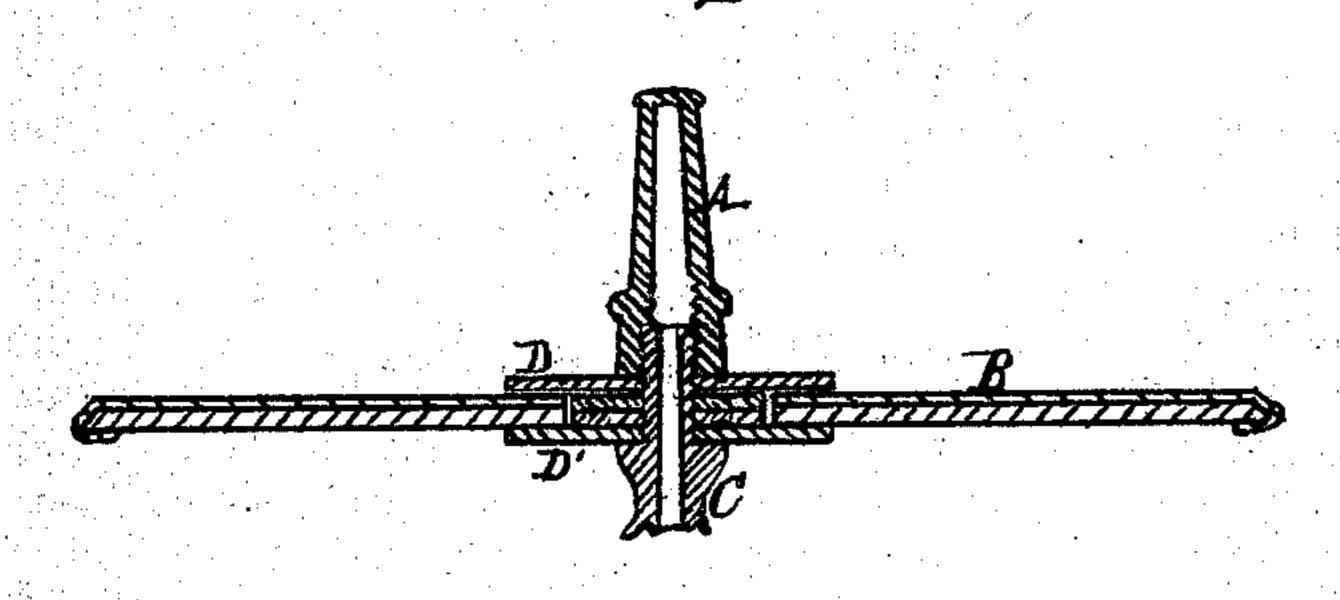
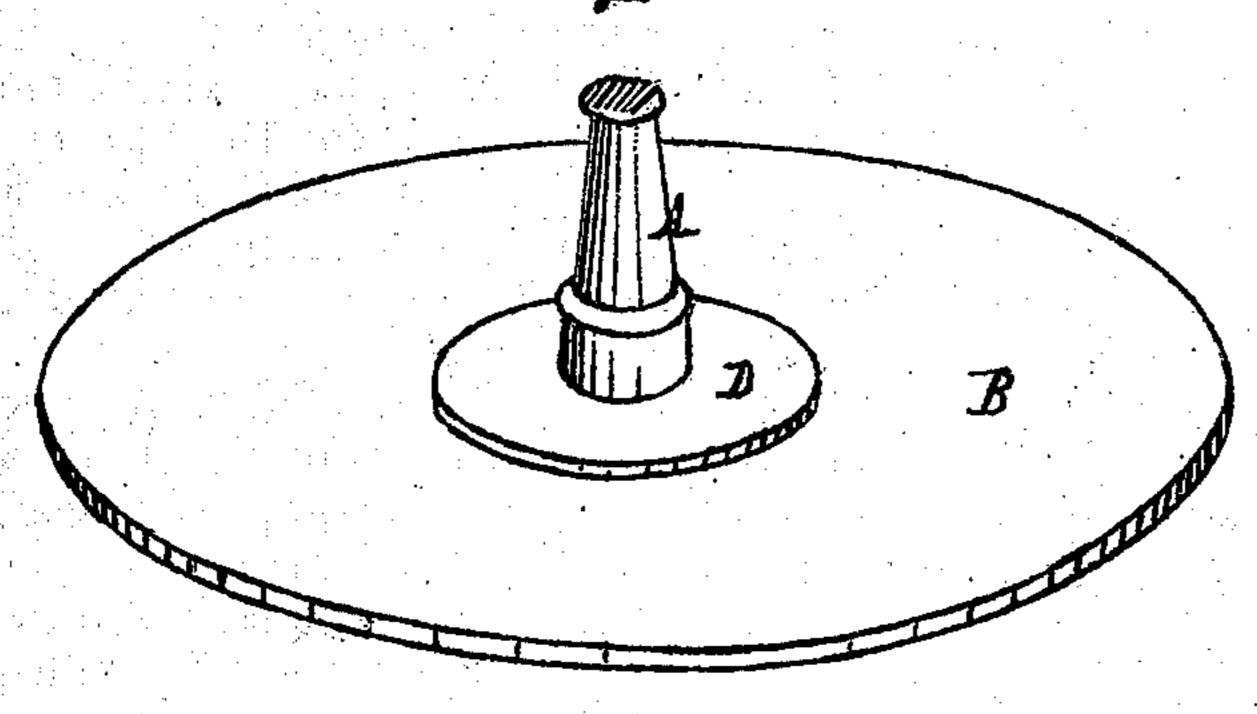
## WILLIAM HARTLEY MILLER. Improvement in Fender for Gas Brackets.

No. 119,236.

Patented Sep. 26, 1871.





John a Bickeli Edgar H. Townan

## UNITED STATES PATENT OFFICE.

WILLIAM HARTLEY MILLER, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN FENDERS FOR GAS-BRACKETS.

Specification forming part of Letters Patent No. 119,236, dated September 26, 1871.

To all whom it may concern:

Be it known that I, WILLIAM HARTLEY MIL-LER, of Philadelphia, State of Pennsylvania, have invented a new and original Fender for Gas-Brackets; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawing making part hereof, in which—

Figure 1 is a vertical cross-section of my in-

vention. Fig. 2, a perspective view.

My invention consists of a fender for gasbrackets, so constructed that the edge of the fender prevents the flame of the gas from coming in contact with the wall, or from coming in contact with any object against which the end of the bracket, to which the burner is attached, may be pushed. My fender is constructed with a joint in the center around the base of the burner, so that when the fender comes in contact with any object it will revolve and not scratch said object.

To enable others skilled in the art to make and use my invention, I will describe its construction

and operation.

In the drawing, A is the burner; B, the fender; C, the gas-pipe. D D' are guides to prevent the fender from wabbling. E are intermediate strips, of any suitable material, which receive the pressure of the burner when it is screwed down, and prevent the guides D D' from binding on the fender B, thus allowing the fender to revolve freely. The fender B may be made of any suitable material so stiff that it will not double up.

The fender, of which the drawing is a representation, is made of pasteboard with an upper facing of tin, the tin being flanged down and lapped over at the edges; but it may be constructed of brass, iron, copper, zinc, or other metal; or of porcelain, wood, glass, earthenware, or in fact any material which will answer the

purpose above specified.

It is applied to the bracket in the following manner: The burner A is first unscrewed and taken off. The fender is then slipped on and se-

cured by screwing down the burner on the upper guide D' as tightly as is desired; the pressure coming on the intermediate layers E, which are thicker than the fender, the fender revolves freely. The intermediate strips E form the tread of a wheel having large projecting flanges D D', (the guides,) and the fender revolves easily and freely around the strips or layers E as a center between the guides or flanges D D'.

If desired, the fender may be rigid and not revolving, though I prefer the latter; or, the fender may be triangular, square, or any polygon, and may be made with arms or spokes like a wheel; or may consist of a number of arms or spokes radiating from the center without a rim or periphery; or the fender may be a semicircle in shape, so applied that the ends of the chord of the semicircle will abut against the wall or other object against which the outer end of the bracket may be thrust; or it may be a straight bar across the burner at right angles with the pipe adjoining the burner, so applied as to strike the wall; or the fender, of whatever, description, instead of being applied to the burner, may be attached to any part of the bracket between the wall and the burner. The fender, also, may consist of an arm or arms starting or diverging from the bracket at or near the wall or point of fixture, and joining the bracket again at or near the burner, thus preventing the burner from striking the wall.

Having thus described my improvement, what I claim as new, and desire to secure by Letters

Patent, is—

1. In combination with a gas-bracket a fender, to prevent the flame or burner from striking the wall or other object against which the outer end of the bracket may be thrust.

2. In combination with a gas-bracket a fender having a joint at the center, allowing the fender

to revolve, substantially as described.

WM. HARTLEY MILLER.

Witnesses:

LEWIS GODBOU, GEO. E. BUCKLEY.

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