

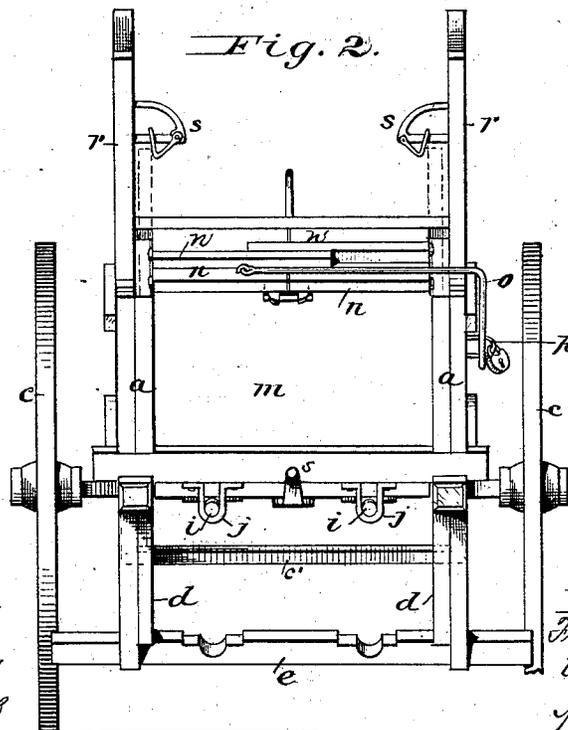
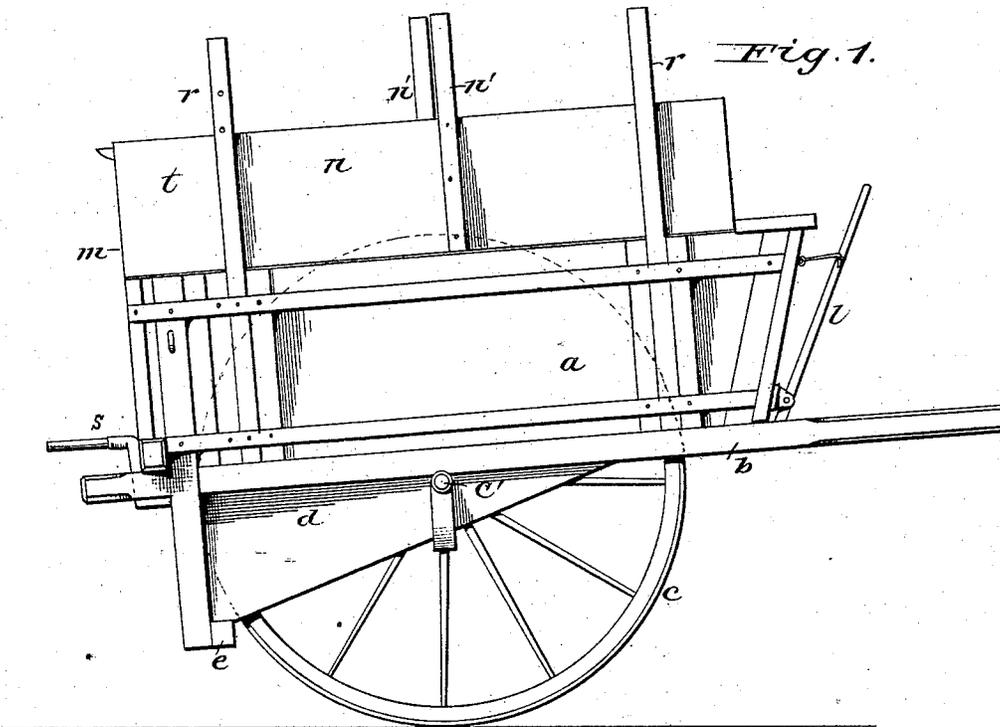
(No Model.)

2 Sheets—Sheet 1.

F. H. TRENHOLM.
Locked Dumping Cart.

No. 238,817.

Patented March 15, 1881.



Attest:
H. D. Permie,
Harry Finckel

Inventor.
Francis H. Trenholm
by his attorney
Wm. H. Finckel

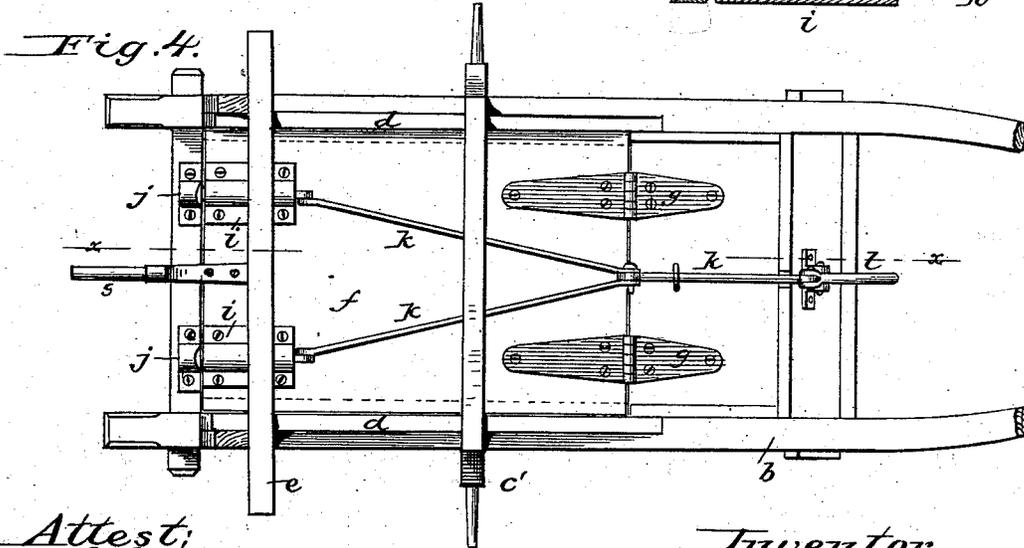
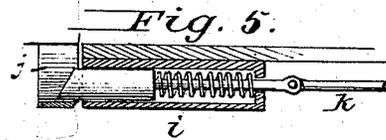
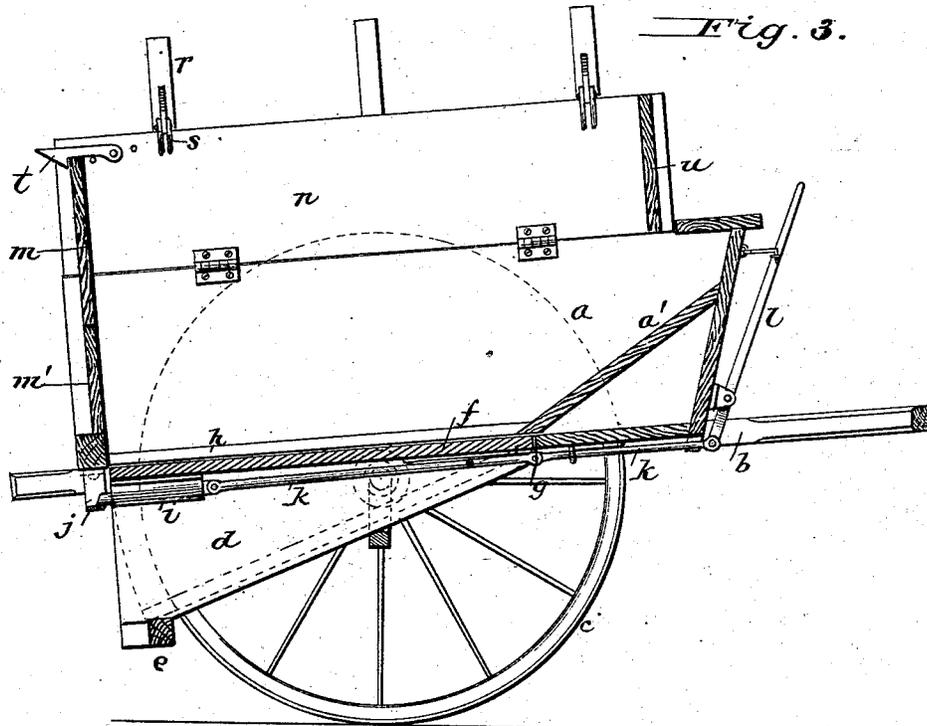
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Harry Finckel

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UNITED STATES PATENT OFFICE.

FRANCIS H. TRENHOLM, OF CHARLESTON, SOUTH CAROLINA.

LOCKED DUMPING-CART.

SPECIFICATION forming part of Letters Patent No. 238,817, dated March 15, 1881.

Application filed December 16, 1880. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS H. TRENHOLM, a citizen of the United States, residing at Charleston, in the county of Charleston and State of South Carolina, have invented certain new and useful Improvements in Locked Dumping-Carts; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to carts constructed to facilitate the safe, correct, and convenient delivery of coal, wood, or other merchandise; and the invention consists in a cart-body, the bottom whereof is hinged at its forward end and adapted to be dropped at its rear end within a chute-extension of such body, in order to discharge the load without tipping the body, and in providing a cart-body with a hinged cover adapted to be locked over such body so as to prevent access to its contents, and also arranged to be turned up vertically to form continuations of the sides of the body, to adapt the cart for containing cord wood or sawed wood. The invention also consists in details of construction for effecting these ends, as hereinafter specified and claimed.

In the drawings hereinbefore referred to, like parts in the several figures of which are similarly designated, Figure 1 is a side elevation, the hinged top being raised. Fig. 2 is a rear elevation, the hinged top being locked down over the body. Fig. 3 is a central longitudinal vertical section. Fig. 4 is a bottom plan view; and Fig. 5, a longitudinal section of the bolt used to secure the hinged bottom in place in the body.

The cart-body *a* may be of any ordinary construction, and is preferably rigidly attached to the shafts *b*, and supported upon wheels *c* and an axle, *c'*. The sides of the body, at their rear lower portions, beginning rather forward of the axle, are extended downwardly at an incline, and deepest at the rear end, as at *d d*, and said portions *d d* are connected by a transverse bar, *e*, at their lowermost rear ends. In the front end of the body I prefer to arrange an inclined board or portion, *a'*, set at sub-

stantially the same inclination as the portions *d d* of the sides of the body, and this board may, if desired, form the bottom of that portion of the cart-body. The real bottom, *f*, of the body is hinged forward of the axle, at *g*, to any suitable portion of the body or framing, and extends from the bottom of the inclined portion *a'* to the rear end of the cart-body, and is adapted to swing or drop between the side extensions, *d d*, as indicated by dotted lines, Fig. 3, in which position its free end rests upon the cross-bar *e* or the axle, whereby said bottom is supported between said extensions *d d*, and forms with them a chute for discharging the load in a single compact pile at the rear of the cart—a mode of dumping coal, &c., always desirable, if not absolutely necessary, and never heretofore obtained except by taking out the stay-stick in front and the tail-board in rear, and tilting the entire body. Within the body, just above the tilting bottom and along the sides of such body, I arrange beads or strips, *h*, to cover the spaces between the sides and bottom to prevent the sifting through of small particles of the load. The bottom *f* is held up within the body by means of bolts *i*, attached thereto and adapted to engage strikes or keepers *j* on the body-frame. These bolts may be of any suitable construction, being shown in Fig. 5 as spring-bolts of ordinary form. They are adapted to be operated to permit the bottom *f* to fall by means of a system of jointed rods, *k*, operated from the driver's seat by a lever, *l*. This part of my invention differs from other drop-bottom carts and wagons in that its entire bottom drops from the extreme front to its rear, so as to discharge the entire load; whereas formerly the bottom was made in several sections, dropping a part of the load from each and beneath rather than at the rear of the cart, or else the bottom was hinged or pivoted between its ends so as to tilt up at its forward end and down at its rear end.

It will be noticed that in my form of drop-bottom cart the end-gate, *m*, need not be removed to discharge the load, nor is the body of the cart tipped; but it may be desirable in some instances to so construct the body as to permit its being tilted, as in the now commonly-used dump-cart.

To the upper edges of the sides of the cart-

body are hinged leaves or doors *n*, adapted to fold down over and form a top for the body, as shown in Fig. 2, and in this position they may be locked so as to prevent access to the body of the cart, by means of a hasp, *o*, connected to one leaf and extending over the other and thence engaging a staple, *p*, on the cart-body, where to it may be locked by a padlock or other means. These leaves or doors may be rabbeted at their ends to fit snugly down upon the end-gate *m*. Strips *n'* are fastened to the tops of the leaves transversely, so as to extend over the top alongside one another to prevent sagging of the top when down. When the cart has its top locked in place over the body the key may be retained by the dealer or owner, and the load delivered entire without unlocking the top, for said load will and can only be discharged by dumping from the tilted bottom, and this bottom cannot be partially tilted or dropped to admit of the petty thieving common in delivering coal, &c., for as soon as its bolts are withdrawn from their keepers the bottom drops to the ends of the sides *d* and the whole load is unavoidably discharged.

For hauling cord or kindling wood the leaves *n* may be turned up in line with the sides of the body so as to rest against the stanchions *r*, the strips *n'* also serving as stanchions for the load. The leaves are held in this upright position by means of drop-catches *s* or equivalent devices on the stanchions *r*, as shown in Fig. 2. The end-gate is extended by suitable additions *m'* thereto, so as to reach to the top of the leaves, where it is held in place by hooks *t* on the said leaves. The front ends of the leaves are grooved transversely on their under sides, and in said grooves is placed a gate, *u*, to confine the load at that end.

It will be understood that making the forward part of the body *a'* on a slant insures the discharge of the entire load at the dropping of the bottom *f*.

While I prefer to use the chute, it may be omitted, and then the bottom would drop on the axle.

A handle, *s*, may be arranged upon the cart-body for convenience in raising it after a load has been dumped.

What I claim is—

1. A dumping-cart having a fixed body and a bottom hinged at one end to said body and adapted to be dropped or tipped to discharge the load of the cart at the rear of the same, substantially as described.
2. The combination, with a cart-body, of a bottom therefor hinged at its extreme forward end and adapted to be dropped from its rear end to form an incline to discharge the entire load from the rear of the cart without removing the end-gate and without disturbing the body, substantially as specified.
3. In a cart, the sides of the body extended rearwardly and downwardly at an incline and connected by a cross-piece, in combination with a hinged drop-bottom secured at its extreme forward end, and falling from its rear end between said extended sides to form a chute to discharge the load from the rear, substantially as specified.
4. A cart provided with a body having a drop-bottom to permit the removal of the load without removing the end-gate, and a cover adapted to be locked down over the body to prevent fraudulent abstractions from the load, and to be opened or raised into vertical position to permit loading, substantially as described.

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

F. H. TRENHOLM.

Witnesses:

SHAND SMITH,
P. C. TRENHOLM.