M. T. CAVANAUGH.

COMBINATION DUST CATCHER.

APPLICATION FILED DEC. 29, 1910.

1,002,500.

Patented Sept. 5, 1911.

2 SHEETS—SHEET 1.

FIG. 1.

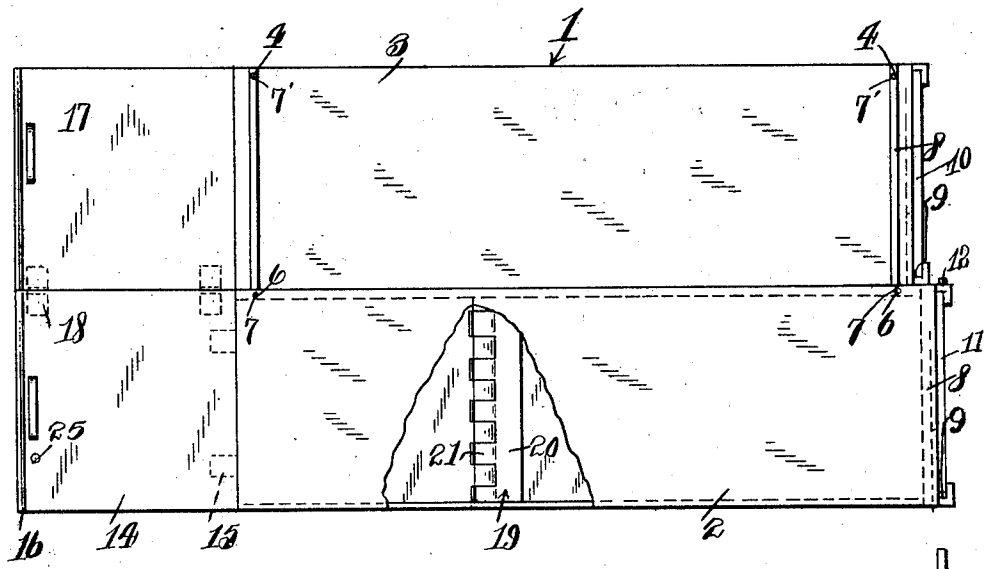
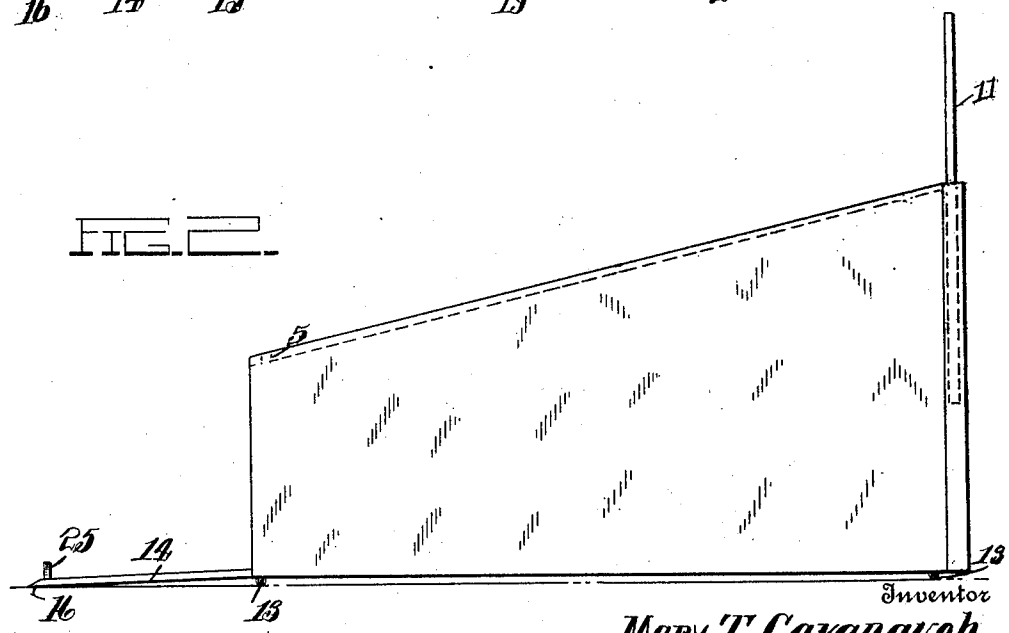


FIG. 2.



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2 SHEETS—SHEET 2.

FIG. 3.

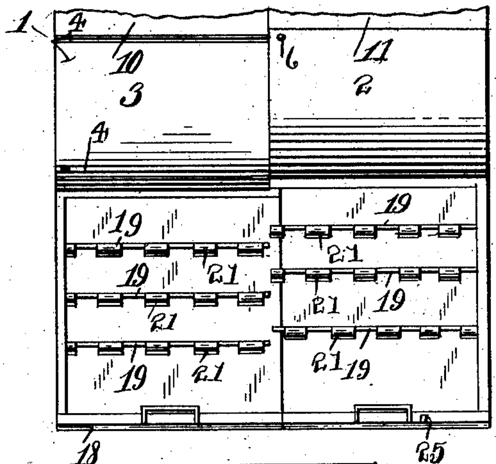


FIG. 4.

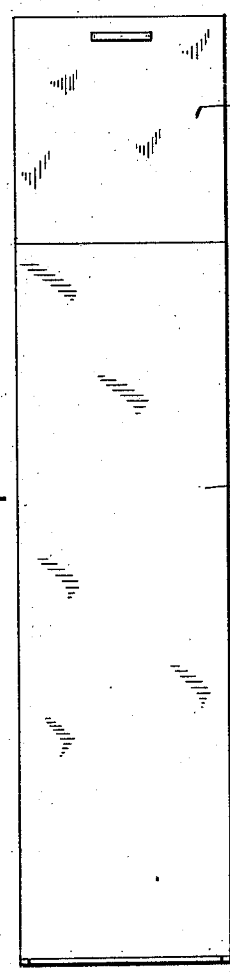
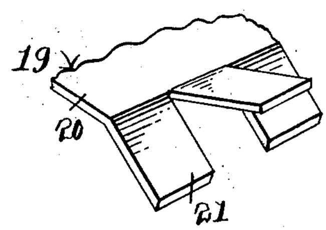


FIG. 5.



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UNITED STATES PATENT OFFICE.

MARY T. CAVANAUGH, OF SALT LAKE CITY, UTAH.

COMBINATION DUST-CATCHER.

1,002,500. Specification of Letters Patent. **Patented Sept. 5, 1911.**

Application filed December 29, 1910. Serial No. 599,847.

To all whom it may concern:

Be it known that I, MARY T. CAVANAUGH, a citizen of the United States, residing at Salt Lake City, in the county of Salt Lake, State of Utah, have invented certain new and useful Improvements in Combination Dust-Catchers; 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 sweeping apparatus and more especially to a dust catching receptacle adapted to be pushed along in advance of the broom and my object is to improve the construction and increase the efficiency and utility of devices of this character.

A further object is to provide a form of dust catching receptacle which may be telescoped to form a more compact article for shipment or when not in use.

A further object is to provide windbreaks to prevent air current from blowing back the dust toward the sweeper, and .

A still further object is to provide baffles or flies within the receptacle in order to keep the air therein in a quiescent state and prevent dust which has been swept in from being dislodged and carried out again by the air gusts resulting from the motion of the broom. It will also be understood that a primary object which governs to some extent every other consideration is to provide the simplest and least expensive construction possible consistent with efficiency, sightliness and durability.

With the above and other objects in view the invention consists in a certain construction, arrangement and combination of parts as is hereinafter more fully described, specifically pointed out in the appended claims and illustrated in the accompanying drawings, which show a preferred embodiment of the invention.

In these drawings which are attached to and form a part of this application, Figure 1 is a top plan view of my improved dust catching receptacle in open position and ready for use, part of the top being broken away. Fig. 2 is a side elevation of the same. Fig. 3 is a front elevation showing the staggered arrangement of the baffles. Fig. 4 is a front elevation of the device folded for storage. Fig. 5 is a fragmental perspective of one of the baffles.

Referring more specifically to these views, in which similar reference numerals designate corresponding parts throughout, 1 indicates in general the body of the receptacle which is composed of the forwardly tapering telescoping members 2 and 3, the latter being adapted to slide into the former. This sliding contact is preferably secured by means of tongues 4 on the upper and lower faces of the member 3 co-acting with channels 5 on the inner faces of the member 2, and in order to limit the outward extension of the two members stop pins 6 are secured in the member 2 and adapted to engage notches or apertures 7 in the faces of the tongues 4. Similar apertures 7′ adjacent the other extremities of the tongues serve to latch the two sections in closed or telescoped position. The side members of the sections 2 and 3 are extended beyond the end members 8 and in these extensions are formed grooves 9 in which slide two plates 10 and 11. Latch pins 12 similar to those previously described are used to secure the plates 10 and 11 in either the extended position shown in Fig. 1 or in the closed position of Fig. 4.

As seen in Figs. 1 and 2 the body section 1 is designed to lie with its length along the floor and is movable thereover by providing casters or rollers 13 secured to the bottom face of the body sections adjacent the corners thereof. It will be seen that by providing these casters the body is raised somewhat from the floor surface thus making it impossible to sweep directly into the open end of the receptacle. This difficulty is overcome by providing a cover 14 which is hinged to the body section 2 at 15, the hinges being counter-sunk to form a smooth inner surface. The outer edge of the cover member 14 is beveled as at 16 and it will be seen that when this cover lies in the position shown in Fig. 2 it forms a slanting platform contacting closely with the floor in front. In order to provide a similar platform for the body section 3 a plate 17 is hinged at 18 to the plate 14, the hinges being placed beneath the plates to enable the plate 17 to be folded back over the plate 14 when the latter is used as a cover.

A plurality of baffle plates 19 are secured in a horizontal position on the inner faces of the members 2 and 3, the plates being preferably disposed in staggered relation as shown in Fig. 3. The particular form of

baffle plates shown in the present construction comprises a sheet metal strip 20 having a series of transverse cuts 21 extending about half way across its width, the tongues defined by said cuts are alternately bent up and down. By disposing a sufficient number of these baffles within the receptacle it will be seen that air currents entering the same will be effectually broken up.

In utilizing the dust catcher, it is opened in to the position shown in Fig. 1 and disposed in front of the point at which the sweeping operations are to begin. The dust is carried by the broom up on to the platform 14 and its inertia is then relied upon to carry it within the receptacle. As the sweeping progresses the receptacle is moved ahead of the broom by the foot of the sweeper, a lug 25 being provided upon the upper face of the platform to facilitate this operation. It is usually considered desirable when sweeping to have windows and doors open and in order to prevent the resultant drafts from blowing back the dust toward the sweeper the wings or windbreaks 10 and 11 are extended, and by referring to Fig. 3 of the drawings it will be seen that the mouth of the receptacle is completely guarded against currents from the front.

The receptacle may be emptied by inverting in the usual manner or it may be thoroughly cleaned out by releasing the stop pins 7 which will permit of the telescoping sections being separated. When not in use the receptacle may be telescoped to occupy a smaller space, and for convenience in storing the plate 17 may be arranged to hook over a nail so that the whole device may be hung up out of the way.

What I claim is:

1. A dust catching receptacle, comprising a pair of telescoping body sections open at one end, a plate hinged to the open end of one of said sections, and a second plate hinged to the lateral edge of said first named plate, whereby a compound cover member is formed which serves as an extension platform when the device is in use.

2. A dust catching receptacle, comprising a body section open at one end, and extensible wings secured to said body section and adapted to serve as wind-breaks.

3. A dust catching receptacle, comprising a pair of telescoping body sections open at one end, plates slidably secured to the other end of said sections to form extensible wings, means for retaining said plates in the extended or closed position, and means for retaining said body section in the telescoped or open position.

4. A dust catching receptacle, comprising a pair of telescoping body sections open at one end, and a plurality of baffle plates arranged within each of said body sections, the baffle plates of one body section being adapted to pass between the baffle plates of the other body section when said sections are closed.

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

MARY T. CAVANAUGH.

Witnesses:
W. E. COULAM,
H. W. CUSHING.