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W. E. BECKER

1,766,870

BRUSH

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Fig. 1.

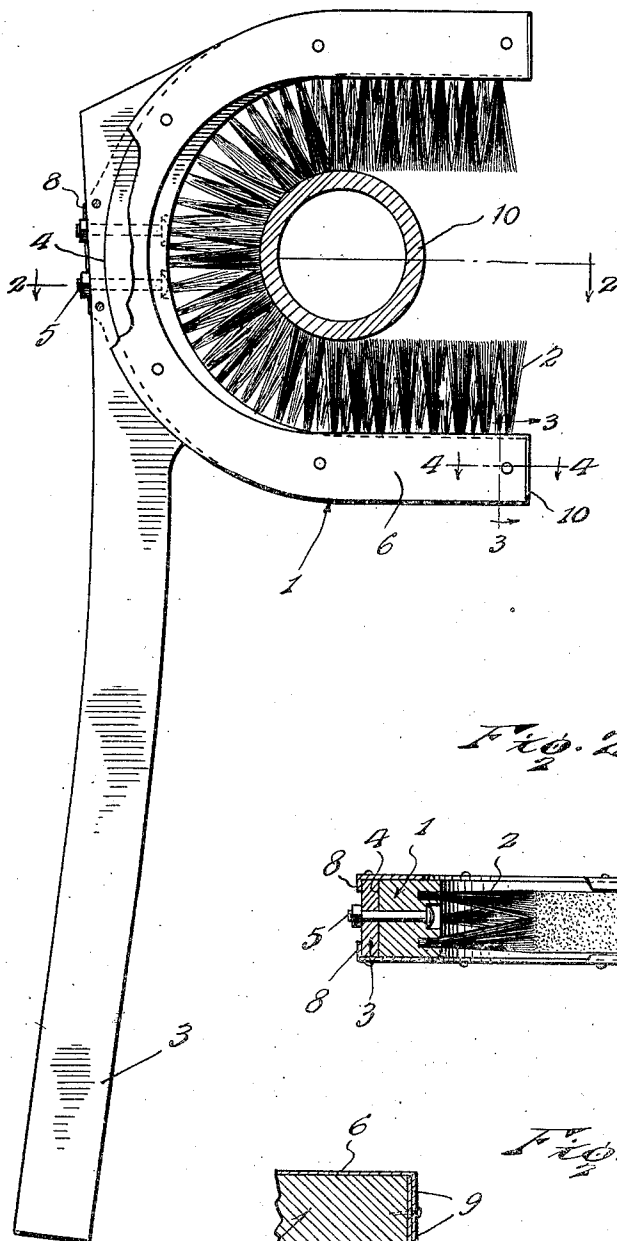


Fig. 3.

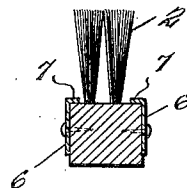


Fig. 2.

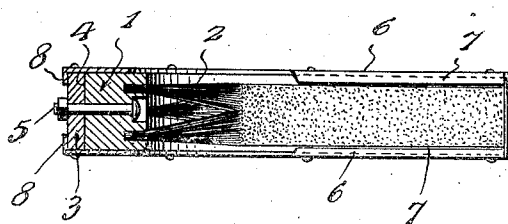
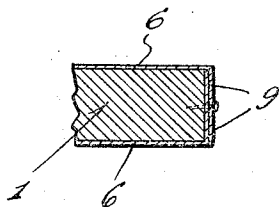


Fig. 4.



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BRUSH

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The present invention is directed to improvements in brushes.

The primary object of the invention is to provide a brush so constructed that it can be effectively used for removing frost from the refrigerant pipes located in the hardening room of an ice cream plant.

Another object of the invention is to provide a brush of this character so constructed that it will conform to the curvature of the pipe in order that the frost accumulated thereon can be easily and quickly removed.

Another object of the invention is to provide a brush of this kind which is strong, easy to manipulate, and one which can be manufactured at a very small cost.

Another object of the invention is to provide a brush which will effectively remove the frost from the pipes without the necessity of stopping the refrigerating system to defrost the pipes.

With these and other objects in view, this invention resides in the novel features of construction, formation, combination and arrangement of parts to be hereinafter more fully described, claimed and illustrated in the accompanying drawing, in which:—

Figure 1 is a side view of the device,

Figure 2 is a sectional view on line 2—2 of Figure 1,

Figure 3 is a sectional view on line 3—3 of Figure 1.

Figure 4 is a sectional view on line 4—4 of Figure 1.

The brush comprises a U-shaped head 1 formed from suitable wood, said head having a plurality of tufts of wire bristles 2 secured in its concave surface, as clearly shown in Figure 1 of the drawing.

A handle 3 is provided and has one end provided with a curved seat 4 for snugly fitting the bight portion of the head 1, there being bolts 5 passing through the head and handle to firmly secure the same in fixed relationship.

Sheet metal brace plates 6—6 of arcuate form are provided and are secured to the opposite sides of the head 1 in any approved manner.

These plates have their arms formed with

inturned flanges 7—7 adapted to engage the inner surfaces of the arms of the head, as clearly shown in Figure 3 of the drawing.

The bight portions of the plates 6—6 are also provided with inturned flanges 8—8 which engage over the adjacent part of the handle 1. The latter flanges will obviously aid the bolt 5 in holding the head and handle united. The terminals 9 of the plates 6 are arranged in overlapping relation, as shown in Figure 4.

Owing to the U-shaped formation of the head the tufts 2 will be so arranged that a pipe 10 can be engaged between the tufts after which the handle is moved along the pipe to scrape the frost therefrom. Obviously the handle can be rocked during the movement of the head so that the frost accumulation can be removed from the entire surface of the pipe.

Heretofore it has been customary to stop the refrigerating apparatus in order that the frost can be removed from the pipes in the hardening room of an ice cream plant, by steam or warm air, but this procedure is objectionable since it takes considerable time to again chill the room. With a brush constructed in accordance with my invention the pipes can be thoroughly cleaned in a comparatively short time and without affecting the temperature in the hardening room.

While the device is primarily designed for removing frost from pipes it is not necessarily limited to such use, since it can be used for removing incrustation of various sorts from pipes used for other purposes.

From the foregoing, it is thought that the construction, operation and many advantages of the herein described invention will be apparent to those skilled in the art, without further description, and it will be understood that various changes in the size, shape, and proportion and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

What is claimed is:—

1. A brush comprising a U-shaped head of wood and bristles extending radially inward from the inner concave wall of the head, a

handle in the plane of the head having a side
portion cut away to provide a curved seat in
which the closed end of the brush head is
snugly fitted, and reinforcing plates secured
to the opposite flat sides of the brush head
5 and overlapping the joint formed between
the head and handle and provided with
flanges engaging the outer side of the handle.

2. A brush comprising a U-shaped head
of wood and bristles extending radially in-
ward from the inner concave wall of the
head, a handle in the plane of the head hav-
ing a side portion cut away to provide a
curved seat in which the closed end of the
brush head is snugly fitted, and reinforcing
plates conforming to the outline of the head
15 and secured to the opposite flat sides thereof
and overlapping the joint formed between
the head and handle, and having flanges
along their inner edges engaging the inner
concave wall of the head adjacent the ends
thereof, and having other flanges at their
outer edges overlapping the outer side of
the handle.

25 In testimony whereof I affix my signature.
WILLIAM E. BECKER. [L. s.]

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