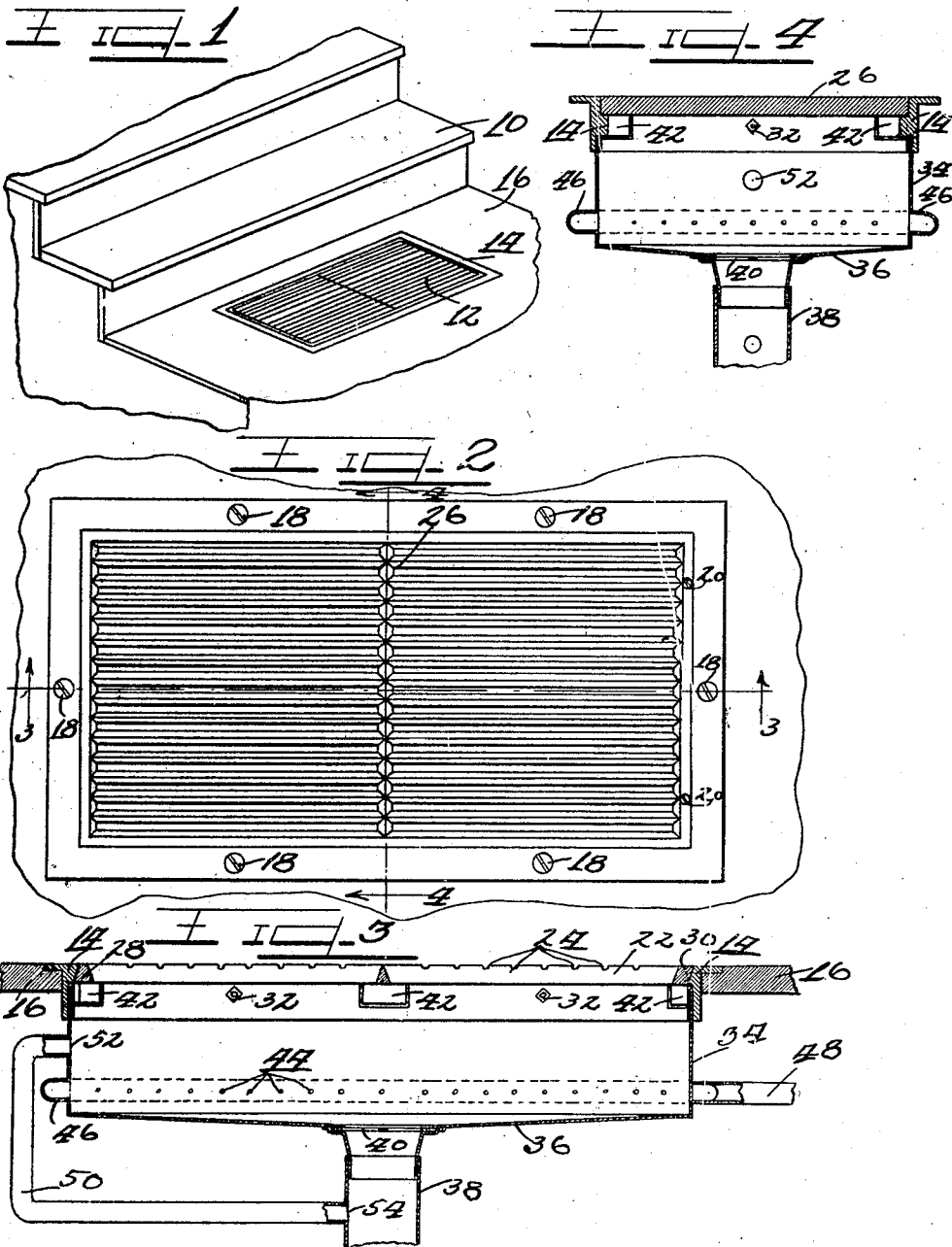


Jan. 30, 1923.

1 443,503

A. P. RITTER.
SANITARY FOOT MAT.
FILED JUNE 26, 1920.



Witnesses

H. Marks
Charles W. Hill

Inventor

Adolph P. Ritter

Charles W. Hill

UNITED STATES PATENT OFFICE.

ADOLPH P. RITTER, OF CHICAGO, ILLINOIS.

SANITARY FOOT MAT.

Application filed June 26, 1920. Serial No. 391,894.

To all whom it may concern:

Be it known that I, ADOLPH P. RITTER, a former subject of the Czar of Russia, who has declared his intention of becoming a citizen of the United States, and who is a resident of the city of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in a Sanitary Foot Mat; and I do hereby declare that the following is a full, clear and exact description of the same, reference being had to the accompanying drawings, and to the numerals of reference marked thereon, which form a part of this specification.

This invention relates to an improved construction of sanitary foot mat, and is particularly designed to take the place of the antiquated foot scrapers, and also to supplant the door mats now commonly in use.

An object of the invention is to provide a foot mat which is automatically kept clean and sanitary and one in which no dirt is allowed to accumulate.

A further object of the invention is to provide a sanitary foot mat which is flush with and fixed in the surface of the pavement, and which therefore cannot be lost or stolen, and furthermore obviates all danger of stumbling or falling over the same.

Still another object of the invention is to provide a sanitary foot mat from which all dirt is removed as soon as deposited, and which, therefore, positively prevents any subsequent carrying of the same dirt into the house.

Further and other important objects of this invention will be apparent from the accompanying drawings and specification.

The invention (in a preferred form) is illustrated in the drawings and hereinafter more fully described.

In the drawings:

Figure 1 is a perspective view of the lower portion of a flight of steps with my invention applied thereto.

Figure 2 is a top plan view of my improved sanitary foot mat.

Figure 3 is a sectional view taken on the line 3—3 of Figure 2 looking in the direction indicated by the arrows.

Figure 4 is a section taken on the line 4—4 of Figure 2 looking in the direction indicated.

As shown on the drawings:

The reference numeral 10 indicates a flight of steps having my sanitary foot mat 12 in

position thereon, the mat being held in place by a frame 14 countersunk flush with the pavement 16. Screws 18 are provided for fixedly holding the frame 14 in the pavement in any approved manner and smaller screws 20, hold the mat or grid 12 in the frame 14.

The mat or grid 12 consists of a plurality of parallel bars 22 made in any preferred manner, those shown in the drawings being provided with notches 24 in the top thereof to more readily dislocate mud and dirt from the shoes of the user. These bars are triangular in cross section, as this has been found by experiment to operate most effectively.

To further strengthen the bars 22, and hold them positively in position a transverse reinforcing bar 26, is provided extending across the middle portion of the grid 12, as best shown in Figure 4.

The grid 12 is provided with parallel sloping ends 28 and 30, adapted to slide into and fit with corresponding sloping sides of the casing 14. In this way the two screws 20 suffice to hold the grid in position, as will be obvious.

Directly underneath the grid 12 and attached to the frame 14 by bolts 32 is a rectangular casing 34, made of sheet iron or any other suitable material and preferably painted or enameled. This casing 34 is provided with a bottom 36 sloping to a central waste pipe 38, preferably fitted with a strainer member 40. Internally projecting lugs 42 are provided on the frame 14, adapted for the reception of the screws 20, and also to maintain the grid in position together with the casing, which is provided with notches to fit over the lugs.

Extending around the lower part of the casing 34, and communicating with the interior thereof, by means of the perforations 44, is the flush pipe 46. This pipe can be either integral with or attached to the casing 34 in any convenient manner, and has leading into it a supply pipe 48. An overflow pipe 50 is connected to the upper part of the casing at 52, and is joined with the waste pipe at 54.

The operation is as follows:

A person, before climbing the steps or entering the house, scrapes his shoes on the mat or grid 12 and any mud or dirt from the shoes falls through the grid to the inside of the casing 34 and is deposited upon the sloping bottom 36 thereof. At intervals which can be controlled either manually or

automatically, a stream of water is caused to flow through the pipe 48, 46 and is sprayed into the interior of the casing through the perforations 44, thereby washing away any mud or dirt from the floor 36 down through the waste pipe 38. The strainer 40 prevents any objectionable matter from getting into the waste pipe and clogging is thereby avoided. Should, however, the strainer become so stopped that the flow of water therethrough is materially prevented, any excess water will be drained off through the over flow pipe 50, which obviously may be connected to the waste pipe 38 at any convenient point.

The flush pipe may be operated intermittently in any ordinary manner, especially when the device is used in large buildings, but as this forms no part of my invention, it is not described herein; another method of flushing the casing may be by push button or suitably controlled valve, which may be operated only when deemed necessary. This may be applied in residences or smaller houses. Any other method of flushing may be provided.

It will be seen that herein is provided a sanitary foot mat which is automatically washed and which positively will not allow of any accumulation of mud or dirt, so that no dirt is carried into the house. If, however, the device should become stopped up, any excess water will escape by means of the over flow pipe, and the strainer 40 can be easily cleaned by simply removing the two screws 20 and pulling up the grating by means of a hook or the like, thereby affording ready access to the interior.

I am aware that numerous details of construction may be varied through a wide range without departing from the principles of this invention, and I therefore do not purpose limiting the patent granted otherwise than necessitated by the prior art.

I claim as my invention:

1. In a foot mat, a grid, comprising bars of suitable shape for cleaning shoes, a casing beneath the grid, and means for flushing the casing.

2. In a foot mat the combination of a rectangular frame flush with a pavement and formed to support a grid, and a grid in the frame, said frame having the inner face of one of its members inclined and the inner face of the opposite member inclined so as to be parallel to the first mentioned face, whereby fastening one end of the grid is sufficient to secure it in the frame, a casing under the grid, and means for flushing the casing.

3. In a device of the class described, the combination of a shoe scraper, a receptacle thereunder, a strainer in the bottom of said receptacle, a flushing device for said receptacle, a drain pipe connected to the bottom of said receptacle beneath said strainer, and an overflow pipe connecting a point of said receptacle above said strainer with said drain pipe.

In testimony whereof I have hereunto subscribed my name in the presence of two subscribing witnesses.

ADOLPH P. RITTER.

Witnesses:

LAWRENCE REIBSTEIN,
CHARLES W. HILLS, Jr.