June 21, 1960 G. V. PRONG 2,941,233

VACUUM CLEANER HEAD

Filed April 21, 1959

Fig. 1.

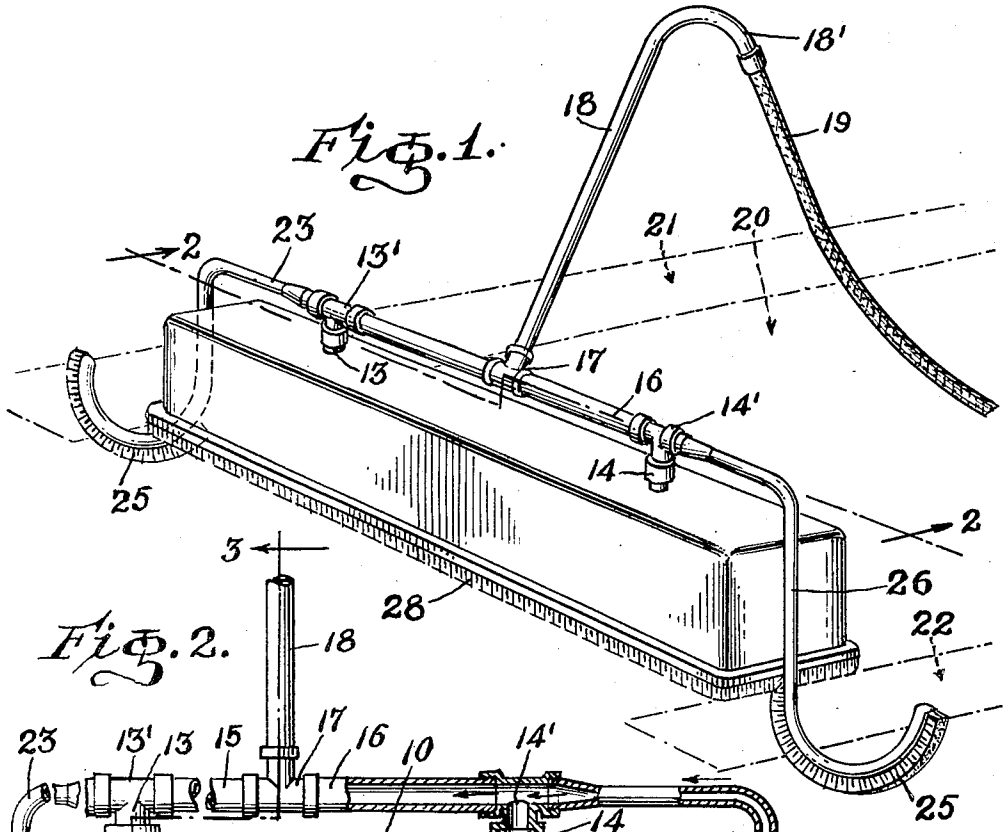


Fig. 2.

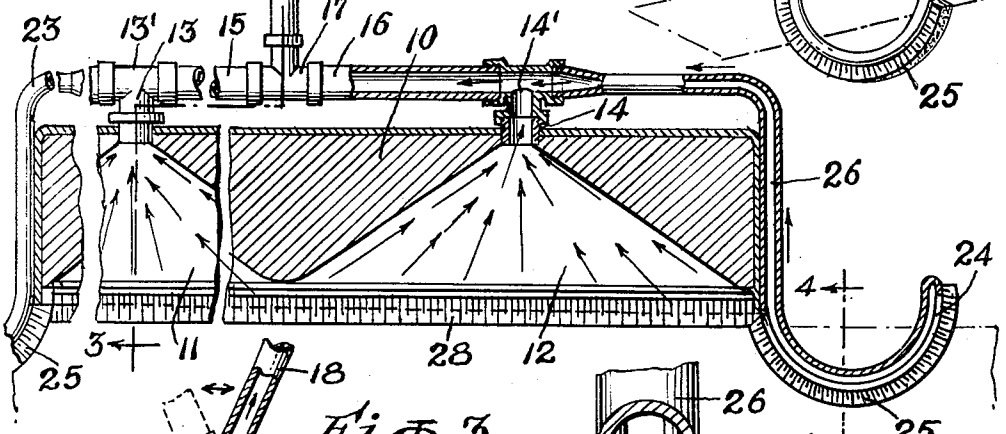
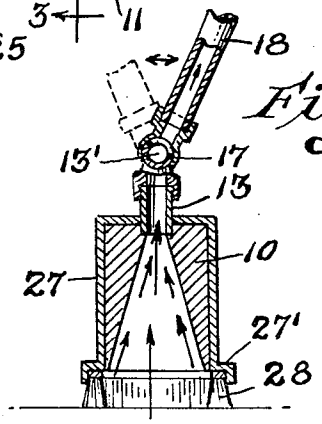


Fig. 3.



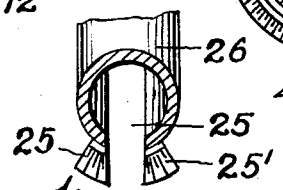


Fig. 4.

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VACUUM CLEANER HEAD

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1 Claim. (Cl. 15—398)

This invention relates to a vacuum cleaner head and more particularly to a vacuum cleaner head for use by bowling lane operators.

It is the principal object of the present invention to provide a vacuum cleaner head adapted to span the full width of a bowling lane and which has extensions from the sides thereof that are shaped to include the outside ball channels so that with one passing of the cleaner head over the bowling lane the entire lane, including the channels, will be cleaned.

Other objects of the invention are to provide a vacuum cleaner head for use on bowling lanes, having the above object in mind, which is of simple construction, inexpensive to manufacture, easy to operate, of pleasing appearance, durable, compact, efficient and effective in use.

For a better understanding of the invention reference may be had to the following detailed description taken in connection with the accompanying drawing, in which Figure 1 is a perspective view of the vacuum cleaner head extended across a bowling lane and its channels to illustrate the manner in which it is used. Figure 2 is an enlarged transverse sectional view of the vacuum cleaner head as viewed on line 2—2 of Figure 1. Figure 3 is a vertical sectional view of the vacuum cleaner head taken through the pipe couplings and generally on line 3—3 of Figure 2. Figure 4 is an enlarged vertical sectional view of one of the channel extensions and as viewed generally on line 4—4 of Figure 3.

Referring now to the figures, 10 represents the main body which is of a length to span the full bowling lane. This main body has two large dust-collecting recesses 11 and 12 in the bottom thereof from which there extends respectively pipe fittings 13 and 14 having respectively T-couplings or fittings 15' and 14'. Extending respectively inwardly from these T-fittings are respective pipes 15 and 16 that are joined to a central T-fitting 17. A pipe handle 18 is connected to and extends upwardly from the T-fitting 17. A vacuum hose line 19 is connected to the upper end of the handle 18, the handle 18 being bent at its upper end as indicated at 18' to provide a portion by which it can be easily grasped. By this handle the cleaner head is pushed along a bowling lane 20 that has on the opposite side thereof ball channels 21 and 22.

Extending laterally from the fitting 13' is a pipe extension 23 that is bent downwardly and curved to conform to the shape of the channel 21. This pipe extension 23 extends laterally and downwardly over the end of the cylinder head and is open on its underside as is shown in Figure 4 to provide an air suction slot 24 for receiving the dust. The part 23 has brush elements 25 and 25' on the opposite sides of the slot 24 for effecting the sweeping action and from which the dust is drawn through the slot 24 into the pipe 23 and laterally through the handle 18 and pipeline 19.

A similar pipe 26 extends laterally from the fitting 14' and downwardly so as to conform with the channel 22. This pipeline extension 26 also has a slot 24 and brushes 25 and 25'. The handle 18 can be pivoted as illustrated in Figure 3 to one side or the other of the cleaner head.

A casing 27 extends downwardly over the body 10 and is flanged at its lower end as indicated at 27' to receive and retain a hollow brush element 28 that extends the full length of the body 10 and width of the bowling lane. The brush is closed at its side ends and is joined by the brush elements 25 and 25' to form the lateral extensions thereof.

It will be apparent that as this vacuum cleaner head is worked across the bowling lane that the full width of the lane will be swept and as well the side ball channels 21 and 22 will likewise be swept. One and not more than two passings of the head over the bowling alley or lane should be sufficient.

While various changes may be made in the detailed construction it shall be understood that such changes shall be within the spirit and scope of the present invention as defined by the apparent claim.

What is claimed is:

A vacuum cleaner head for use on bowling lanes, comprising a main body adapted to extend the full width of the bowling lane, said main body having two openings in the underside thereof, each opening communicating with the top of the body through spaced apart fittings, a vacuum pipe disposed along the top of the body including T couplings connecting with said fittings, a tubular operating handle connected to the centre of said vacuum pipe and having a vacuum hose line connected thereto, a hollow brush element secured to the underside of said body and surrounding said two openings, pipe extensions connected to each end of said vacuum pipe, said extensions embracing the ends of said body and terminating with arcuately curved ends adapted to conform to the respective side ball channels of the bowling lane, a slot formed along the bottom of each arcuately curved end having small brush elements disposed along each side and projecting downwardly therefrom.

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