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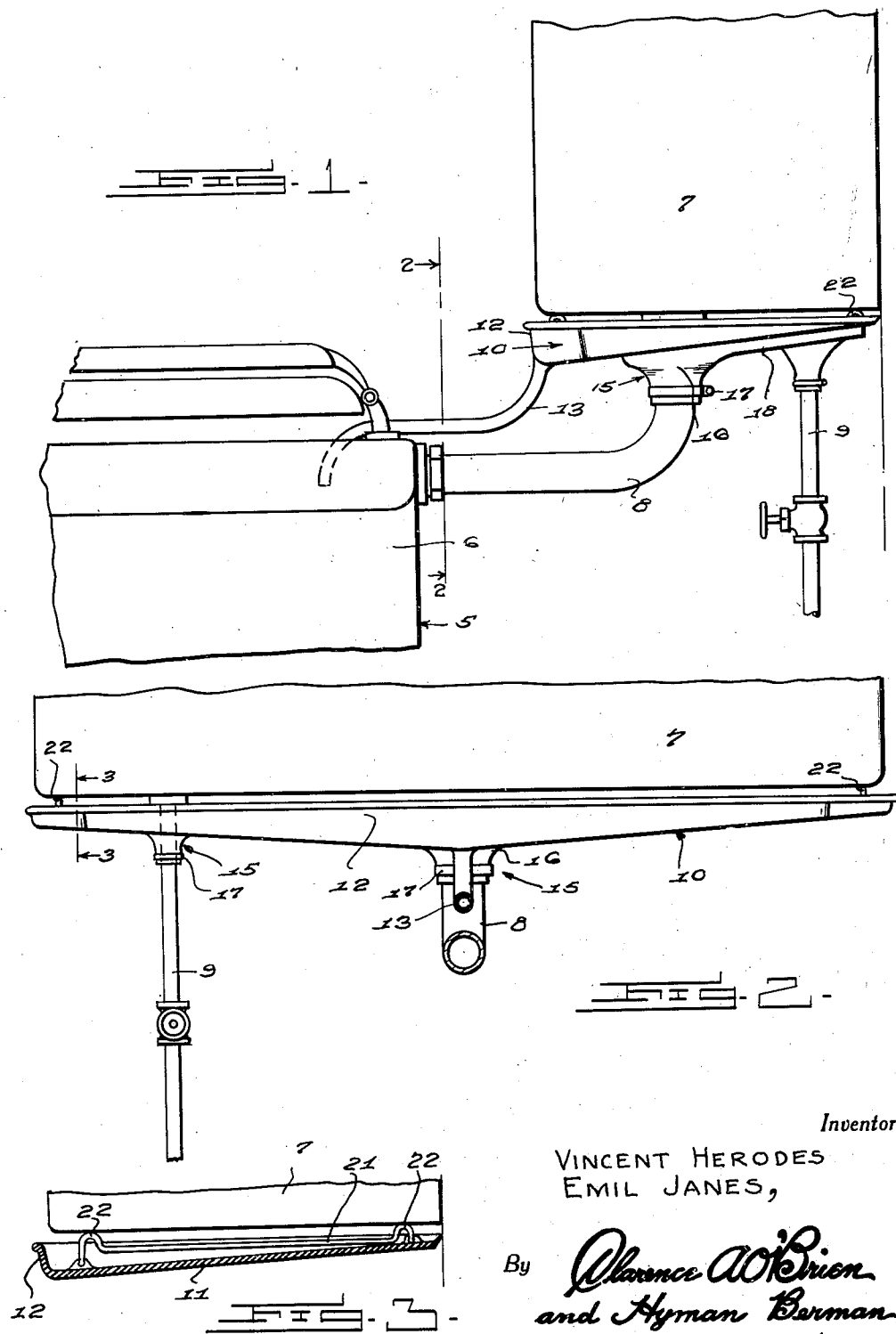
V. HERODES ET AL

2,180,902

FLUSH TANK MOISTURE COLLECTION DEVICE

Filed May 25, 1939

3 Sheets-Sheet 1



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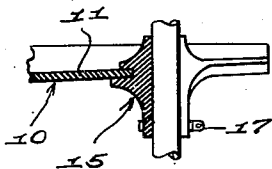
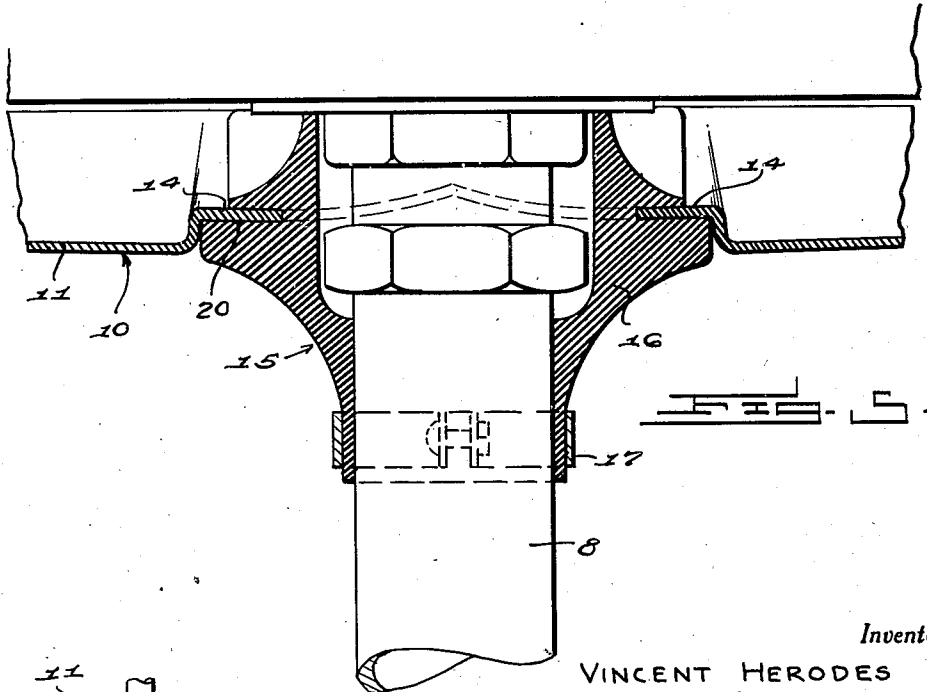
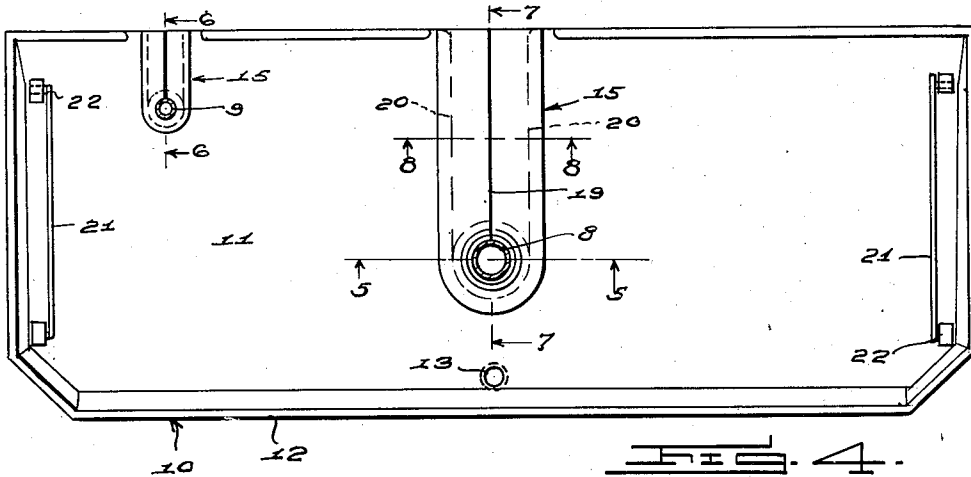
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3 Sheets-Sheet 2



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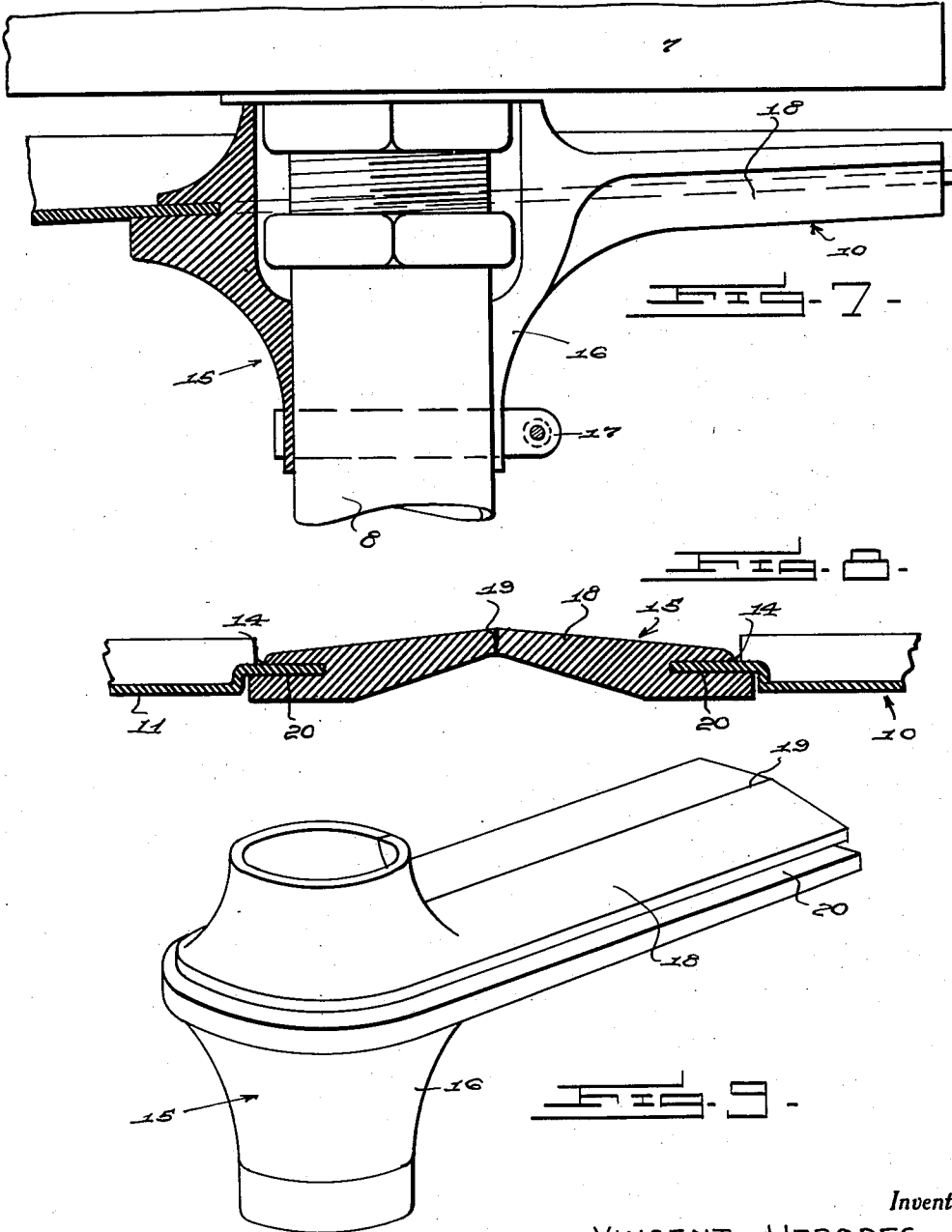
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FLUSH TANK MOISTURE COLLECTION DEVICE

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3 Sheets-Sheet 3



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UNITED STATES PATENT OFFICE

2,180,902

FLUSH TANK MOISTURE COLLECTION
DEVICE

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Application May 25, 1939, Serial No. 275,756

5 Claims. (Cl. 4-252)

This invention relates to a collection device for toilet flush tanks and similar devices, and has for the primary object the provision of a device of this character which may be easily and quickly installed on a flush tank for catching condensation which may drip or fall from the tank and direct the fluid into the bowl of the toilet and thereby prevent wetting and soiling of the floor under and adjacent the toilet and which includes an improved mounting for the device and which will permit the tray of said device to be easily removed and replaced for cleaning and other purposes.

With these and other objects in view, the invention consists in certain novel features of construction, combination and arrangement of parts to be hereinafter more fully described and claimed.

For a complete understanding of our invention, reference is to be had to the following description and accompanying drawings, in which

Figure 1 is a fragmentary side elevation illustrating a toilet equipped with a moisture collection device constructed in accordance with our invention.

Figure 2 is a sectional view taken on the line 2-2 of Figure 1.

Figure 3 is a sectional view taken on the line 3-3 of Figure 2.

Figure 4 is a top plan view illustrating the tray and the means of mounting said tray on a toilet.

Figure 5 is a sectional view taken on the line 5-5 of Figure 4.

Figure 6 is a sectional view taken on the line 6-6 of Figure 4.

Figure 7 is a sectional view taken on the line 7-7 of Figure 4.

Figure 8 is a sectional view taken on the line 8-8 of Figure 4.

Figure 9 is a perspective view illustrating one of the mountings employed for detachably securing the tray in place on the toilet.

Referring in detail to the drawings, the numeral 5 indicates in entirety a conventional type of toilet including a flush bowl 6, a flush tank 7 connected to the flush bowl by an outlet pipe 8. Water is supplied to the flush tank 7 by a supply pipe 9. The foregoing description briefly sets forth a conventional construction and it is to be understood the primary purpose of the present invention is to provide an efficient, practical, inexpensive means for catching and directing into the flush bowl condensation which may drip or fall from the flush tank. This occurs frequently during certain temperatures of the at-

mosphere varying with the temperature of the water of the tank. If no provision is made for the catching of this condensation the floor in the vicinity of the toilet is wet thereby and caused to become unsanitary and have a soiled appearance.

In order to collect the condensation which may drip from the tank 7 a tray 10 is provided constructed of any material suitable for the purpose and includes a bottom wall 11 with upstanding walls 12. A drain pipe 13 is connected to the bottom wall adjacent one of the upstanding side walls and leads to the flush bowl 6, as clearly shown in Figure 1. It is preferable that the bottom wall slope toward the drain pipe 13 from each end and the opposite sides thereof. Further it is preferable that the drain pipe be of a flexible material so that it can be easily extended from the tray which is arranged under the tank 7 to the flush bowl, as shown in Figure 1.

In order to adapt a tray to the flush tank as shown in Figure 1, provision must be made for the accommodation of the pipes 9 and 8. Therefore, the tray has extending inwardly from one side edge thereof slots to permit the tray to be easily positioned under the flush tank. The portions of the bottom wall 11 of the tray adjacent the slots are bent to provide flanges 14 lying in a plane above the bottom wall 11 with certain edges thereof forming the edges of the slots. The edges of the flanges 14 are spaced a sufficient distance apart to permit the pipes 8 and 9 to pass freely therein when the tray is brought into operative position.

In order to mount the tray on the pipes fittings 15 are provided for the slots and each is of identical construction, therefore, only one will be described specifically.

The fitting 15 consists of a sleeve 16 of the split type adapted to be positioned about the pipe and secured thereon by a split adjustable clamp 17. The split sleeve 16 has integral therewith an elongated portion 18. The elongated portion 18, as shown clearly in Figure 9, forms an enlargement entirely about the exterior wall of the sleeve and is provided with a slit 19 extending the full length thereof and communicating with the slit of the sleeve so that the sleeve and elongated portion 18 may be spread apart to permit the adapting of the fitting 15 on the pipe. Formed in opposite edges and about the sleeve is a groove 20 opening outwardly through the free end of the portion 18 so that the flanges 14 of the tray may slide into the groove and thereby bring about the mounting of the tray directly under the flush

tank. The fitting 15 is preferably constructed of rubber or some similar material and when the flanges are received within the groove they are frictionally gripped obviating any possibility of the tray becoming accidentally displaced. However, when it is desired to remove the tray it is only necessary to slide the flanges out of the groove.

It is preferable that the top face of the elongated portion 18 of the fitting slope in opposite directions so that any condensation forming thereon will be directed onto the bottom of the tray.

Elongated elements 21 are mounted at their ends on the bottom wall of the tray and adjacent the ends thereof are provided with offsets 22 forming stops for limiting the movement of the tray toward the bottom wall of the flush tank so that the tray may only be brought in such relation to the flush tank that a space will be provided between the bottom of the flush tank and the tray. Instead of employing the elements 21, studs may be formed on the bottom wall of the tray which will act in a manner similar to the members 21.

From the foregoing description taken in connection with the accompanying drawings it will be seen that a very practical and efficient device is provided which may be manufactured at a very nominal cost and will be easily applicable to flush tanks and may be removed whenever necessary and will efficiently catch any fluid dripping from the flush tank and direct the fluid into the flush bowl.

It is believed that the foregoing description, when taken in connection with the drawings will fully set forth the construction and advantages of this invention to those skilled in the art to which such invention relates, so that further detailed description will not be required.

What is claimed is:

1. In a device of the character set forth, a tray including a drain means and having slots opening outwardly through one side thereof to receive pipes of a flush tank said slots having parallel opposite walls, and yieldable fittings detachably mounted on the pipes to receive said walls of the slots for slidably securing the fittings to the tray for closing said slots.

2. In a device of the character set forth, a tray including a drain means and having slots opening outwardly through one side thereof to receive pipes of a flush tank, said tray having portions thereof offset adjacent the slots to form flanges, and grooved fittings receiving said flanges and detachably mounted on the pipes.

3. In a device of the character set forth, a tray including a drain means and having slots opening outwardly through one side thereof to receive pipes of a flush tank, said tray having portions thereof offset adjacent the slots to form flanges, fittings having grooves to slidably receive the flanges and each including a sleeve and an elongated portion integral therewith, said elongated portion and sleeve being split to permit application thereof to a pipe, and means for clamping the sleeve onto the pipe.

4. In a device of the character set forth, a tray including a drain means and having slots opening outwardly through one side thereof to receive pipes of a flush tank, said tray having portions thereof offset adjacent the slots to form flanges, fittings having grooves to slidably receive the flanges and each including a sleeve and an elongated portion integral therewith, said elongated portion and sleeve being split to permit application thereof to a pipe, and means for clamping the sleeve onto the pipe, said elongated portion having the top face thereof sloping in opposite directions for directing fluid into the tray.

5. In a device of the character set forth, a tray including a drain means and having slots opening outwardly through one side thereof to receive pipes of a flush tank, said tray having portions thereof offset adjacent the slots to form flanges, fittings having grooves to slidably receive the flanges and each including a sleeve and an elongated portion integral therewith, said elongated portion and sleeve being split to permit application thereof to a pipe, means for clamping the sleeve onto the pipe, said elongated portion having the top face thereof sloping in opposite directions for directing fluid into the tray, and stops carried by the tray to abut the flush tank.

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