

(No Model.)

N. SCHWAB.

GAS TRAP COVER FOR WASH BASINS.

No. 355,722.

Patented Jan. 11, 1887.

Fig. 1.

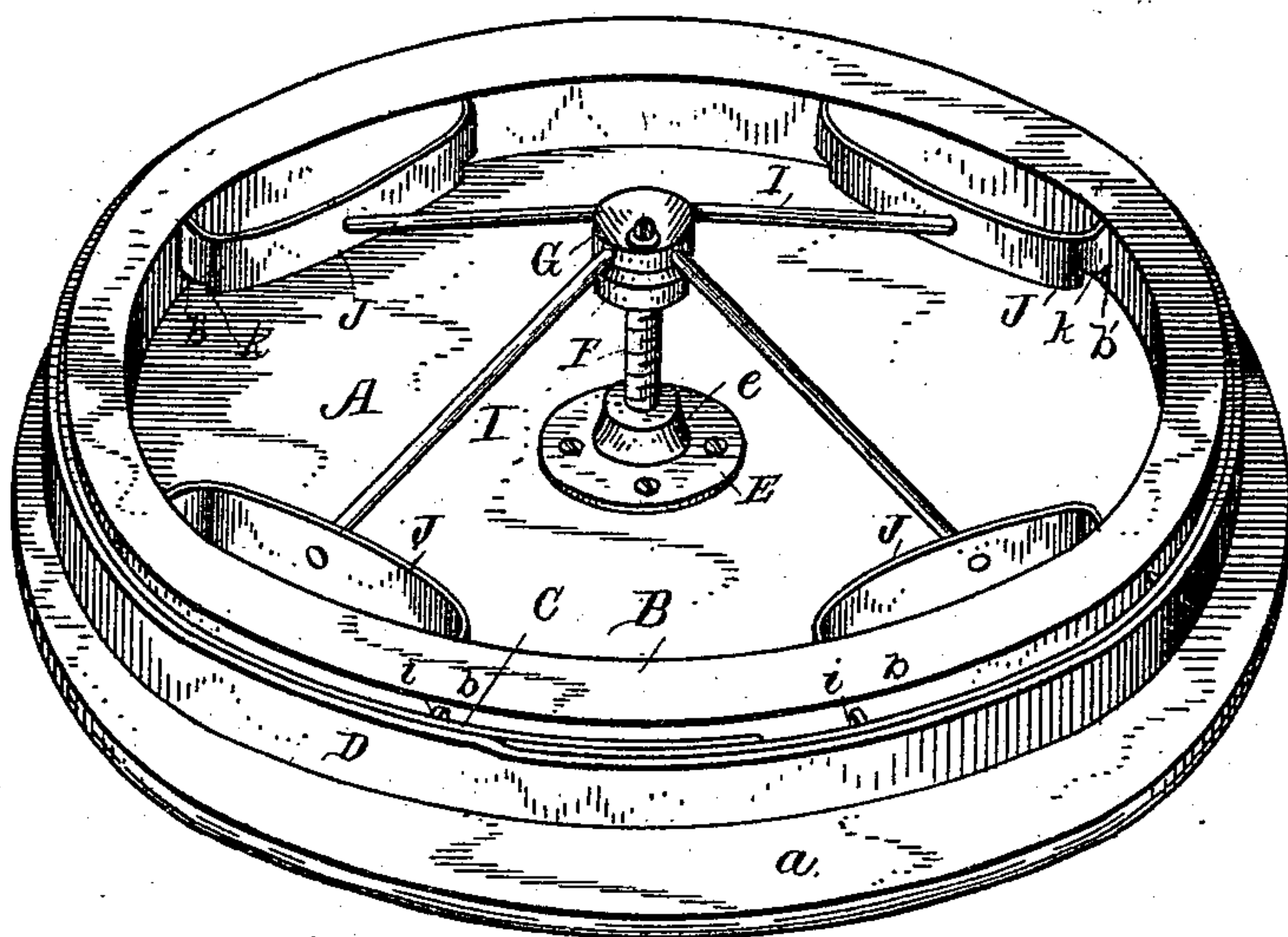


Fig. 2.

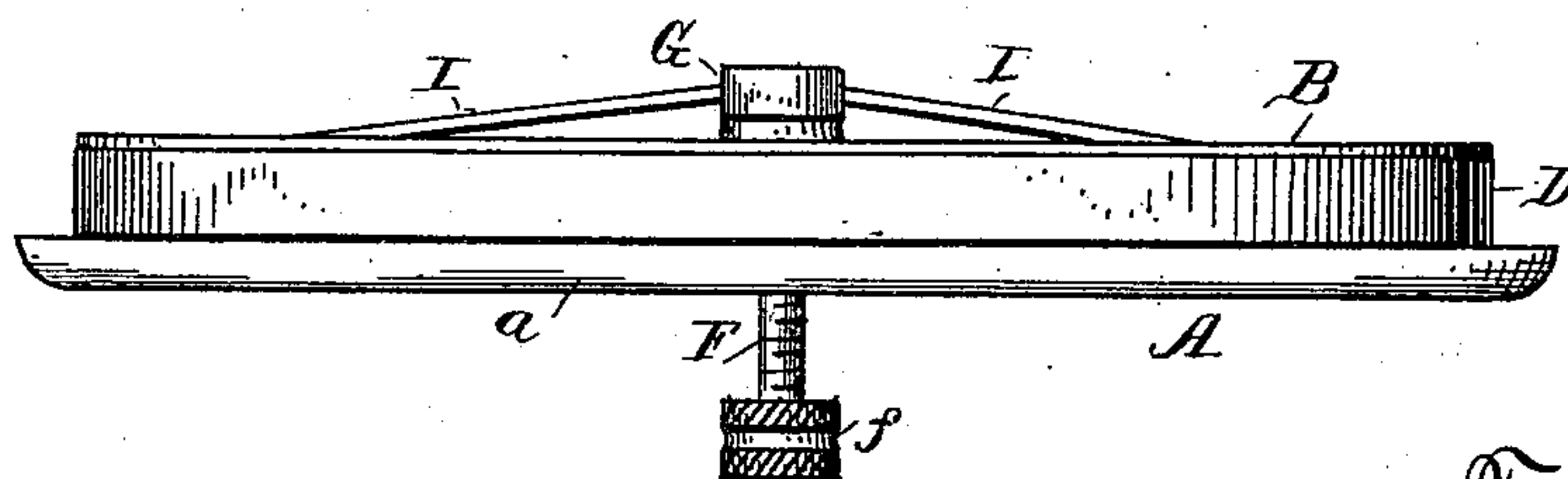


Fig. 4.

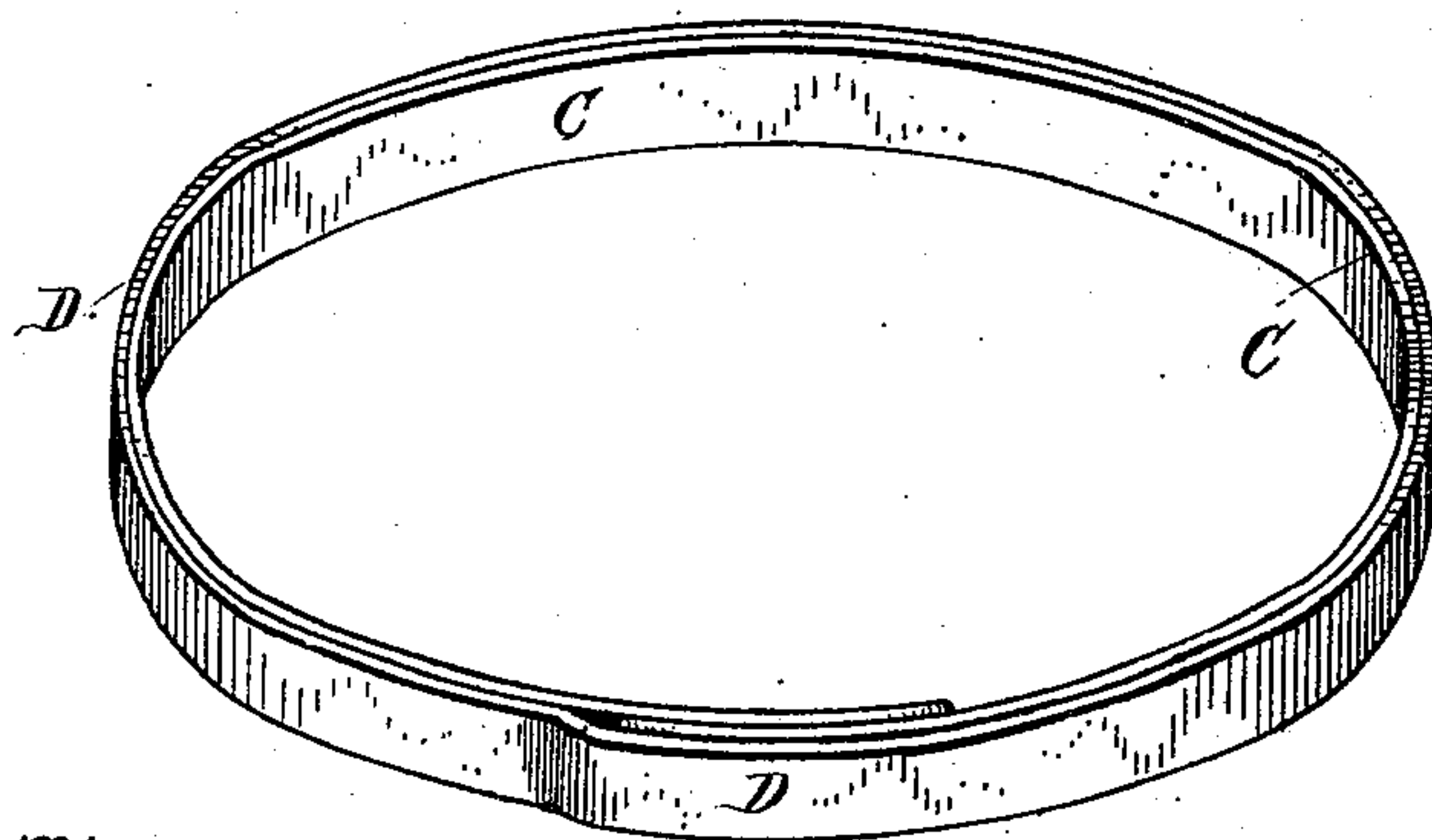
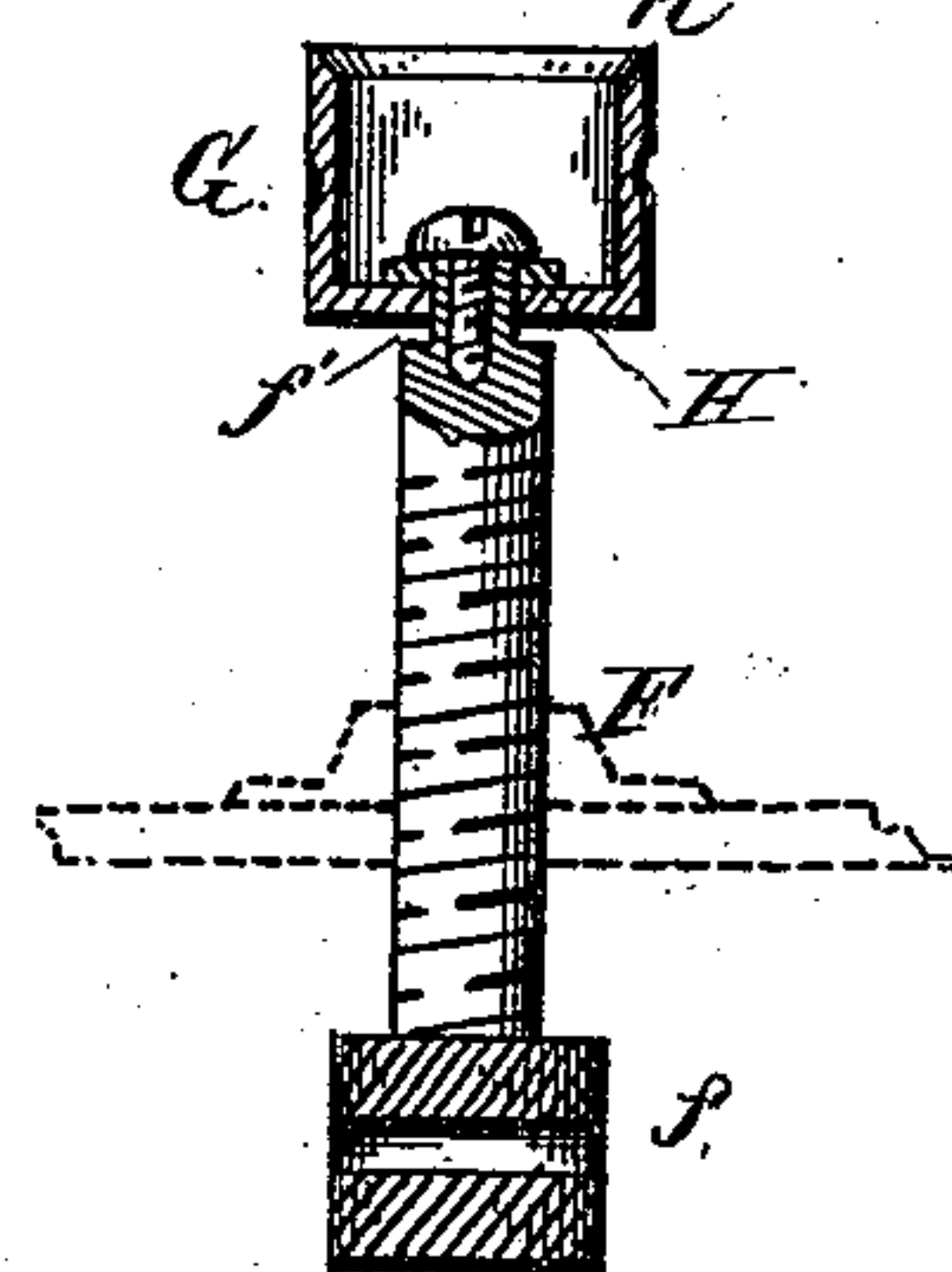


Fig. 3.



Inventor

Nathan Schwab

By his Attorney *M. D. Peck*

Witnesses  
J. Thomas Groves  
Martha Blumberg.



# UNITED STATES PATENT OFFICE.

NATHAN SCHWAB, OF NEW YORK, N. Y.

## GAS-TRAP COVER FOR WASH-BASINS.

SPECIFICATION forming part of Letters Patent No. 355,722, dated January 11, 1887.

Application filed August 24, 1886. Serial No. 211,719. (No model.)

*To all whom it may concern:*

Be it known that I, NATHAN SCHWAB, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Gas-Trap Covers for Wash-Basins; and I 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, which form part of this specification.

My invention relates to that class of covers for wash-basins for the prevention of escape of noxious and poisonous gases from the street-sewer into the bed-chamber and other apartments of the house; and it consists in the construction hereinafter described, and more particularly pointed out in the claims.

It is well known that many kinds of fevers and other low types of disease are contracted in the sleeping-apartment from the escape of sewer-gas through the pipes connecting the wash-basin with the main sewer in the street; and the object of my invention is to provide a safety-cover that can be adjusted to any of the ordinary-sized basins and be so tightly secured in the upper part of the basin as to form an air-tight trap, rendering the escape of gas into the apartment impossible until the cover is removed.

Referring to the drawings, Figure 1 is a perspective view of the under side of my improved cover ready for use. Fig. 2 is a side view of the same. Fig. 3 is a sectional view showing the swivel-joint. Fig. 4 is a view showing the band and elastic packing detached from the cover.

Like letters refer to corresponding parts in each figure of the drawings.

A represents a cover, of wood or of any other light suitable material, of sufficient size to cover the top of the largest ordinary wash-basin, having a beveled horizontal flange, *a*, adapted to fit down upon the top of the stand when the cover is applied. On the underside of the cover, and toward its center from the periphery of flange *a*, there is a vertical rim or flange, B, which may be made of different layers of veneer, with the grain of each layer crossing or partially crossing that of the oth-

ers; or, if desired, this rim may be formed in the same piece with the cover, or made of a single piece and secured to the cover to fit down within the top of the basin when the cover is applied.

Around the rim B, on its outer side, there is placed a band, C, of metal or other hard strong flexible material, with its ends *c c* overlapping each other, to enable it to be crowded outward from the rim or enlarged in diameter without the ends separating from each other.

On the outer side of the band C, and of about the same width, there is placed a gasket or packing, D, of rubber or other soft elastic material, in the form of a belt or ring, which is stretched or pressed outward as the band is increased in diameter, and is adapted to fit into the inner top portion of the basin, and to conform to any irregularities there may be in the surface to which it is applied, thereby forming an air-tight joint.

In the center of the under side of the cover there is attached a keeper, E, by means of screws, bolts, or any other suitable fastening devices, from the center of which arises a screw-nut, *e*, which, by preference, is made integral therewith, though it may be formed separately and secured to the keeper.

A screw-bolt, F, is made to extend through the cover in the center, and is adapted to be worked up and down in the nut *e* by hand on its milled head *f* on the upper side of the cover. The lower end, *f'*, of the screw-bolt is reduced in diameter and passed through a hole in the top of a thick metal cup, G, and has a washer, H, around its end resting on the under side of the top of the cup, and is secured therein by a screw, *h*, inserted in its end, with the head of the screw resting on the washer to hold the parts together, thereby forming a swivel, enabling the end of the bolt to be turned in the cup without becoming detached therefrom.

Within the sides of the cup G there are loosely pivoted or hinged braces I, that extend to near the inner side of the rim B, where their other ends are loosely pivoted or hinged in the center of spring-arms J, each of which is so curved that its ends *j* are adapted to pass through vertical slots *b* in the rim that center at the screw-bolt F. The slots *b* are cut



within the rim B at a point sufficiently below where the rim is joined to the under side of the cover, so as to leave a stop, *b'*. That portion of the curved arms J which works in the slots *b* is reduced in width, forming a shoulder, *k*, on its upper side, which is retained within the circumference of the rim and limits the outward movement of the arms by striking the stop *b'*. The reduced portion of the arms is of sufficient length to enable their ends *j* to be pressed through the slots *b* against the band C, and to crowd the band outward alike on all sides, thereby increasing its diameter and stretching the elastic ring covering it until it shall be made to tightly fit within the top of the basin.

If desired, the ends *j* of the spring-arms J may be fastened to the band C, and the gasket D may be of the same length as the band and secured thereto, so that by contracting or drawing the arms within the rim the band will be drawn to its seat against the rim, instead of relying upon the contraction of the elastic gasket to crowd the rim to its seat when the arms are drawn inward, though I prefer the latter.

In operation, the screw-bolt F is turned downward until its head is near the upper surface of the cover, withdrawing the spring-arms J within the slots, when, by contraction of the elastic ring *t*, the end portions of the band are crowded over each other and the band is brought into contact with the rim B. The cover is then placed on the wash-stand with its rim extending into the basin, when the screw-bolt is turned outward, carrying with it the cup G and the inner ends of the braces, thereby forcing the ends of the spring-arms J against the band, which becomes enlarged in diameter, stretching the elastic ring D until it tightly presses against the inner sides of the basin, and is thus held in this position, in which it forms a complete trap to prevent the escape of sewer-gas into the room.

I do not confine myself to the number of

braces and spring-arms to be used in my cover, as I am aware that it is well adapted to the tops of many kinds of vessels, where it is desired to preserve the contents in an air-tight condition, and these braces and spring-arms can be increased or decreased in number in proportion to the size of the vessel, it being desirable, however, that in all cases at least three of the braces and spring-arms should be used to bring the requisite pressure on all sides of the band to insure a tight joint.

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

1. The combination, in a gas-trap cover, of a screw-bolt extending through the cover and braces connected therewith on the under side and within the rim of said cover, said bolt to be turned up and down to press curved spring-arms through the rim and against a band adjustable to the size of the basin, substantially as and for the purpose set forth.

2. A gas-trap cover for basins, having a rim on its under side, in combination with a screw-bolt in the center of the cover working through a nut secured thereto, the lower end of the bolt being swiveled in a cup carrying braces adapted to be raised to press curved spring-arms through the rim to adjust a band to the size of the basin, as and for the purpose set forth.

3. In combination with an adjustable gas-trap cover for wash-basins, a spring-arm curved and having its ends reduced in width to pass through openings in the rim of the cover to press a band against the sides of the basin, the said spring-arms being provided with shoulders to limit their movement, as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

NATHAN SCHWAB.

Witnesses:

HENRY MICHAELS,  
HENRY S. CLEMENT.