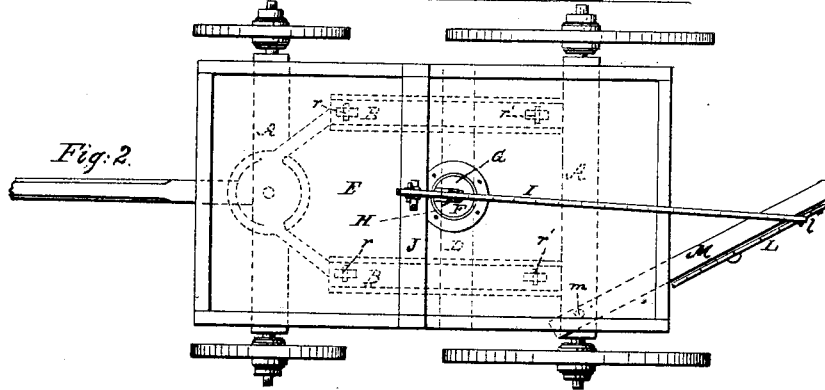
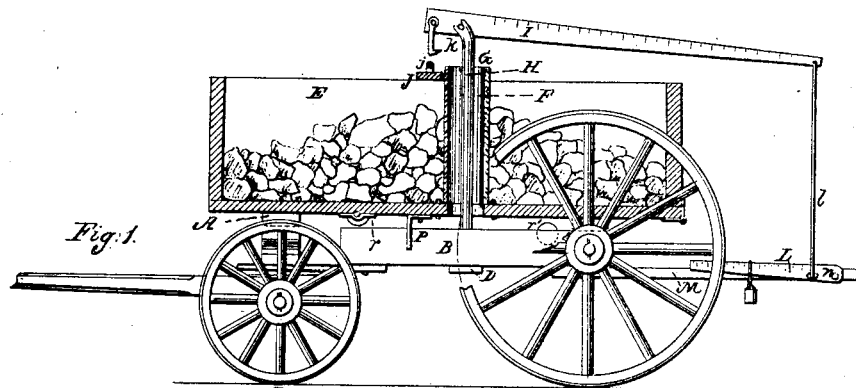


G. A. WILCOX.

Wagon Scales.

No. 110,100.

Patented Dec. 13, 1870.



Witnesses:  
J. Munday  
L. L. Coburn.

Inventor:  
G. A. Wilcox.

# United States Patent Office.

GEORGE A. WILCOX, OF CHICAGO, ILLINOIS.

Letters Patent No. 110,100, dated December 13, 1870.

## IMPROVEMENT IN WEIGHING-WAGONS.

The Schedule referred to in these Letters Patent and making part of the same.

I, GEORGE A. WILCOX, of Chicago, in the county of Cook and State of Illinois, have invented certain Improvements in Scale-Wagons, of which the following is a specification.

My invention relates to a wagon constructed so that the contents may be weighed by a scale attached thereto.

The box of the wagon is so constructed that, at pleasure, it may be hoisted clear of the bolsters and running-gear by means of a lever or "steelyard," which has its fulcrum in an upright standard, said standard being supported upon the running-gear of the wagon, and passing up through a tube or well-hole vertically at about the center of the wagon-box, as will presently be set forth more explicitly.

In the accompanying drawing, which, together with the letters and figures of reference marked thereon, form part of this specification—

Figure 1 is a side elevation of a wagon constructed after my invention.

Figure 2 is a plan or top view of same.

Figure 3 exhibits a side elevation of same in the act of dumping or discharging the load.

Figure 4 is a side view of the detachable or supplementary bolster hereinafter referred to.

### General Description.

Upon the axle-trees of the wagon I place the detachable bolster A, having upon its under side two pins or dowels, *a a*, and at the center of the upper side a conical pivot, *a'*. These bolsters are two in number—one for the front and one for the rear axle.

Attached to the rear axle are the two parallel reaches B B, extending forward nearly to the front axle, where they meet and are secured to a prolongation of the fifth-wheel C.

At about the center of the wagon is the transverse support or beam D, which is firmly attached to the reaches B B.

E is the wagon-box. At about the center thereof is the vertical tube or well-hole F, the purpose of which is to surround an opening, G, through which passes the vertical standard H. This standard rests in a socket in the beam D.

The said standard has, at its upper extremity, a crotched bearing for the pivot or fulcrum *i* of the steelyard I.

J is a cross-piece, attached to the wagon-box, carrying the link or staple *j*.

The steelyard I has, at its short arm, a hook, *k*, adjusted to catch under the link *j*.

The wagon-box may be lifted clear of the running-gear by means of this lever or steelyard I, and the load may be weighed by a plumb or weight arranged to slide upon the said steelyard. But, as the weights

are likely to be great, I arrange a second lever, L, of the second class, connected to the lever I by the rod *l*. Upon this lever L I make a graduated scale and place the plumb or weight.

M is a swinging support, pivoted to the under side of the rear axle at *m*, and carrying the lever L, pivoted, at *n*, near its free extremity.

When not in use, this support, after detaching the rod *l* from the lever L, may be swung around under the axle out of the way, carrying the lever L with it.

After the load is weighed, and while the box still swings clear of the running-gear, I remove the detachable bolsters A A and allow the box to come down until it rests upon the rollers *i i'*, one pair of which, *i*, is attached to and has a bearing upon the box, while the other pair, *i'*, has a bearing upon and is attached to the reaches B B.

These reaches B B are grooved at their upper surface, to afford a guideway for the rollers *i*.

The vertical standard H may now be removed, and with it the steelyard I.

The box E, containing the load, may be thus easily rolled back until the stop P catches against the rear axle, when the weight of the load will ordinarily be sufficient to tilt it and discharge the contents, as seen clearly at fig. 3.

One of the principal advantages of my scale-wagon lies in the fact that, when not actually engaged in weighing, there is no wear upon the weighing apparatus.

I dispense with the complicated system of balance-levers, and, consequently, with the liability of breakage and wear in the pivoting attendant thereon.

### Claims.

Having thus fully described my invention,

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

1. The arrangement of the lever or steelyard I, with its attachment, to the wagon or cart-box at a point above the center of gravity of the same, for suspending it for weighing, as specified.

2. The combination of the wagon-box E, having the tube or well-hole F, with the standard H, supported upon the running-gear, and the lever or steelyard I, substantially in the manner and for the purpose set forth.

3. The combination of the wagon-box E, the tube F, standard H, steelyard I, lever L, and pivoted bar M, substantially as and for the purpose set forth.

GEORGE A. WILCOX.

Witnesses:

J. W. MUNDAY,  
J. H. IRWIN.