(No Model.)

E. BROWN & J. T. GAIGE.

Milk Cooler Washer.

No. 241,290. Patented May 10, 1881.

Fig. 1.

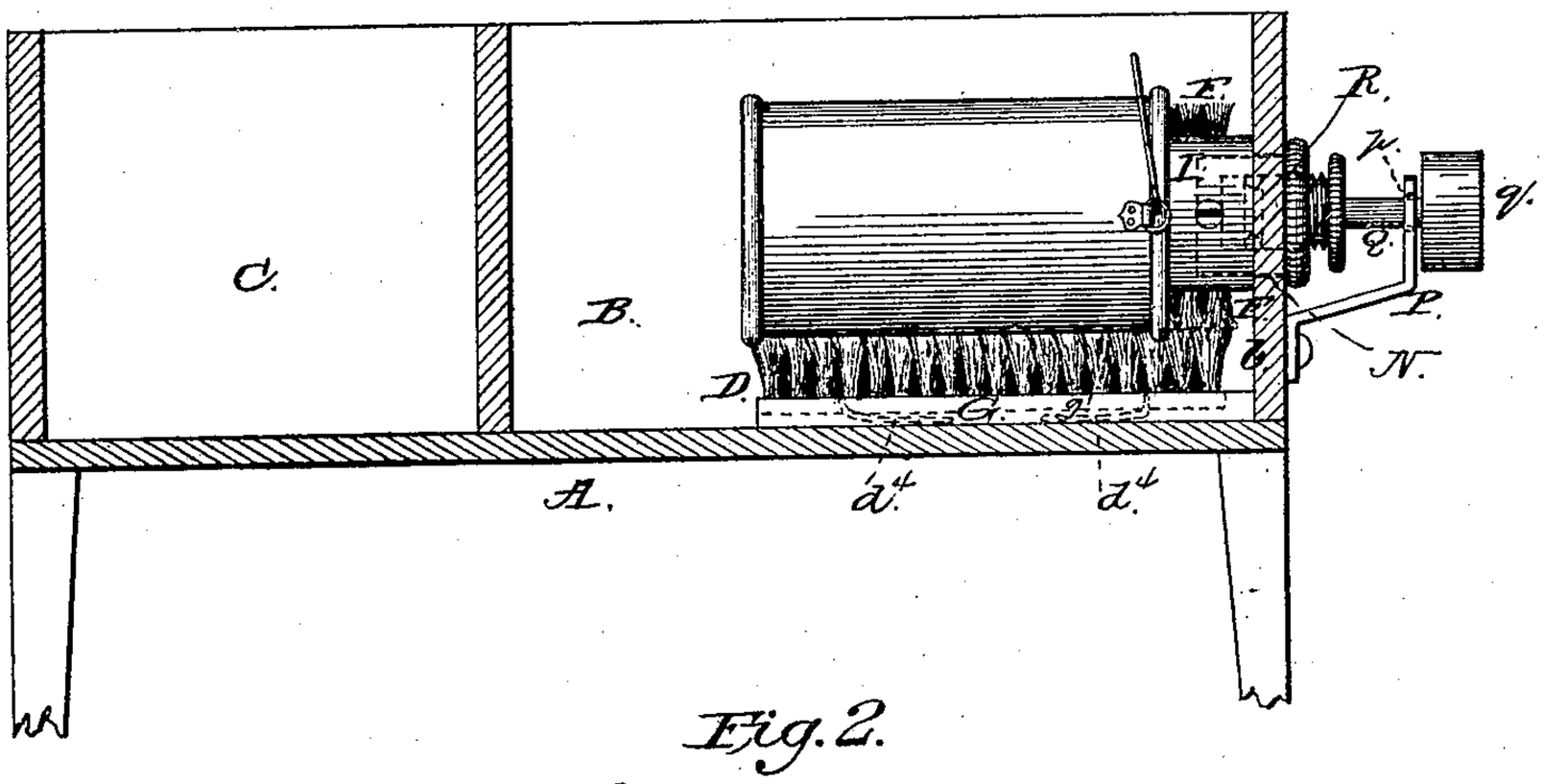


Fig. 2.

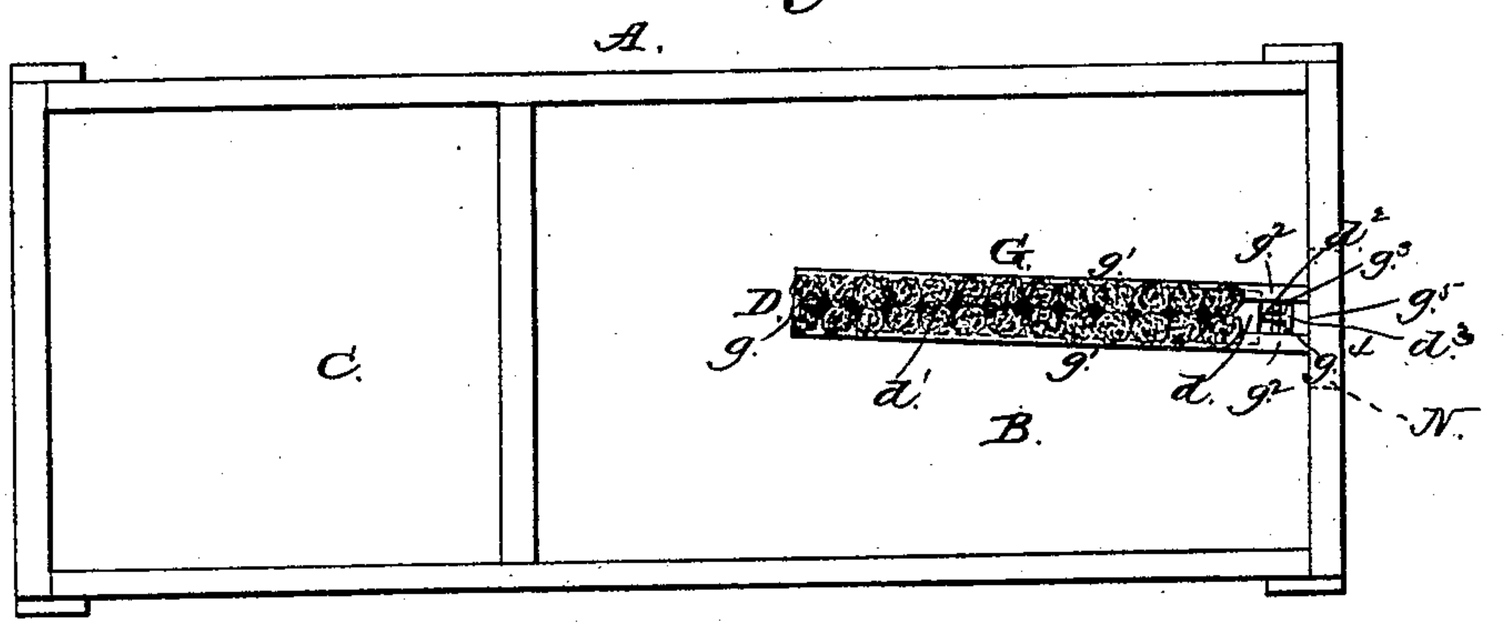


Fig. 3.

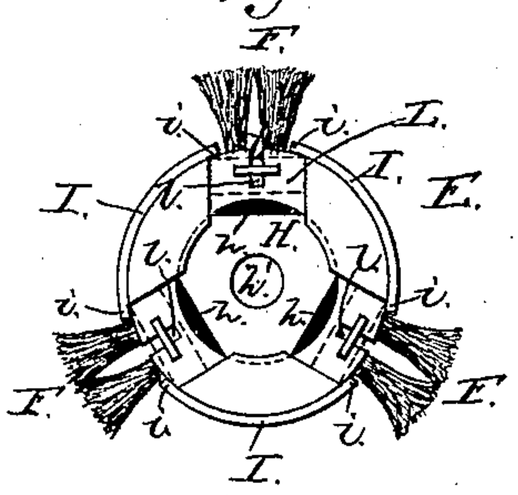
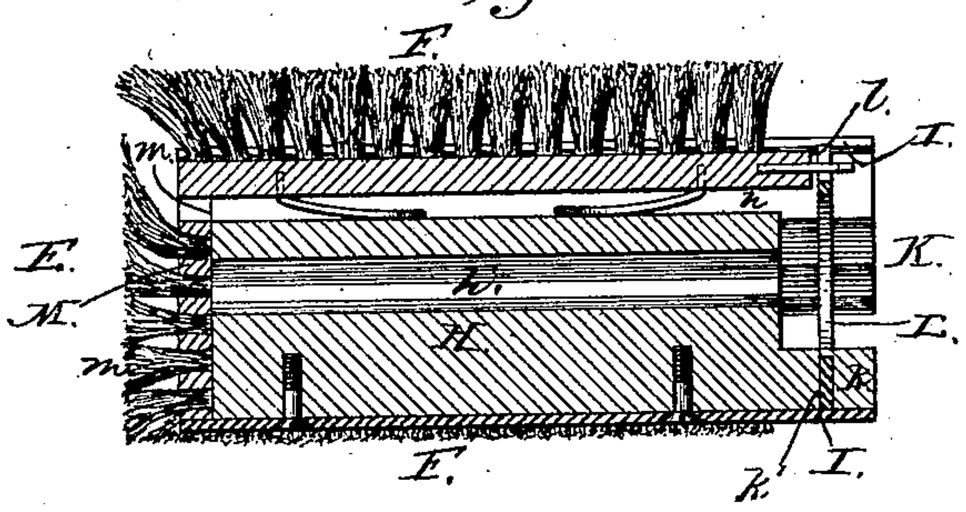


Fig. 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

EUGENE BROWN AND JOHN T. GAIGE, OF EATON, NEW YORK.

MILK-COOLER WASHER.

SPECIFICATION forming part of Letters Patent No. 241,290, dated May 10, 1881.

Application filed February 28, 1881. (No model.)

To all whom it may concern:

Be it known that we, EUGENE BROWN and JOHN T. GAIGE, citizens of the United States, resident at Eaton, in the county of Madison and State of New York, have invented certain new and useful Improvements in Milk-Cooler Washers; and we 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 is a representation of a longitudinal section, partly in elevation. Fig. 2 is plan, showing inclined brush, and Figs. 3 and 4 are detail views.

This invention relates to improvements in devices for cleaning cans.

The object of this invention is the production of a device which will thoroughly cleanse all portions of the can and at the same time relieve the pressure upon the apparatus.

The invention consists in a brush constructed as hereinafter set forth, by means of which, and its combination with other devices, the result is obtained.

In the annexed drawings, A is a table supported on legs and divided into the washing and rinsing tubs B C. At the bottom of the former, at its outer end, *b*, is arranged obliquely a stationary brush, D. Above this, but on the same line, is the rotary cylinder E, having similar brushes F.

G is the holder for brush D, made of metal, having its end *g* open, its sides *g'* turned in at g^2, and having a bridge, g^3, with notch g^4, located near its end g^5, which latter is at the end of tub B.

Brush D is formed of a back, *d*, and bristles *d'*, and has at one end the key d^2, having head d^3, and has springs d^4 made fast to its back. These springs may be made of any suitable shape—spiral, plate, loop wire, as shown, or any other. This brush is slipped into the open end of holder G, the key end in front, the edges of the back catching under lips g^2. The key is turned with its stem in notch g^4 and its head back of the bridge g^3. This keeps the brush in place.

H is the body or stock of cylinder E. It has in its periphery the longitudinal grooves *h*, of a size to receive the backs of the brushes F, the latter of a construction similar to brushes D. Secured to the portions of this stock between the grooves are the curved plates I I I, whose edges *i i* project over said grooves and engage the edges of the backs of the brushes. At one end this stock has the enlarged bore K, and in the ends *k*, between the grooves *h*, are cut from the outside the transverse grooves *k'*. In these grooves *k'* is placed the flat ring L, having the notches *l* where it spans the grooves *h*. The brushes F are run into these grooves *h* from the other ends, and are held in by their keys being turned in the notches *l*. At the other end of the cylinder the curved plates I pass beyond the stock H, forming a recess, *m*.

M is a plate having a shape like the end of stock H. This plate has bristles *m'*, and is securely attached to stock H in recess *m*. Longitudinally through the center of this stock is the bore *h'*.

N is a hole in the end of tub B, and P a bearing, with hole *p* on a line therewith.

Q is a journal, which is passed through these holes, a gland, R, being preferably placed in hole N and through the bore *h'*, and having at its outer end the pulley *q* or other device for applying power. This journal is held secure in the cylinder, and when the gland is used it enters into the enlarged bore K.

The cans to be cleansed are slipped onto the cylinder and the latter is revolved. The side and end brushes of the cylinder cleanse the inside, and the bottom brush the outside. The springs receive the pressure, relieving the brushes and preventing their breakage.

The brushes, being removable, can be taken out and cleaned and replaced.

What we claim is—

1. In a milk-cooler washer, the combination, with the tub B, having the grooved holder G, provided with the notched bridge g^3, of the removable brush D, having key d^2 d^3, the cylinder E, having the removable brushes F, the plate M, having bristles *m'*, and the shaft and pulley for operating said cylinder, substantially as and for the purposes set forth.

2. In a milk-cooler washer, the cylinder E,

formed of the grooved stock H and the curved plates I, the edges of which project slightly over the grooves in the stock, in combination with the flat ring L, having notches *l* where it spans the grooves *h*, and the brushes F, provided with springs at their backs and keys at their front ends, substantially as and for the purposes set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

EUGENE BROWN.
JOHN T. GAIGE.

Witnesses:
MYRON D. CASE,
NICHOLAS BENEE.