

A DRAINAGE TRAP

5 The present invention relates to a drainage trap comprising an inlet part, a discharge pipe protruding sideways from the inlet part and a damming wall forming part of the inlet part and mounted between a dip plate and the discharge pipe.

10 During the last years, the total height of drainage traps of the above type has been substantially reduced but the structural expedients adopted for this purpose have often to a great extent reduced the through-flow capacity of the drainage trap. Also, certain endurance and/or manufacturing problems have occurred.

15 The object of the present invention is to eliminate these problems, and provide a low-built drainage trap of the above type which by simple means has a good through-flow capacity and becomes stable and easy to manufacture of e.g. plastics.

20 According to the invention there is provided a drainage trap comprising an inlet part, a discharge pipe protruding sideways from the inlet part, a damming wall forming part of the inlet part and mounted between a dip plate and the discharge pipe, and
25 an outflow portion positioned under a dip plate member, wherein the dip plate member is positioned above a draining edge of the dip plate.

30 The invention will now be further described below with reference to the accompanying drawings, in which:

35 Figure 1 is a longitudinal section of an embodiment of a drainage trap according to the invention;



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Figure 2 is a cross section of the drainage trap without a mountable insert, and

Figure 3 is a plan view of the drainage trap without said insert.

5 The drainage trap illustrated in the drawings is made of plastics material and comprises an inlet part 1 and a discharge pipe 2 protruding sideways from the inlet part. The inlet part 1 has mounted therein an insert 3 forming a dip plate 4 when mounted in the
10 inlet part 1. The inlet part 1 also comprises a damming wall 5 mounted between the dip plate 4 and the discharge pipe 2 and providing with the dip plate 4 a waterseal of the trap in which water is collected up to a level 6.

15 In order to facilitate outflow of water from the inlet part 1 to the discharge pipe 2, the damming wall comprises an outflow portion 7 sloping downwardly towards the discharge pipe 2. Furthermore, the length of the outflow portion 7 corresponds to half the width
20 of the lower portions of the inlet part.

 Beyond disirous outflow, this downwardly sloping outflow portion 7 means that the manufacture of the drainage trap is facilitated in that a mould member (not shown) forming part of the pouring equipment
25 may be pulled upwards from the inlet part 1 in an inclined direction, whereby said outflow portion 7 also strengthens the inlet part 1 of the trap.

 The through-flow capacity may be increased by providing the damming wall 5 with a portion 9 extending
30 in an upwardly inclined direction from the bottom portion 8 of the inlet part 1 towards the discharge

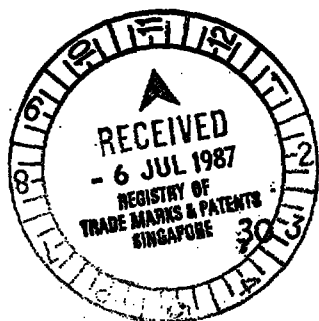
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pipe 2 and which at the top is transformed into said outflow portion 7.

At the bottom, the outflow portion 7 is preferably transformed into a substantially vertically
5 extending portion 10 which below opens into lower wall portions 11 of the discharge pipe 2 for providing a return-water lock to prevent or at least efficiently counteract that water flows in the opposite direction from the discharge pipe 2 into the inlet part 1. Also
10 the outflow portion 7 contributes in providing a return-water lock, but the portion 10 may in certain cases substantially improve the locking effect.

The outflow from the inlet part is especially facilitated if the outflow portion 7 slopes from a
15 level substantially at the same height as upper wall portions 12 of the discharge pipe 2 to a level at the same height as the centre 13 of the discharge pipe 2. The inlet part of the drainage trap shown also has side wall portions 14 and 15 extending from the outflow
20 portion 7 towards the discharge pipe 2 and sloping completely or partially downwards and inwards towards the centre 13 of the discharge pipe 2. The side wall portions 14, 15 preferably extend a short distance into the discharge pipe 2 and open into a wall portion 16
25 substantially parallel to the outflow portion 7.

In order to further ensure that the drainage trap has an advantageous through-flow capacity and thus, a good "swallowing capacity" in spite of a low total height, a member 18 of the dip plate 4 arranged above the outflow portion 7 and especially above the highest point 17 thereof, may extend with its underside



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19 level with or above a level for a grating and/or clamping ring seat 20 in the inlet part 1. In order to ensure that despite this increment drainage into the inlet part 1 is not obstructed, the insert 3

5 providing the dip plate 4 has a draining edge 21 at a level beneath the member 18.

The invention is not limited to the embodiment described and shown in the drawings, but may vary within the scope of the following claims. Thus, the

10 portion 22 of the inlet part 1, at a level just above the outflow portion 7, may comprise an outwardly directed flange 23 the top surface 24 and underside 25 of which form an acute angle with each other. The underside 25 of the flange 23 may be directed

15 horizontally in order to facilitate positioning of the trap in horizontal position on a support 25, while the top surface 24 may slope downwardly and inwardly to facilitate drainage into the inlet part 1. The upper portion 22 of the inlet part 1 is intended to receive

20 a floor covering 26, a clamping ring (not shown) for fixing the floor covering and grating means (not shown) of per se known type. The insert 3 preferably has a groove 27 for a sealing ring 28 and flanges 29, 30 for snapping said insert in the inlet part 1. Of course,

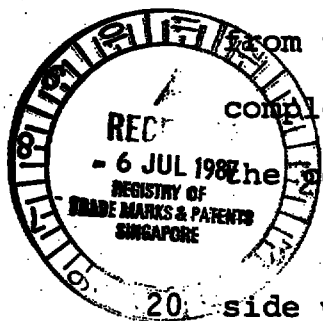
25 the invention may be used at drainage traps of other types or other material and with a fixed dip plate instead of a dip plate forming part of a mountable insert.

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Claims:

1. A drainage trap comprising an inlet part, a discharge pipe protruding sideways from the inlet part, a damming wall forming part of the inlet part and mounted between a dip plate and the discharge pipe, and an out-
5 flow portion positioned under a dip plate member, wherein the dip plate member is positioned above a draining edge of the dip plate.
2. A drainage trap according to claim 1, wherein the outflow portion extends down to a level at the same
10 height as the centre of the discharge pipe, whereby the length of the outflow portion substantially corresponds with half the width of the lower portions of the inlet part.
3. A drainage trap according to any preceding claim,
15 wherein side wall portions of the inlet part extending from the outflow portion towards the discharge pipe slope completely or partially downwards and inwards towards the centre of the discharge pipe.
- 20 4. A drainage trap according to claim 3, wherein the side wall portions extend a short distance into said discharge pipe.
5. A drainage trap according to any preceding claim, wherein side wall portions extending from the outflow





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portion towards the discharge pipe open into a wall
portion substantially parallel to said outflow portion.

6. A drainage trap substantially as hereinbefore
described with reference to the accompanying drawings.
