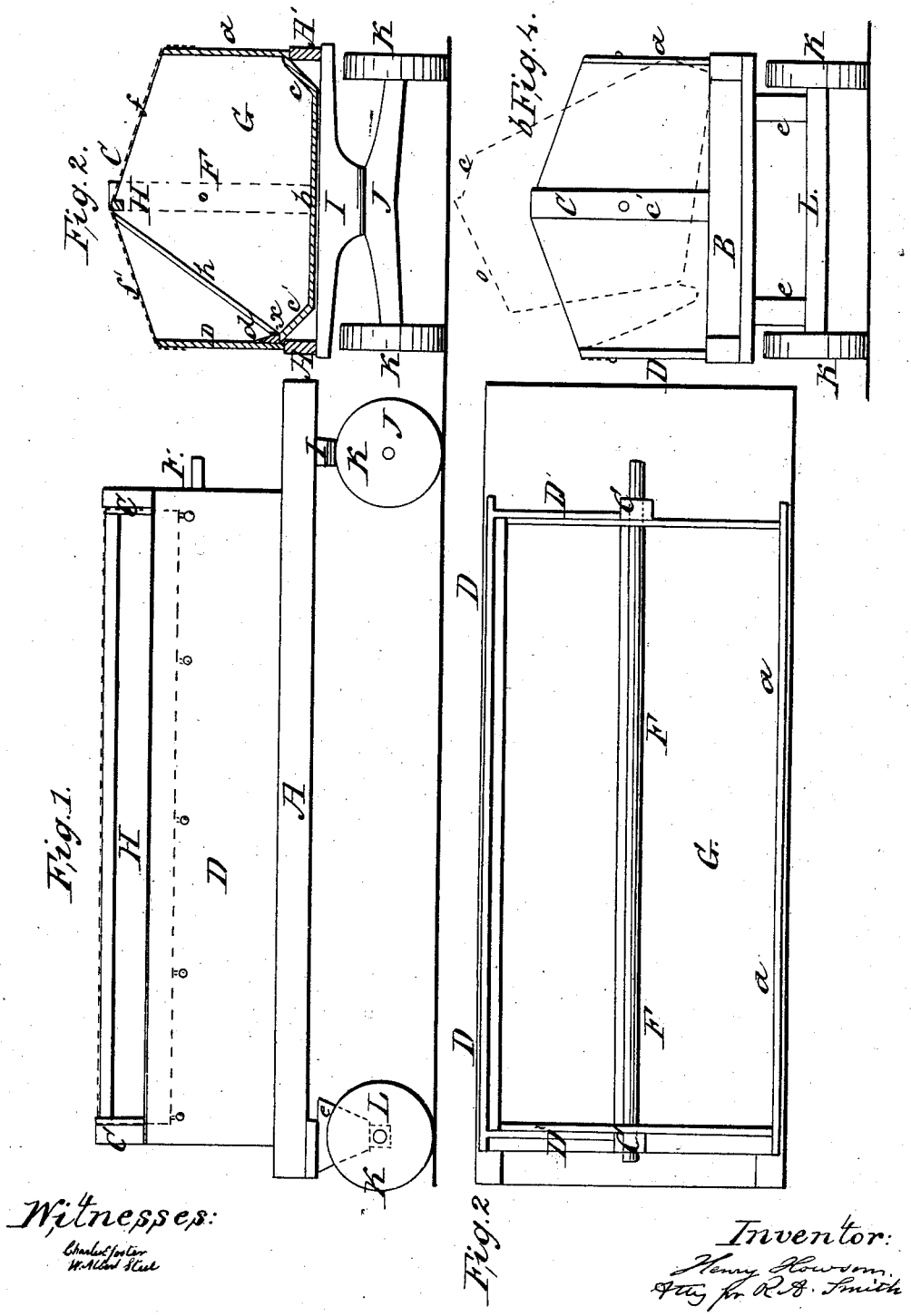
R. A. SMITH.

Dumping-Wagon.

No. 45,761. Patented Jan. 3, 1865.



# UNITED STATES PATENT OFFICE.

ROBERT A. SMITH, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN ASH-CARTS.

Specification forming part of Letters Patent No. **45,761**, dated January, 3 1865; ante dated July 21, 1863.

*To all whom it may concern:*

Be it known that I, R. A. SMITH, of Philadelphia, Pennsylvania, have invented an Improved Ash-Cart; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention consists in the peculiar construction and operation of a cart pulley, described hereinafter, for collecting, carrying, and disposing of ashes in towns and cities, my invention being devised with the view of diminishing the labor and time consumed and expense incurred in accomplishing the same end by the carts in common use.

In order to enable others to make and use my invention, I will now proceed to describe its construction and operation.

On reference to the accompanying drawings, which form a part of this specification, Figure 1 is a side elevation of my improved ash-cart; Fig. 2, a plan view of Fig. 1; Fig. 3, a transverse vertical section, and Fig. 4 an end view looking toward the rear of the cart.

Similar letters refer to similar parts throughout the several views.

The frame of the cart is composed of the two longitudinal beams A and A′, connected together at the opposite ends only by suitable cross-bars, B, and to each of the latter is secured a vertical post, C. To the longitudinal beam A of the frame is secured the board D, which is connected at or near its opposite ends to the vertical posts C by the end boards, D′, as best observed on reference to the plan view, Fig. 2.

A longitudinal shaft, F, passes through and is arranged to turn in the posts C C, and to this shaft is hung or secured the dumping portion of my improved ash-cart. This dumping portion consists of a receptacle or box, G, which has one side, *a*, of the same height as the boards D, above alluded to.

The bottom of the box is composed of the horizontal portion *b* and angular portions *c* and *c′*, the upper edge, *x*, of the latter being the termination of the box in one direction, and this edge bearing against the under side of a strip, *d*, which is secured to the inside of the board D.

The form of each end of the box is similar to that of the space inclosed by the lines *c′ b c a² f* and the diagonal line *h*, Fig. 3.

A bar, H, extends along the top of the box and is secured to the ends of the same, aprons *f* and *f′*, of canvas or other suitable material, being attached to this bar and being carried over the side *a* and over boards D, where they are buttoned or otherwise secured, so as to prevent the dispersion of dust.

A cross-bar, I, is secured to the under side of the longitudinal beams A and A′ of the frame, and to the center of this bar is connected, by the usual king-bolt, the front axle, J, which carries two ordinary wheels, K K. The rear axle, L, which carries similar wheels, is attached to blocks *e e*, which are secured to the rear cross-bar, B, of the frame.

On reference to Fig. 3 it will be observed that the receptacle for the ashes is partly permanent and partly movable, the board D, above alluded to as being secured to the longitudinal beam A of the frame, forming one side of the receptacle, the portion *a* of the movable box G forming the other side, and the bottom being formed of the pieces *c*, *c′*, and *b*.

The opposite ends of the receptacle are formed partly by the ends of the box G and partly by the permanent boards D′, which serve to connect the permanent side D to the posts C C.

When the cart is in a condition to receive the ashes, the box G, which is supported by the shaft F, is steadied by its edge *a* being in contact with the longitudinal beam A′ of the frame, while the edge *x* of the box bears against the under side of the strip *d* on the inside D of the receptacle. In this position the dumping-box may be secured by bolts, latches, or other suitable fastenings.

When the receptacle has been filled with ashes, the cart is drawn by horses to the point where its contents have to be deposited. The fastenings which connect the movable to the permanent portion of the cart are then loosened, and the shaft F is turned so as to bring the box G to the position shown by dotted lines, when the entire contents fall to the ground. After this the shaft F is turned in a contrary direction, so that the tilting or dumping portion of the receptacle may again assume the position in relation to the permanent portion

illustrated in Fig. 3, when the cart is in a condition to receive another collection of ashes.

In large cities and towns it has been the practice to collect the ashes in small carts, which, when full, are drawn by a horse or horses to the outskirts of the city, the regulations being generally such that the deposits of ashes in populous districts is forbidden. Much time and labor are necessarily consumed and much expense incurred in thus collecting and making frequent trips for the purpose of disposing of the ashes.

In my improved ash-cart the receptacle is large enough to contain five ordinary loads. At the same time it is light, simple, and cheap as regards construction, the disposal of the materials composing the cart being such that the weight of the receptacle and its contents are borne directly by the axles.

Not only are time, labor, and expense economized by the saving of the number of trips to be made by ordinary ash-carts, but the disposal of the ashes when the cart with its load has arrived at its destination is accomplished with the greatest promptitude.

I claim as my invention and desire to secure by Letters Patent—

A cart having a receptacle composed of permanent side D and permanent ends D′, and the tilting or dumping box G, hung or secured to a shaft, F, and constructed and applied to the permanent portion of the receptacle, substantially as and for the purpose herein set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ROBERT A. SMITH.

Witnesses:
HENRY HOWSEN,
JOHN WHITE.