

(No Model.)

S. T. WILLIAMS OF THOS.  
SEWER GUARD.

No. 492,450.

Patented Feb. 28, 1893.

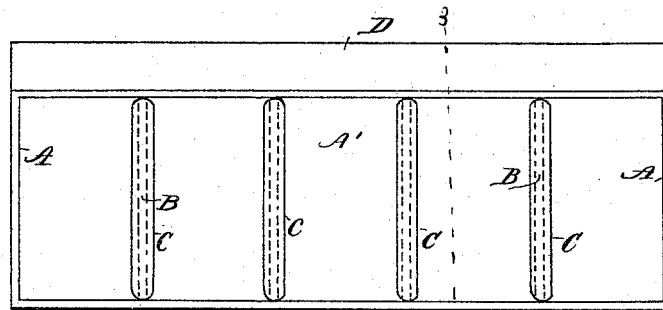


Fig. 1.

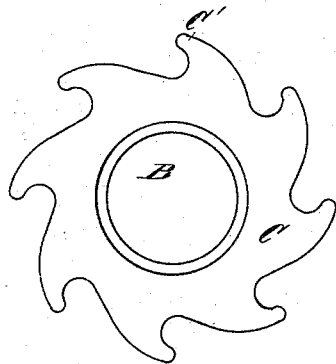


Fig. 3.

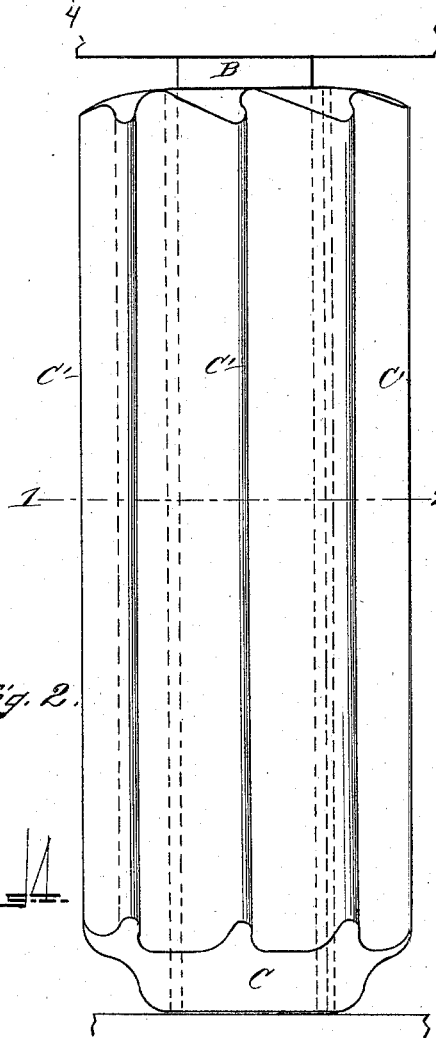
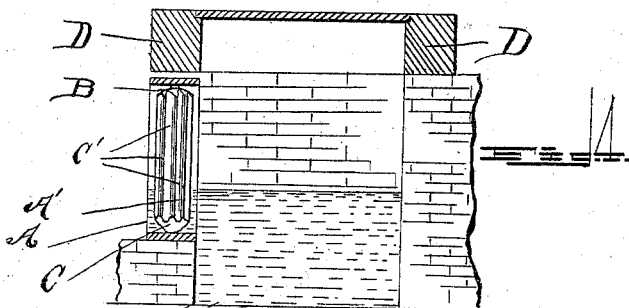


Fig. 2.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

SAMUEL T. WILLIAMS OF THOS., OF BALTIMORE, MARYLAND.

## SEWER-GUARD.

SPECIFICATION forming part of Letters Patent No. 492,450, dated February 28, 1893.

Application filed May 14, 1892. Serial No. 432,961. (No model.)

### *To all whom it may concern:*

Be it known that I, SAMUEL T. WILLIAMS of Thos., a citizen of the United States, residing in Baltimore city, in the State of Maryland, have invented certain new and useful Improvements in Sewer-Guards; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to make and use the same.

My invention relates to an improved device for sewer guards, adapted to be placed in the openings to sewers.

An object of my invention is to provide a device whereby large objects are prevented from passing into the sewer.

Another object of my device is to facilitate the passage of straw, dirt and other small material into the sewer and thereby preventing the opening to the sewer being banked up and the water prevented from flowing therein.

These and other objects are accomplished by my device as hereinafter described and shown in the drawings.

My invention consists in certain novel features, constructions and combinations as hereinafter described and particularly pointed out in the claims.

In the accompanying drawings which illustrate my invention,—Figure 1 is a front elevation of my device showing it in position in an opening to a sewer. Fig. 2 is an enlarged side elevation of one of the rotating sleeves. Fig. 3 is a cross-section on the line 1—2 of Fig. 2 through the sleeve and bar on which the sleeve rotates. Fig. 4, is a transverse vertical section of a guard constructed in accordance with this invention as applied to a sewer, it being taken on line 3—4 of Fig. 1.

Like letters of reference refer to like parts throughout the several views.

A wrought iron frame A is set in the sewer opening A', and at certain distances apart is provided with a series of round bars B on which are loosely mounted the fluted sleeves C C, each of which is provided with the blades or wings C', so that the said sleeves are easily revolved by the water passing into the sewer. The sleeves C are preferably formed separately, and are loosely mounted on the bars B, but it is obvious that the bars B and the sleeves might be of one piece, and

the said bars journaled at the top and bottom in the wrought iron frame A.

D represents the curb over the sewer opening.

The operation is as follows:—By means of the bars placed in the position shown, it is impossible for large objects to pass into the sewer as they will be intercepted by the sleeves which are mounted on bars; thus, loss of life is prevented as it has been not an uncommon thing for children to be swept into sewers during heavy rains. By means of the bars B and the rotating sleeves C mounted on said bars, small objects which are usually swept from the street into the sewer during heavy rains are prevented from piling up around the rods and thereby banking up the water and preventing its entrance into the sewer, for the reason that these objects as they come against the sleeves C by the force of the water which revolves the said sleeves are carried around therewith, and the water sweeps them into the sewer.

I do not limit myself to the exact construction shown as the same may be varied without departing from the spirit of my invention.

Having thus ascertained the nature and set forth the construction of my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination in a sewer guard, of a frame secured in the sewer opening, with a series of bars across said opening and mounted in said frame, and rotary sleeves mounted upon said bars and provided with blades or wings adapted to be turned by the flow of the water, substantially as and for the purpose set forth.

2. The combination in a sewer guard of a frame mounted in the sewer opening, with rotary devices located in said opening and mounted in said frame and adapted to be revolved automatically by the water flowing into the sewer, substantially as and for the purpose set forth.

3. A sewer guard consisting of a series of rotary devices located in the opening to the sewer and adapted to be revolved automatically by the water flowing therein, substantially as and for the purpose set forth.

4. The combination in a sewer guard, of a

frame mounted in the sewer opening, and a series of fluted rollers adapted to be rotated by the water in a plane substantially parallel to the direction of the said flow, substantially  
5 as described.

In testimony whereof I have signed my name to this specification, in the presence of

two subscribing witnesses, on this 11th day of May, A. D. 1892.

SAMUEL T. WILLIAMS OF THOS.

Witnesses:

THOS. KELL BRADFORD,  
LEE PURCELL.