

L. BRUCKER.
SWEEPER.

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982,240.

Patented Jan. 24, 1911.

2 SHEETS-SHEET 2.

Fig. 4.

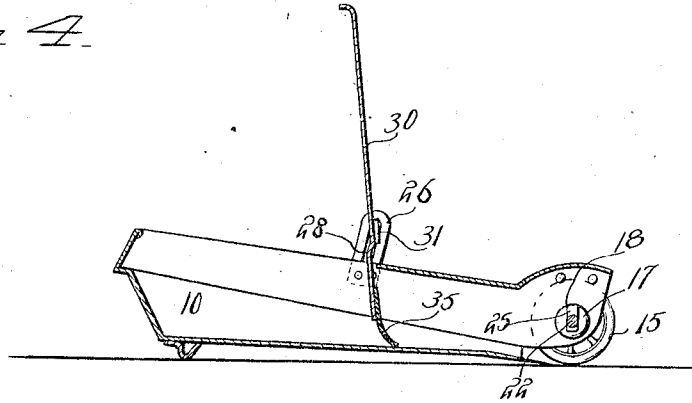


Fig. 5.



Fig. 6.

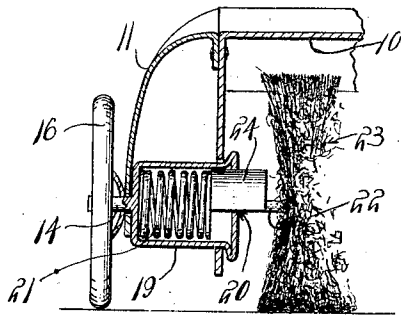
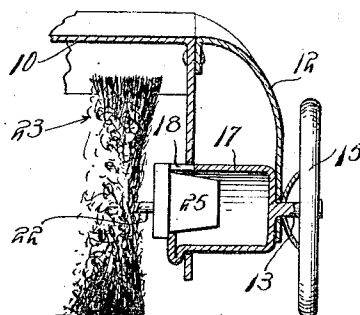


Fig. 7.



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SWEEPER.

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To all whom it may concern:

Be it known that I, LOUIS BRUCKER, a citizen of the United States, residing at Boston, in the county of Suffolk, State of Massachusetts, have invented certain new and useful Improvements in Sweepers; 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.

This invention relates to sweepers.

The object of the invention resides in the provision of a device for sweeping dust, dirt, litter, etc., from the surface of floors, carpets and the like, which will be simple in construction and comparatively inexpensive to manufacture.

The invention comprises a casing for receiving dirt swept from a floor or the like through the instrumentality of a traction operated rotary brush associated with the casing, and a pivoted cover for said casing adapted in its movement to open position to force dirt previously deposited in the forward end of the casing to the rear thereof.

In describing the invention in detail reference will be had to the accompanying drawings wherein like characters of reference denote corresponding parts in the several views, and in which,

Figure 1 is a plan view of the sweeper constructed in accordance with the invention; Fig. 2, a side elevation thereof; Fig. 3, a section on the line 3—3 of Fig. 1; Fig. 4, a section on the line 4—4 of Fig. 1, with the cover of the casing shown in open position; Fig. 5, a detail view of the detachable brush employed in the sweeper; and, Figs. 6 and 7, fragmental sectional views of the traction wheels and their associated parts which support and rotate the brush shown in Fig. 5.

Referring to the drawings, the invention is shown as comprising a casing 10 having its front end and rear portion of its top open. Secured to the respective sides of the casing 10 and projecting laterally therefrom are brackets 11 and 12 in which are journaled respectively shafts 13 and 14. Fixed on the outer end of the shaft 13 is a wheel 15 preferably of iron with a tire of hard rubber, while a similar wheel 16 is fixed on the outer end of the shaft 14. The inner end of the shaft 13 is extended in the

form of a hollow member 17 provided at its inner end with a notch 18. Likewise, the shaft 14 is provided at its inner end with an extension in the form of a hollow member 19, the inner end of which has an open portion as at 20. Mounted in the hollow member 19 is a spring 21 adapted to be compressed by the insertion of one end of the spindle 22 of a rotary brush 23, through the opening 20. Said spindle has the end adapted for insertion in the opening 20 enlarged as at 24 so as to efficiently engage one end of the spring 21. The other end of the spindle 22 is enlarged as at 25 and so shaped as to be capable of movement transversely of the hollow member 17 through the notch 18 of said member.

From the construction just described it will be apparent that in order to mount the brush 23 between the hollow members 17 and 19 it is only necessary to insert the enlarged end 24 of the spindle into the opening 20 of the member 19 and compress the spring 21. This compression of the spring 21 will move the brush 23 longitudinally, and bring its enlarged end 25 within the longitudinal limits of the notch 18 when said end 25 can be moved transversely of the member 17 through the notch. When the end 25 has been so moved the brush 23 is released to the influence of the spring 21 and as a result moved toward the member 17 carrying the outer extremity of the end 25 beyond the outer longitudinal limitation of the notch 18 and when so disposed the brush 23 is securely locked between the members 17 and 19 for rotation therewith. The brush 23 may be as easily detached from the members 17 and 19 by reversing the operation just described.

Secured to respective sides of the casing 10, just rearward of the closed portion of the top of said casing are upstanding ears 26 and 27 provided with vertical slots 28 and 29 respectively, while a cover 30 adapted to close the open portion of the top of the casing is provided intermediate its ends at opposite sides with arms 31 and 32 projecting through the slots 28 and 29 respectively, thus providing a shifting pivotal connection between the cover and the casing. The outer ends of the arms 31 and 32 are enlarged as at 33 and 34 respectively to prevent disengagement of the arms from the upstanding ears through which they extend. The forward end of the cover 30 has

attached thereto a flexible strip 35 preferably of rubber adapted to engage the bottom of the casing when said cover is moved to open position in order to sweep the dust disposed at the forward end of the casing to the rear thereof. During this opening movement of the cover it will be apparent that its forward end will move into engagement with the bottom of the casing and that the upward movement of the arms 31 and 32 in the slots 28 and 29 respectively will permit continued movement of the forward end of the cover along the bottom of the casing. A socket 38 secured to and projecting rearwardly from the rear end of the casing 10 is adapted to receive a handle 39 in order that the device may be conveniently manipulated.

What is claimed is:

1. A sweeper comprising in combination a casing having its front and the rear portion of its top open, a traction operated rotary brush disposed across the open front of said casing, a pair of upstanding ears provided with vertical slots secured to opposite sides of said casing at the inner end of the closed portion of the top thereof, a cover for closing the open portion of the top of the casing, an arm projecting laterally from each side of the cover intermediate the ends thereof and passing through the slots in adjacent upstanding ears, and a flexible strip secured across the forward end of said cover adapted to engage the bottom of the casing as said cover is moved to open position.

2. A sweeper comprising in combination

a casing open at its front, a bracket secured to each side of the casing and projecting laterally thereof, a shaft journaled in each of said brackets, a wheel fixed on the outer end of each of said shafts, a hollow member extending from the inner end of one of said shafts provided at its inner end with a notch, a second hollow member extending from the inner end of the other shaft provided with an opening in its inner end, a spring disposed within said last named hollow member and a brush having one end of its spindle enlarged and disposed within the opening in the end of the last named hollow member and the other end of its spindle enlarged and projecting through the notch of the first named hollow member.

3. A sweeper comprising in combination a casing having its front and the rear portion of its top open, a traction operated rotary brush disposed across the open front of said casing, a pair of upstanding ears provided with vertical slots secured to opposite sides of said casing at the inner end of the closed portion of the top thereof, a cover for closing the open portion of the top of the casing and an arm projecting laterally from each side of the cover intermediate the ends thereof and passing through the slots in adjacent upstanding ears.

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

LOUIS BRUCKER.

Witnesses:

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