

No. 608,365.

Patented Aug. 2, 1898.

F. GOEHRING.
BRUSH.

(Application filed Oct. 5, 1897.)

(No Model.)

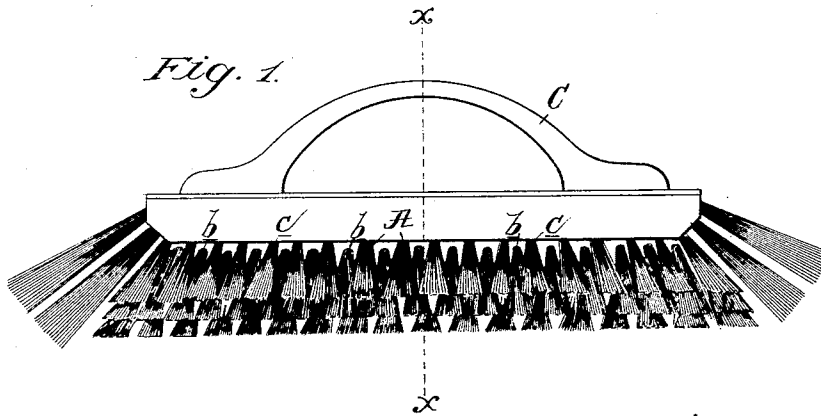
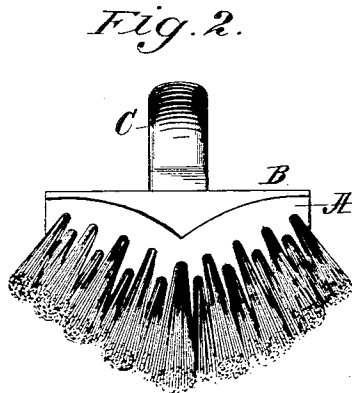
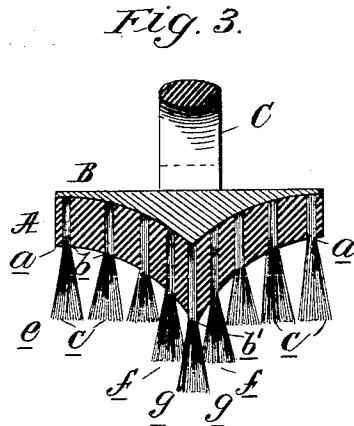
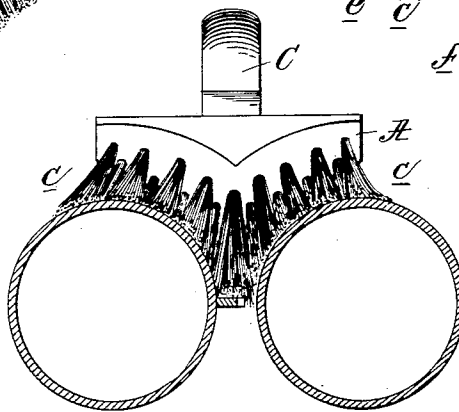


Fig. 4.

Witnesses
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UNITED STATES PATENT OFFICE.

FRIDOLIN GOEHRING, OF UNION, HUDSON COUNTY, NEW JERSEY.

BRUSH.

SPECIFICATION forming part of Letters Patent No. 608,365, dated August 2, 1898.

Application filed October 5, 1897. Serial No. 654,125. (No model.)

To all whom it may concern:

Be it known that I, FRIDOLIN GOEHRING, a citizen of the United States, residing in the town of Union, Hudson county, and State of New Jersey, have invented certain new and useful Improvements in Brushes, of which the following is a specification.

My invention relates to that class of brushes which are intended for use in cleaning the pipes of beer-coolers, and my improvements are particularly directed to giving to the brush such a shape and configuration that it shall readily and effectually clean the adjacent sides of two of the pipes and the intervening comb in a single operation, as is hereinafter more fully set forth.

As is well understood in the art, beer is cooled by allowing it to flow downward over a series of refrigerating-pipes placed above each other and provided upon their under sides with depending combs to assist in regulating the flow of the beer. These pipes and combs require frequent cleaning, and it is for this special purpose that my improved brush has been designed.

In the drawings, Figure 1 is a side elevation of the brush. Fig. 2 is an end view of the same. Fig. 3 is a cross-sectional view, on an enlarged scale, taken on the lines *xx* of Fig. 1 and omitting the end bristles; and Fig. 4 is an end view of the brush in use upon a section of the cooling apparatus.

Similar letters of reference designate similar parts in all the figures.

A is the body of the brush, which is formed, as shown, with two oppositely-inclined concave faces *aa* and is also furnished with a suitable back *B* and a handle *C*. The body *A* of the brush is provided with a series of openings *bbb* in the faces *aa* and also with a series of holes *U* along the center of the body in the ridge formed between the faces *aa*. These holes are to receive the bristles *ccc*, and they penetrate the body of the brush, when viewed in cross-section, substantially at right angles to the plane of its back, and the ends of these bristles are cut so as to present three separate horizontal planes *eee* *ffg*. When viewed laterally, the bristles

either end, and at each end of the brush-body it is provided with a series of end bristles *hh*, which project outwardly and downwardly in a fan-shaped form, so as to extend beyond all the other bristles except those inserted along the central rib of the back. By this arrangement I provide a brush which when applied to the refrigerating-pipes will have two oppositely-inclined substantially concave faces adapted to engage with the opposed sides of the refrigerating-pipes and also having a central portion which is adapted to engage with the comb intervening between the pipes, so that by a single longitudinal movement of the brush both pipes and the intervening comb will be scoured.

By inserting the bristles substantially at right angles to the back of the brush I secure their greatest efficiency, the outer series of bristles contacting with the pipes substantially at right angles, the central series engaging with the comb substantially at right angles, while the series adjacent to the central series, being compressed between the approaching surfaces of the pipes, not only scour the pipes, but by being so compressed tend to give additional support to the central series.

As is well understood, the refrigerating-pipes are inserted in headers, and in order to effectively and easily clean the headers, particularly at these points of junction, I provide the brush with the downwardly-inclined fan-shaped series of bristles at either end. These projecting beyond the ends of the brush follow the pipes up to and against the headers and may be effectively used to thoroughly cleanse that portion of the apparatus. When used upon the pipes only, they operate to remove the lighter and looser portions of the accumulated matter from the pipes and to brush off the matter which has been loosened by the scouring of the main body-bristles.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

The combination, in a brush for cleaning beer-coolers, of a body provided with two oppositely-inclined concave faces merging into a central rib, series of body-bristles, mounted

in said concave faces and along said rib, at
right angles to the back of the brush in trans-
verse section, and inclining from the center
of the brush toward either end, for scouring
5 the pipes and combs of the cooler by longitu-
dinal movement, and fan-shaped series of
end bristles extending outwardly and down-

wardly from each end of the brush for clean-
ing the headers of said coolers, substantially
as described.

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Witnesses:

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