No. 805,904. PATENTED NOV. 28, 1905.

L. B. DESPAIN.

DUST PAN ATTACHMENT FOR BROOMS.

APPLICATION FILED MAY 9, 1905.

FIG. 1.

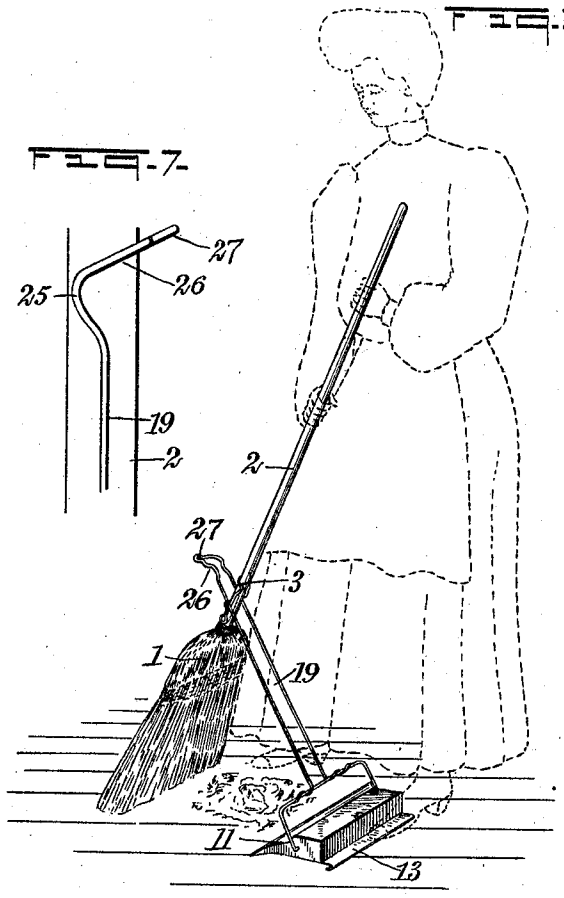


FIG. 7.

FIG. 2.

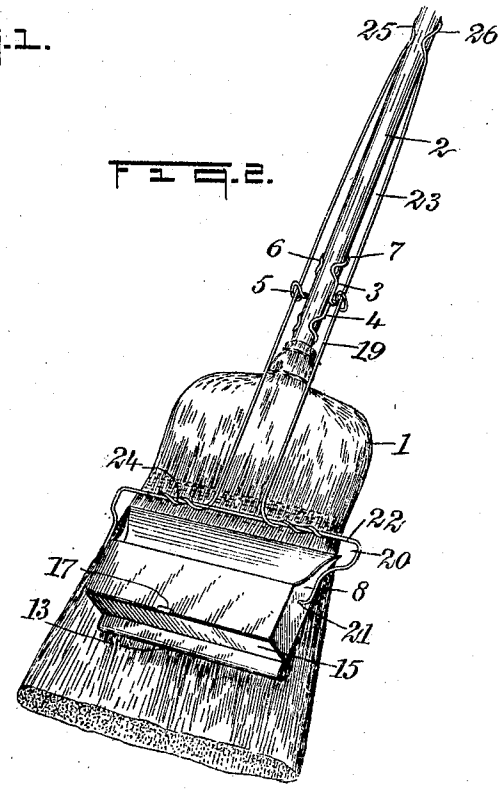


FIG. 3.

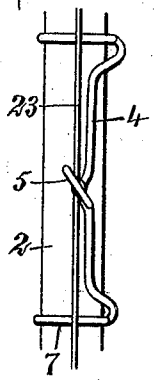


FIG. 4.

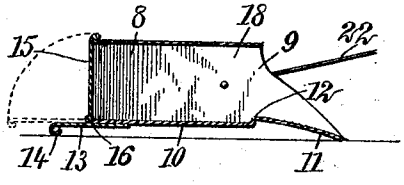


FIG. 5.

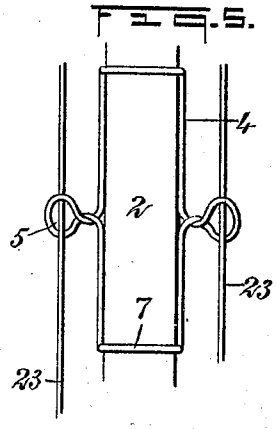
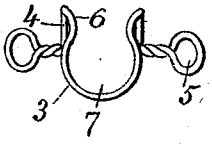


FIG. 6.



WITNESSES:

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DUST-PAN ATTACHMENT FOR BROOMS.

No. 805,904. Specification of Letters Patent. Patented Nov. 28, 1905.

Application filed May 9, 1905. Serial No. 259,524.

To all whom it may concern:

Be it known that I, LOUIS B. DESPAIN, a citizen of the United States, and a resident of Pacific Grove, in the county of Monterey and State of California, have invented a new and Improved Dust-Pan Attachment for Brooms, of which the following is a full, clear, and exact description.

This invention relates to a dust-pan attachment for brooms, such as used in sweeping the floors of dwellings.

The object of the invention is to produce a dust-pan attachment for a broom which can be readily applied to the broom and which may be operated readily to enable the dirt to be swept into the pan conveniently and without necessitating the sweeper to stoop closely over the dust-pan during the operation.

The invention consists in the construction and combination of parts to be more fully described hereinafter and definitely set forth in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective representing the device in operation. Fig. 2 is a perspective showing the attachment when held rigidly against the side of the broom. Fig. 3 is a side elevation showing a portion of the broom-handle and illustrating a saddle slidably mounted thereupon, together with a portion of an arm, which is guided on said saddle. Fig. 4 is a transverse section through the dust-pan. Fig. 5 is a side elevation showing the parts illustrated in Fig. 3 projected upon a plane at right angles to the plane of Fig. 3. Fig. 6 is an end elevation of the saddle shown in Figs. 3 and 5, and Fig. 7 is a side elevation showing a portion of the broom-handle and illustrating the means for locking the arm referred to upon the broom-handle.

Referring more particularly to the parts, 1 represents the body of the broom, which may be of the common form, provided with a handle 2.

In applying my invention I provide a saddle 3, which is preferably formed of wire, as shown, comprising two oppositely-disposed bars 4, which are twisted at their middle points, so as to form oppositely-disposed guiding-eyes 5. Toward their extremities these bars 4 converge, so as to present oppositely-disposed lips 6, and beyond these lips the wire out of which the saddle is preferably formed is bent downwardly, so as to form two loops or throats 7. The construction is such as to enable the device to be snapped over the handle of the broom, as illustrated most clearly in Fig. 2. The handle being inserted from the front, so as to force the lips 6 outwardly and apart, this spreading movement would continue until the handle of the broom seated itself in the throats 7. When so seated, the saddle, which would be more or less resilient, would regain its normal position and the lips 6 would project toward each other, so as to grasp the handle in such a manner as to prevent the saddle from being readily removed. While this arrangement would lock the saddle securely against removal, it does not operate to prevent the saddle from moving readily longitudinally upon the handle 2.

The dust-pan comprises a body 8 of substantially rectangular form and preferably formed of a sheet metal out of which dust-pans are usually constructed. It consists, substantially, of a rectangular box having an opening 9 at one side. The bottom 10 of the body is preferably formed with a projecting lip 11 at the lower side of the opening 9, and the material forming this lip is preferably upset, so as to form an upwardly-projecting shoulder 12. At the rear edge of the bottom 10 a narrow cleat 13 is rigidly attached in such a manner as to project rearwardly beyond the body of the pan, as illustrated. The rear edge of this cleat is preferably formed with a crimp or bead 14, which raises the rear portion of the body from the floor and maintains the same substantially horizontal. The side 15 of the body 8 is not rigid with the body of the pan, but forms a hinged connection 16 therewith at the bottom and is adapted to open downwardly, as indicated in the dotted lines in Fig. 4. A resilient snap or catch 17 is provided, as indicated in Fig. 2, which enables this side or lid 15 to be held in the position shown. The end walls 18 of the body are preferably extended, so as to project beyond the forward edge of the upper wall, as indicated in Fig. 4, projecting to the extrem-

ity of the lip 11, so as to constitute reinforcements therefor, as will be readily understood.

To the body 8 of the pan I attach an arm 19. This arm is preferably constructed of wire, like the saddle 3. It comprises a yoke or bail 20, pivotally attached, as at 21, in the end walls of the pan-body. This yoke comprises a transverse bar 22, to which a tongue 23 is rigidly attached, and this tongue is preferably formed of two oppositely-disposed bars formed from a single piece of wire, the extremities of the wire being firmly twisted into the body of the bar 22, as indicated at 24. This tongue 23 is preferably attached at substantially the middle point of the bar 22. The material out of which the tongue 19 is formed is preferably bent at its upper extremities, so as to form forwardly-projecting lips 25, beyond which a loop or throat 26 is formed. As indicated most clearly in Fig. 7, the loop or throat 26 is formed in a plane inclined with respect to the axis of the broom-handle 2. The lips 25 approach each other, as indicated, and enable the handle of the broom to be retained in the throat 26 when forced rearwardly into the same, as will be readily understood. The material out of which this tongue is formed is resilient, and in order to increase the capacity of the throat 26 in opening it is preferably provided with a bight or bow 27, formed on the central axis of the tongue by offsetting the wire outwardly, as indicated most clearly in Fig. 1.

In sweeping, the attachment is securely held against the broom in the manner indicated in Fig. 2, the bottom 10 of the pan-body being held against the side of the broom-body 1. The upper portion of the handle 2 being held in the throat 26 in the manner just described, the bars 23 of which the tongue 19 is composed, pass, as indicated, through the guiding-eyes 5. With the attachment secured in the manner described the broom would then be used in the same way as an ordinary broom. When the dirt being swept up is collected at some point, the handle 2 is forced out of the throat 26, so as to enable the pan-body to descend to the floor in such a way as to occupy a relation such as that indicated in Fig. 1. The mouth of the pan is then disposed toward the broom-body 1 and on the opposite side of the accumulated dirt. The sweeper's foot is then held against the rear wall or lid 15 of the pan-body and upon the cleat 13, referred to above. In this way the body of the pan is held securely in position. The broom is then operated so as to sweep the dirt into the pan, as will be readily understood. In order to facilitate this operation of the broom, the guiding-eyes 5 are preferably enlarged, as indicated, so as to give a very free movement of the arm with respect to the broom-handle. After the dirt is swept into the pan the pan is returned to the position in which it is shown in Fig. 2, and the broom is then carried to a receptacle into which the dirt is dumped by unfastening the lid 15.

Forming the bottom of the pan-body with a shoulder is highly advantageous, as its effect is to produce a depressed bottom tending to prevent the return of the dirt down at the inclined mouth 11.

It should be evident that in the operation of the broom and its attachment it is not necessary for the sweeper to stoop in order to hold the pan in position when receiving the dirt. This feature is not only desirable in saving labor, but is also highly sanitary, as it does not subject the sweeper to danger from inhaling the dust-laden air in the immediate vicinity of the pan.

The device evidently admirably accomplishes the purposes of the invention.

Attention is called to the fact that in attaching the device to the broom no fastening devices are necessary and the attachment can be removed from a broom when worn out, simply by sliding the saddle 3 off of the handle or by forcing the same to one side so as to extricate the handle from the throats 7.

When the attachment is in the inoperative position, (shown in Fig. 2,) the loop 26 is not at such a height on the handle as to be in the way of the sweeper's hand. The fact that the bail 20 is attached near the forward part of the pan enables the pan to swing automatically into an upright position when raised from the floor, as will be understood from an inspection of Fig. 1.

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

1. An attachment for a broom, comprising, in combination, a body adapted to receive dirt, an arm freely attached thereto, a saddle adapted to be attached to the handle of the broom and constituting a guide through which said arm may slide, said arm having means for grasping the handle of said broom.

2. An attachment for a broom comprising, in combination, a saddle adapted to grasp the broom-handle and presenting guiding-eyes, an arm having bars passing through said guiding-eyes and having a throat formed at the extremity thereof adapted to grasp said handle, and a pan-body attached to said arm.

3. An attachment for a broom comprising a body constituting a receptacle for the dirt and having a cleat projecting on the rear side thereof and adapted to be pressed by the sweeper's foot, an arm pivotally attached to said body and a saddle adapted to be attached to the broom-handle and making a running connection with said arm.

4. An attachment for a broom comprising, in combination, a saddle presenting throats adapted to grasp the handle of said broom and

having guiding-eyes disposed between said throats, an arm presenting bars passing freely through said guiding-eyes and having a throat at the upper extremity thereof adapted to grasp the handle of said broom, and a body constituting a receptacle for dirt and having a mouth on one side thereof, and a movable lid opposite said mouth.

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

LOUIS B. DESPAIN.

Witnesses:
B. M. FITZSIMMONS,
SAMUEL L. FRETZ.