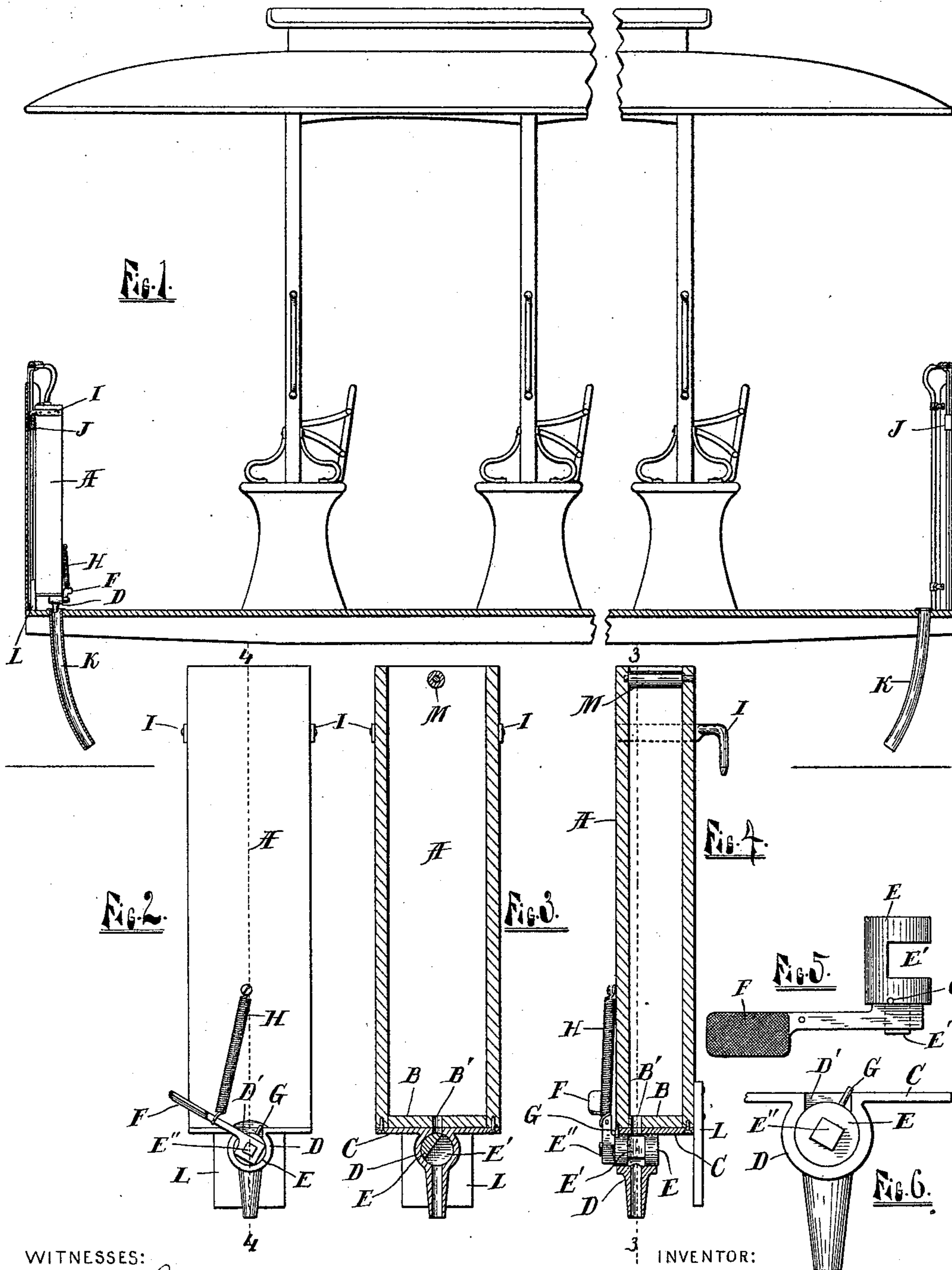


(No Model.)

W. W. ANNABLE.
SAND BOX.

No. 584,977.

Patented June 22, 1897.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WARREN W. ANNABLE, OF GRAND RAPIDS, MICHIGAN, ASSIGNOR TO
BURDETTE L. BOWNE, OF SAME PLACE.

SAND-BOX.

SPECIFICATION forming part of Letters Patent No. 584,977, dated June 22, 1897.

Application filed October 12, 1896. Serial No. 608,562. (No model.)

To all whom it may concern:

Be it known that I, WARREN W. ANNABLE, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Sand-Boxes; 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.

My invention relates to improvements in sand-boxes for street-cars and analogous purposes; and its object is to provide a sand-box which may be readily moved from place to place, may be used on either end of the car, and is detachable, and to provide the same with certain new and useful features, hereinafter more fully described, and particularly pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure 1 is a side view of a portion of a street-car with my device in position for use thereon; Fig. 2, a front elevation of a device embodying my invention; Fig. 3, a vertical section of the same on the line 3 3 of Fig. 4; Fig. 4, a section on the line 4 4 of Fig. 2; Fig. 5, an enlarged detail of the plug, and Fig. 6 an enlarged view of the stop-cock.

Like letters refer to like parts in all of the figures.

A is a rectangular wooden box having an open upper end and a bottom B, provided with the opening B', through which the sand escapes. An iron plate C, having the same area as the lower end of said box, is secured thereto and integral with said plate, and extending downward from said opening B' is the stop-cock D, which is provided with the cylindrical transverse plug E to close said opening. A cut E' is made in said plug intermediate its ends and extending from one side of the same beyond its axis a sufficient distance to allow a direct passage for the sand through said stop-cock when said plug is turned so that the end of said cut E' is in line with said opening B', which opening is in line with the axes of said plug and cock. Near the outer end of said plug and projecting from the side of the same is a pin G, adapted to engage the ends of the recess D' in said stop-cock and limit the movement of said plug, and a lug E''

on said end furnishes a place of attachment for the short straight foot-lever F, which is provided to operate said plug and open and close said cock. When said lever is in the position shown in Fig. 2, said plug is in such a position that its side which is opposite the cut E' is opposite the opening B', thus closing said opening, and the pin G is in contact with one end of said recess. Said plug is held in this position by the spring H, which is attached to said lever and box A, and when it is desired to open said cock pressure is applied by the foot of the operator to the said lever and the plug turned until the pin G comes in contact with the opposite end of said recess, said cock being again closed by said spring as soon as the lever is released.

Secured to the dashboard of each end of the car is a block J, having openings in its upper side to receive the hooks I, which are secured to the sides of the sand-box near its upper end and which detachably secure said box to the dashboard, said box being supported by the leg L, which rests on the floor of the car. An opening is made in the car-floor at each end of the same, directly beneath said box when in position for use, and in these openings are secured hose-pipes K, adapted to conduct the sand from the stop-cock, the lower end of which projects a short distance into said pipe, to the car-track. These blocks J and hose-pipes K are permanently secured to the car, the sand-box only being detachable. A handle M is provided in the upper end of said box to facilitate the moving of the same from place to place or from one end of the car to the other.

At present each car must be provided with two boxes, and as they are usually made of iron they add greatly to the weight of the car and are expensive.

Attention is called to the fact that the long levers and expensive and cumbersome connections between the same and the plug for operating the latter are dispensed with.

My box is very light and cheap, being made mostly of wood, and being portable but one is required for each car.

It will also be observed that the sand in my box does not come in contact with iron at any point except through the small opening in

the bottom, and therefore will not sweat or gather moisture, as in the iron boxes, and said box, being long, narrow, and thin, contains a column of sand, which will keep drier than
5 the same amount in a mass.

Having thus fully described my invention, what I claim is—

1. The combination with a car, having a platform at each end, formed with an opening and provided with a hose-pipe leading
10 from said opening, of a single sand-box, having an opening for the escape of the sand and a stop-cock leading from said opening and constructed detachably to engage either of
15 said hose-pipes, and means for detachably securing the upper end of said sand-box to either dashboard of the car, substantially as described and for the purposes specified.

2. In combination with the dashboard of a
20 car having a block attached, and a hose-pipe attached to the floor of said car and extending through the same, a sand-box having hooks

to engage said block, a support engaging said floor, and a stop-cock the lower end of which is adapted to engage said hose-pipe, substantially as described. 25

3. In combination, a rectangular box, a bottom therein, having an opening for the escape of sand, a plate secured to the lower
30 end of said box, a stop-cock integral with said plate and opposite said opening, a cylindrical plug having a central portion cut away, to close said opening, a lever on said plug, a stop on said plug, a spring attached to said
35 lever and box, a support for said box, hooks attached to said box near its upper end, and a handle on said upper end, substantially as described.

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

WARREN W. ANNABLE.

Witnesses:

LEWIS E. FLANDERS,
LOIS MOULTON.