

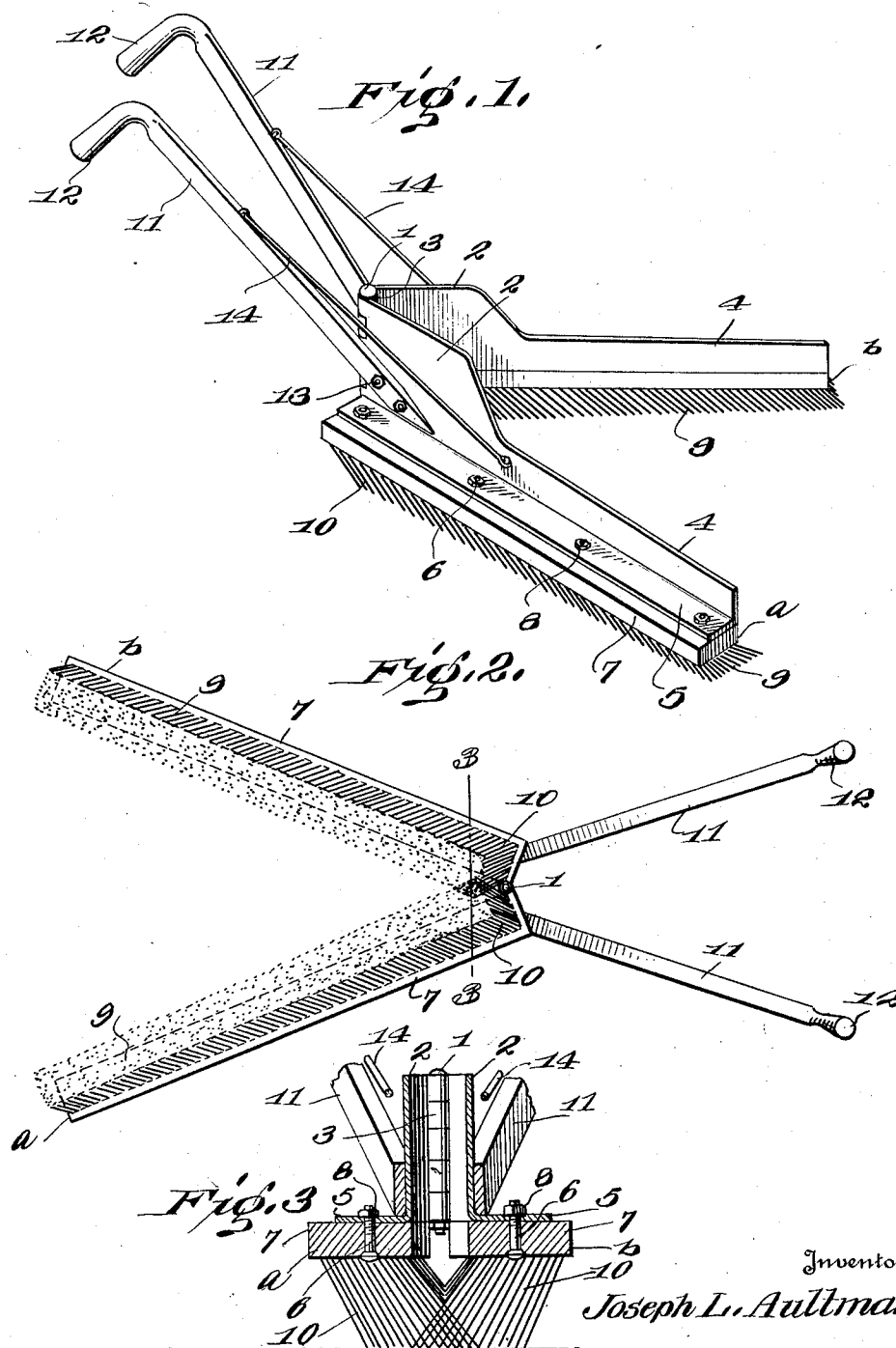
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SWEEPER

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SWEEPER

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My invention relates to new and useful improvements in sweepers or brushes and more particularly to a device of this character adapted for sweeping or cleaning floors such as in textile plants, mills, factories, hotels or the like wherein in each operation it is desired to cover a relatively large area for accumulating the material upon the floor or the like, the principal object of the invention consisting in constructing the device so that it is relatively simple and cheap in construction, light, so that it may be readily moved over the surface, and adapted to be folded or collapsed to be stored in a relatively small space.

Another object of the invention resides in providing a sweeper or brush formed of two sections hingedly connected at one end, the sections being adapted to be opened to extend in substantially V-shape, it being understood that the sections may be opened or closed to the desired extent so as to cover a greater or less area as desired.

A further object of the invention consists in forming a sweeper or brush having two sections adapted to be connected together, each of the sections carrying a multiplicity of relatively stiff brush bristles, the bristles being forwardly and inwardly directed so that the bristles of each section extend forwardly with the bristles of one section extending inwardly towards the bristles of the other section, and the rearwardmost bristles of each section being of somewhat greater length than the forwardmost bristles so that when the sections are opened or arranged in sweeping or brushing position the rearwardmost bristles of one section will overlap or be interengaged with the bristles of the other section to prevent the dirt or waste accumulated by the sweeper or brush from passing through the rear end thereof.

With the above and other objects in view, which will appear as the description proceeds, my invention consists in the novel details of construction, and arrangement of parts, described in the following specification and illustrated in the accompanying drawings, and while I have illustrated and described the preferred embodiments of the

invention, as they now appear to me, it will be understood that such changes may be made as will fall within the scope of the appended claims.

In the drawings:—

Fig. 1 is a perspective.

Fig. 2 is a bottom plan; and

Fig. 3 is a transverse section on the line 3—3 of Fig. 2.

In the drawings *a* and *b* indicate the sections of the sweeper or brush hingedly connected at 1 and each of the sections comprises a vertically extending plate 2 formed at the rear end with the loop or eye portions 3 through which the hinge pin extends, the loop or eye portions of one section being staggered with those of the adjacent section so that they may be brought in alignment as shown more particularly in Figs. 1 and 3 of the drawings to form a continuous loop or eye for the hinge pin. At the forward ends the plates 2 are reduced in height as shown at 4 so that the sweeper or brush may be pushed under relatively low objects in the cleaning operation. At the lower edge each of the plates, including the reduced portions 4, are bent to provide the outwardly directed horizontal flange 5 having a plurality of longitudinally spaced openings therethrough in which bolts 6 are adapted to pass to secure the brush heads 7 to the flange. Nuts 8 are received on the bolts, as shown more particularly in Figs. 1 and 3 of the drawings, so that the brush head may be readily detached when desired. The plates 2 are formed of metal or similar material whereas the brush heads 7 will be formed of wood or similar material. Each of the brush heads 7 has secured to its bottom face a multiplicity of relatively stiff bristles 9 which, as quite clearly shown in the drawings, are inclined forwardly and inwardly. In other words the bristles carried by each brush head are inclined forwardly and at the same time the bristles carried by one brush head are inclined inwardly or towards the bristles of the other brush head. This is of particular advantage in that dirt, lint, waste or the like, will be prevented from passing beneath the bristles, in the sweeping operation, and when the sections are arranged in

V-shape as shown the waste, lint or dirt will be directed towards the rear of the brush or sweeper. It can readily be appreciated that in hinging the sections together there would be a possibility that when the sections are arranged in V-shape that there would be a space between the bristles of the sections, at the rear of the sweeper or brush, through which the dirt, waste or the like would pass. To overcome this I provide the bristles 10, towards the rear of the brush heads, of greater length than those bristles towards the forward ends of the heads so that the rearwardmost bristles will overlap or interengage as shown more particularly in Fig. 3 of the drawings. The overlapping or interengaging of the rearwardmost bristles forms a closure at the rear of the brushes and prevents dirt from passing between the hinged ends thereof.

In order that the sweeper or brush may be easily pushed over the floor or other surface I provide the handles 11, of the shape shown, with the hand grips 12 and these handles are secured to the outer faces of the plates 2 by means of the nut and bolt connections shown at 13 whereby the handles may be readily removed when desired. At 14 I have indicated braces positioned between each of the handles and its associated plate.

From the above detailed description it is thought that the construction and advantages will be clearly understood. While I have described my sweeper as being more particularly adapted for cleaning floors or the like in mills, textile plants, factories, hotels, and the like it will be understood that it might equally as well be used for cleaning other surfaces at other places. By having the sections *a* and *b* hingedly connected together at one end the sections may be opened or positioned in V-shape or formation to cover a relatively large area in every operation. At the same time dirt or the like will be received in the relatively wide open end of the brush or sweeper and directed rearwardly thereof. The brush heads are connected to the metal plates in a novel manner so that they may be readily detached when desired such as for replacement when the old brushes have become worn. The handles are provided for readily pushing the sweeper or brush over the floor or the like and are also used for opening and closing the sections, it being understood that when the sweeper or brush is not in use that the sections may be closed or brought together into close contact for storing away into a relatively small space. By having the forward ends of the metal plates 2 reduced in height the sweeper may be operated under relatively low objects. The advantages in having the brush bristles arranged as described has been fully brought out and a further detailed description thereof is not thought necessary.

Having fully described my invention what

I claim as new and desire to secure by Letters Patent is:

1. A sweeper of the character described including two sections, means for connecting the sections, and brush heads connected to and carried by each of the sections, each of the brush heads having forwardly and inwardly directed bristles.

2. A sweeper of the character described including sections, means for connecting the sections at one end, and a brush head carried by each of the sections, each of the brush heads including forwardly and inwardly directed bristles, the bristles towards the connected ends of the sections being of greater length than the remaining bristles whereby the bristles adjacent the connected end of one section will overlap or intermingle with corresponding bristles of the other section.

3. A sweeper of the character described including two members pivotally connected at one end whereby they may be swung to extend parallel or at an outwardly extending angle from the pivot point, each of said members including a plate having its lower longitudinal edge bent to provide an outwardly directed horizontal flange and its forward end of less height than the rear end, a brush connected to each of the horizontally extending flanges, the bristles at the ends of the brushes at the pivot ends of the members being of a length to overlap and intermingle when the members are at any angle to provide a closure at the pivot ends of the members, and a handle connected to each of the members for propelling the sweeper.

4. A sweeper of the character described including two members pivotally connected at one end whereby they may be swung to extend parallel or at an outwardly extending angle from the pivot point, each of said members including a plate having its lower longitudinal edge bent to provide an outwardly directed horizontal flange and its forward end of less height than the rear end, a brush positioned beneath each of the horizontal flanges, and means extending through the brushes and horizontal flanges for detachably connecting the brushes to the flanges.

In testimony whereof I hereunto affix my signature.

JOSEPH LAFAYTTE AULTMAN.