

No. 654,329.

Patented July 24, 1900.

G. SCHNEIDER.
COMBINED SCALE AND WAGON.

(Application filed Oct. 21, 1899.)

(No Model.)

2 Sheets—Sheet 1.

Fig.1.

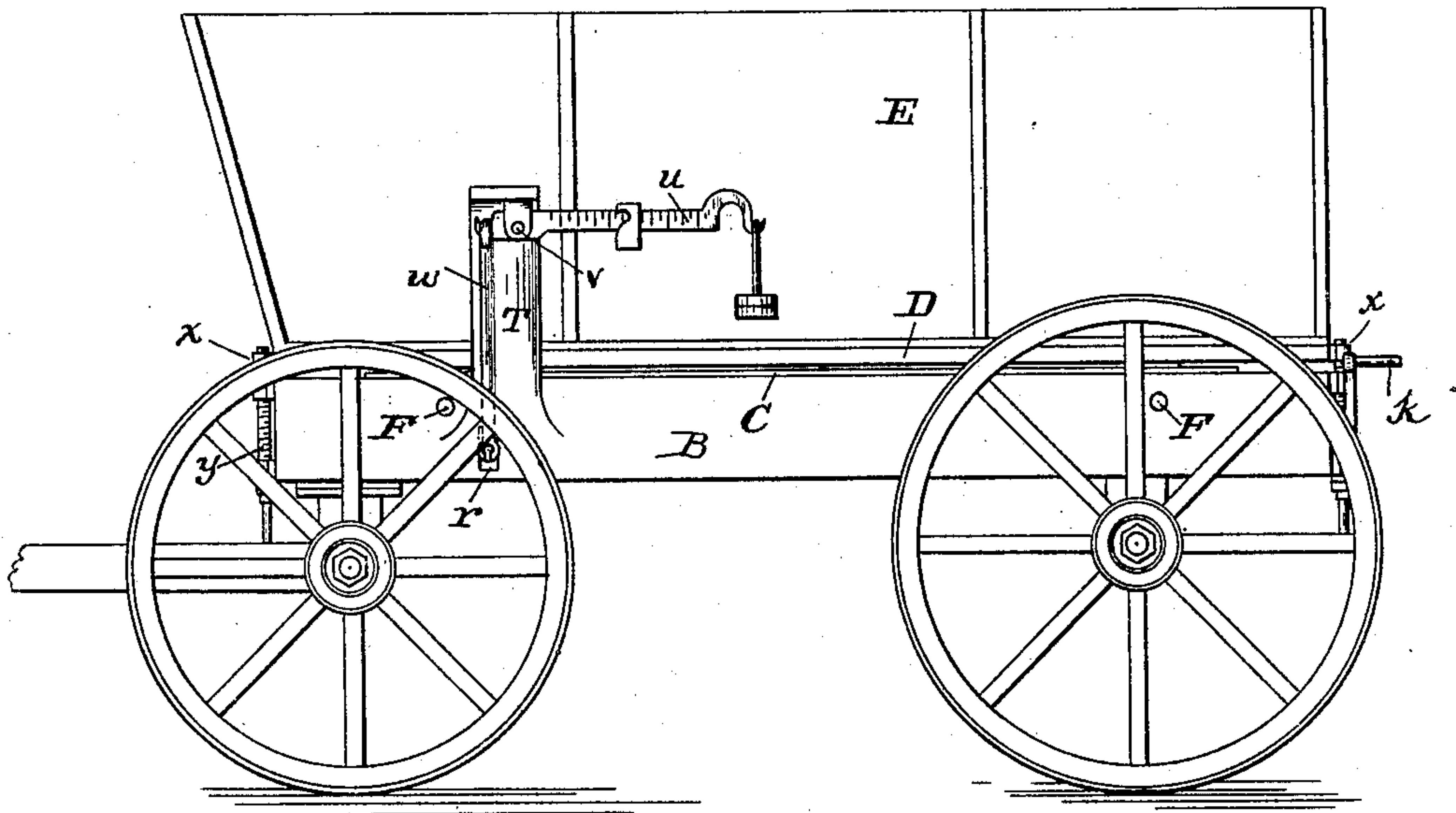
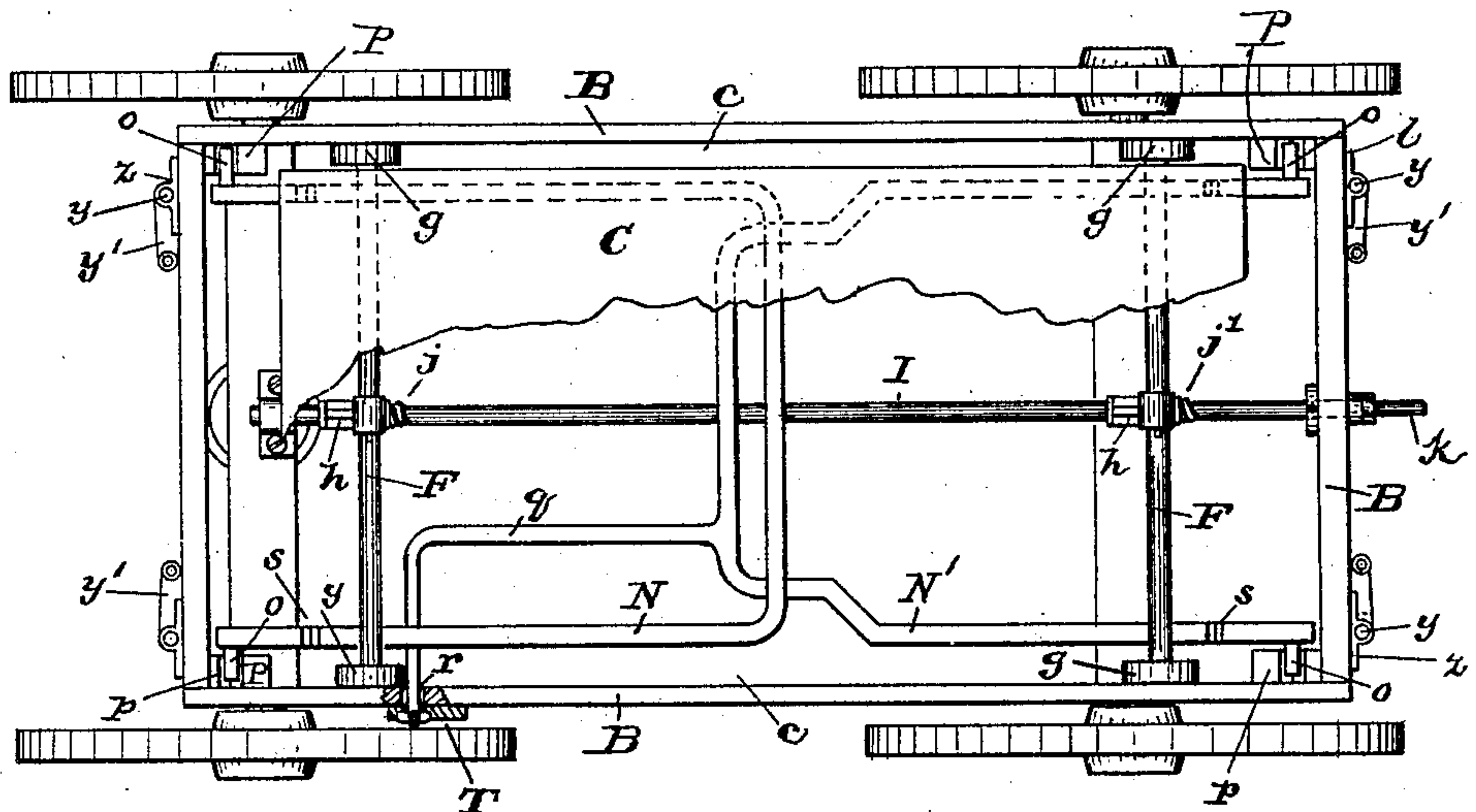


Fig. 2.



WITNESSES:—

Wm. H. Vail.
Charles Vietsch.

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Fig. 3.

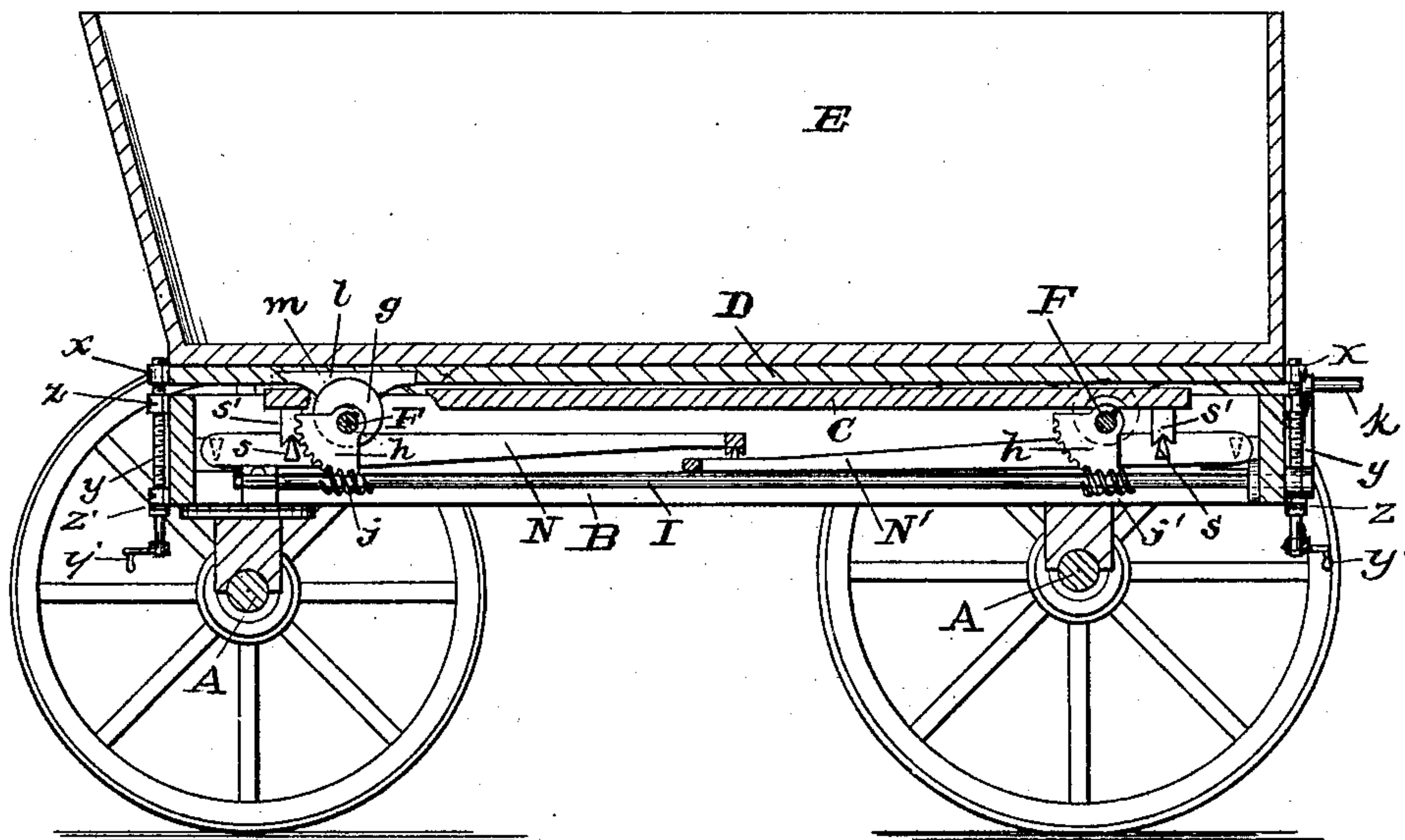
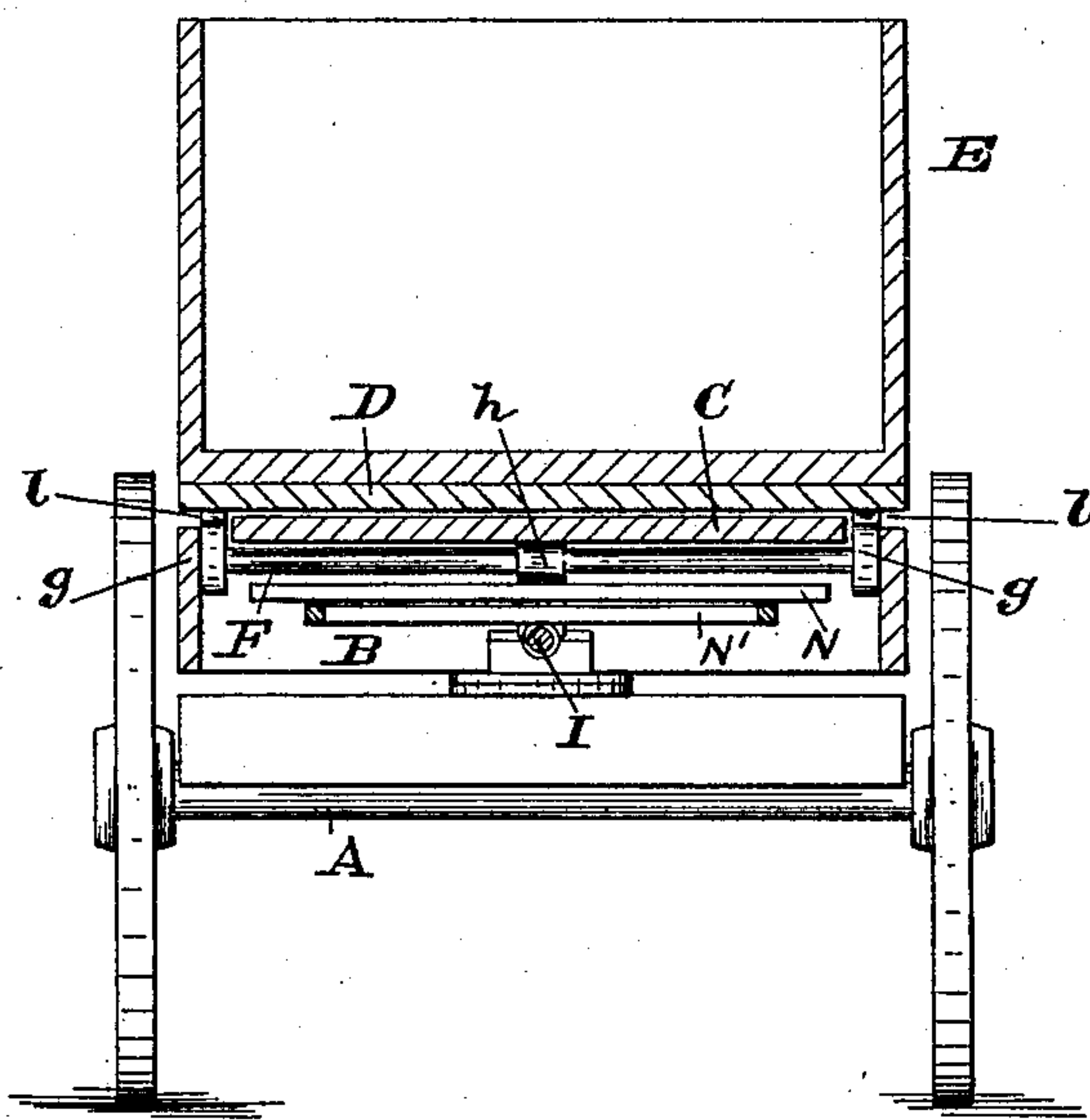


Fig. 4.



WITNESSES:—

Wm. H. Vail.
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INVENTOR:—

George Schneider
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ATTORNEY.

UNITED STATES PATENT OFFICE.

GEORGE SCHNEIDER, OF BALTIMORE, MARYLAND, ASSIGNOR OF TWO-THIRDS TO LEON FERRANDINI AND HESS GREENBAUM, OF SAME PLACE.

COMBINED SCALE AND WAGON.

SPECIFICATION forming part of Letters Patent No. 654,329, dated July 24, 1900.

Application filed October 21, 1899. Serial No. 734,307. (No model.)

To all whom it may concern:

Be it known that I, GEORGE SCHNEIDER, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in a Combined Wagon and Scale, of which the following is a specification.

This invention relates to an improved construction for a combined wagon and scale. The wagon of course may be used for any purpose; but it is intended to be used as a coal-delivery wagon.

The invention will first be described in connection with the accompanying drawings and then pointed out in the claims.

Figure 1 is a side elevation of the wagon. Fig. 2 is a top plan of the wagon, the box or body being removed. Fig. 3 is a vertical longitudinal sectional elevation of the wagon, showing the parts in position for traveling. Fig. 4 is a vertical cross-section of the wagon.

The letter A designates the axles, and B a rectangular frame mounted thereon. A scale-platform C has position within the frame B, but is narrower than the frame, an open space *c* being left at each side of the scale-platform and between it and the side wall of the frame. An elevator-platform D is above the said frame and entirely covers it. The box or body E of the wagon in the present instance is mounted on the elevator-platform D.

The weighing mechanism is carried in the rectangular frame B, and when the platform D and box E are in the lowered position the load may be weighed. I have provided improved mechanism for slightly elevating the body and disconnecting it from the weighing mechanism and carrying it elevated while the wagon is traveling.

The elevating and staying mechanism for use when the load is being transported comprises two cross-shafts F, whose ends have bearings in the sides of the rectangular frame B. Each shaft has two eccentric cams *g*, one being at each end of the shaft and projecting up past the scale-platform in the open space *c* between the scale-platform and side wall of the frame B. At the center of each shaft is a sector-wheel *h*, keyed fast, the sector-wheel projecting downward. A longitu-

dinal shaft I extends lengthwise below the two cross-shafts and has its ends in bearings in the end bars of the frame B. This shaft I is provided with two worms *j j'*, and at the end the shaft has a crank *k*, by which it is turned. Each worm engages with one of the sector-wheels *h*.

The elevator-platform D has four brackets or plates *l* on its lower side, one being near each corner. Each plate *l* has a concave face *m*, against which the rounded edge of one of the cams *g* bears. When the parts are in position for the wagon to travel—that is, the box or body elevated off the scale mechanism—the cams *g* will have their high side upward against the plates *l* and will be held in such position by the sector-wheels *h*. In this position the platform D will be elevated and no load whatever will be resting on the scale-platform C.

It will now be seen that by turning the crank *k* the shaft I will revolve and both sector-wheels *h* will be gradually acted on by the worms until the two cross-shafts F have been turned one-quarter, which will turn all the cams simultaneously and either raise or lower the platform D, according to which way the cams are turned.

The weight of the box or body E, and of course the load it contains, is supported by the platform D.

Suitable or well-known weighing mechanism will be employed; but my present invention is not limited to any particular construction of such mechanism. In the present instance two U-shaped levers N N' are in position reversed with respect to each other. Each lever at its two extremities has knife-edge lateral pivots *o*, which set on bearings *p*, secured in the corners of the rectangular frame B. The union ends of these U-shaped levers overlap at the center of the frame, and the underneath lever N' has an arm *q*, which extends forward and curves laterally and projects through a slot *r* in the side of the frame B. Each end of the said levers N N' has on its upper side a knife-edge pivot *s*, on which bears a block *s'* on the lower surface of the scale-platform C. Thus the scale-platform is provided with four such blocks *s'*. A stand-

ard T is affixed to the sides of the frame B and projects upward on the outside of the platform D and box E. This standard has a graduated weighing lever or arm *u*, pivoted
 5 at *v* on the standard, and a vertical rod *w* connects the arm *q* on the lever N' (which arm projects through the slot in the frame B) with the said graduated weighing-lever *u*. The weight of a load may be ascertained by
 10 first lowering the platform D, so as to seat it directly upon the scale-platform C and then by using weights on the graduated lever *u* in a well-known manner. As already stated, the
 15 four cams *g* and sector-wheels *h* on the cross-shafts and the longitudinal shaft I, with the worms, constitute the mechanism for relieving the load from the scale mechanism. The load is thus carried in a slightly-elevated position. I have provided means to stay the
 20 parts firmly and securely in this elevated position while the wagon is traveling along the streets or roads. This staying mechanism consists of brackets *x*, two of which are firmly secured at each end of the platform D, each
 25 bracket having a screw-threaded hole in it. A vertical shaft *y*, partly threaded, is movable in brackets *z*, also having a screw-threaded hole, another pair of brackets *z'* having holes to receive the end of the shaft
 30 not screw-threaded, both pairs of brackets being secured to the upper and lower portion of each end of the frame B, and a crank-arm *y'* is on the lower end of each shaft. The upper ends of the screw-shafts *y* are in position to enter the threaded holes in the brackets
 35 *x* on the platform D whenever the shafts are turned to move upward. When the box or body E and the platform D have been raised by revolving the longitudinal shaft I to lift the load off the scale, the shafts *y* will
 40 be turned and connected with the brackets *x*. Thus the shafts *y* will hold the platform D firmly to the cams *g* while the wagon is traveling along the road. It will now be seen
 45 that each of the shafts *y* must be unscrewed to disconnect them from the brackets *x* pre-

vious to each weighing operation, so as to permit the descent of the wagon-body onto the scale.

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

1. In a wagon, the combination of a rectangular frame; scale mechanism and platform, C, within the frame; an elevator-platform, D, 55 above the frame and provided on its lower side with four concave-faced plates; two cross-shafts having their ends in bearings in the sides of the frame and each shaft provided with two eccentric cams which project upward 60 past the scale-platform and each cam bearing against one of the said concave-faced plates on the elevator-platform; a sector-wheel on each cross-shaft; and a longitudinal shaft, I, extending at right angles with respect to 65 the two cross-shafts and provided with worms which engage the said sector-wheels.

2. In a wagon, the combination of a rectangular frame; scale mechanism and platform, C, within the frame; an elevator-platform, D, 70 above the frame cross-shafts having their ends in bearings in the sides of the frame and each shaft provided with two eccentric cams which project upward past the scale-platform and when turned one way support the elevator-platform and when turned the other way 75 allow the elevator-platform to rest bodily on the scale-platform; a sector-wheel on each cross-shaft; a longitudinal shaft, I, extending at right angles with respect to the two cross-shafts and provided with worms which engage 80 the said sector-wheels; and vertical screws connected with the rectangular frame and entering brackets on the said elevator-platform for staying the latter and holding it firmly on 85 the cams while the wagon is traveling.

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

GEORGE SCHNEIDER.

Witnesses:

CHAS. B. MANN,
CHARLES VIETSCH.