

Chapter 9 of Category III

It is the basin of the peacock for washing the hands. It is divided into four sections

Section 1

On the outside appearance of the basin, and its functioning

It is a basin resting on a pedestal. On the floor of the basin are four columns which support a square-shaped castle. On the roof of the castle is a standing peacock with tail erect, its neck stretched out in a curve, its beak pointing to the floor of the basin, at the front of the castle. In the front of the castle, i.e. on the same side as the head of the peacock, are two doors, each having two closed leaves.

Its functioning: when the master¹ wishes to wash his hands or perform his ritual ablutions, the servant brings the basin [and places it] in front of him, with the head of the peacock facing the master. The servant stands aside and the peacock begins [to work], pouring a small quantity of water from its beak on to the master's hands. Then the leaves open on the door at the right of the castle and a slave emerges from it holding a jar containing vegetable soda (*Ishnān*), from which he [the master] takes what he requires. The water flows while he is washing, and when he has finished washing the flow of water ceases. Then the leaves open on the door at the left of the castle and a slave emerges holding a towel, for him to dry his hands. All the while the water is flowing it runs first into the basin and then into the basin's pedestal. In the pedestal is a closed tap. When the basin is taken away from him [i.e. the master] and removed from the company, the tap is opened and the basin is tilted towards the tap, to extract all the water it contains. When this has been done the tap is closed and the basin is put aside until such time as it is required for use.

Section 2

Construction of the basin, the four pillars, the castle on top of them with the two doors in its front, and the two slaves

A basin is made of brass with a wide floor and a vertical rim, its top slightly dished. The floor of the basin is divided into two halves and on one of the halves four columns are erected, each about 1 sp. high. Two columns are erected on the centre of the basin's floor and two on the corners of a square. Two holes are made below the two columns which are at the edge of the basin, penetrating through the floor of the basin into the two columns. If some water is poured into the floor of the basin it will rise in the floor of the basin because it has no outlet. Then, in the base of the right-hand column of these two columns, an opening is made into the floor of the basin, through which [opening] water falling into the floor of the basin can discharge.

Then a rectangular castle is made, wider than the square of the columns [i.e. wider than the side of the square formed by the feet of the columns] and about 1 sp. high. Two adjoining doors are opened in the [front] face of the castle, each door nearly as high as the castle. For each door two leaves are made, on hinges which move easily. Then the castle is fixed to the tops of the columns, the face with the doors on it towards the empty half of the basin. Then a slave is made from jointed copper, standing on an axle on the floor of the castle behind the right-hand door. The ends of the axle are on bearings, in which it moves freely towards the front and back of the slave. The height of the slave is such that he moves in and out of the door without hindrance. The slave is holding a small jar of fine workmanship in which some vegetable soda is placed. A bar [*sahm.*, lit arrow] is fixed rigidly to the axle, and it reaches to the top of the right-hand column, which has the opening in its foot for the water to fall through. The slave is tilted towards his rear, with the hand and the jar behind the door leaves, which are closed. The bar on the axle has a flat end, and this is touching the floor of the castle and over the centre of the column. There is a hole in the floor of the castle which goes through to the hollow of this column, whose foot has the opening in it. So if a rod rises from the column it will lift the end of the bar and tilt the slave forwards, who will push the door leaves with the jar he is holding. They open and he emerges from the door

¹ *Al-makhdūm*. Lit. He who is served.

and stands where he is. Then another slave is made, like the first, behind the left-hand door, standing on an axle. This has a bar on it the end of which extends to the centre point of the top of the other column on the edge of the basin – [this column] has no opening in its foot. A hole is made in the floor of the castle which goes through into the hollow of this column. If the end of a rod rises from it [i.e. the top of the column] it will lift the end of the bar, tilting the slave forwards so that his hand which holds the small towel opens the leaves. He emerges from the door and stands where he is.

Section 3

Construction of the basin

A pedestal is made, the width of its top equal to the distance between the columns, wider than that at the bottom, and about 1 sp. high. This pedestal is soldered underneath the four columns so that it is underneath half the basin – one need not fear that the basin will tilt. Then two holes are made from inside the pedestal, through the floor of the basin into the hollows of the two columns. A medium sized float is made, like a hollow turnip as [described] previously. For this float a chamber is made like a vertical jar, its height twice the thickness of the float, and wide enough for the float to be placed in it, and to move freely. Then a flat bottom [cover] is made for the pedestal, and this cover is cut into two halves. One half is fitted over the half of the pedestal below the two columns which are on the edge [of the basin], and its perimeter is soldered securely to the perimeter of the pedestal. The float's chamber is placed inside this half of the bottom of the pedestal, vertically beneath the column with the aperture in its foot, and is soldered to the bottom of the pedestal so that it cannot move out of position. Then a light rod is fixed vertically to the top of the float. Its length is such that it extends from the float, when this is resting in [the floor of] its chamber, up through the column with the opening in its foot, and almost touches the end of the bar on the axle of the slave who is holding the jar with the vegetable soda [in it]. When water is poured into the floor of the basin it flows from the hole in the floor of the basin into the chamber of the float, causing it to rise, until the rod lifts the end of the bar on the axle, which tilts the slave. So he opens the door leaves. Then a hindrance is made for the float which prevents it from exceeding that level, and coming out of its chamber. It stays where it is, at the top of its chamber. Then another float is made with a short, vertical rod on top of it. This float rests on the cover of the floor of the pedestal, and [the rod] is inside the left-hand column which is at the edge of the basin. The [other] half of the bottom of the pedestal is put back in position and its perimeter soldered securely to the perimeter of the pedestal. Then the cut is soldered securely. Water is poured into the floor of the basin and it flows through the opening in the foot of the column into the float's chamber, which fills up. The float rises and the rod lifts the rod on the axle of the slave who holds the jar with the vegetable soda. The water flows over the chamber of the float into the bottom of the pedestal and the other float rises. Its rod is short and does not touch the end of the bar on the slave's axle until the pedestal is full, and until the water in the peacock is exhausted. And at that juncture the float's rod touches the end of the bar on the axle of the slave who holds the towel. He tilts, pushes the leaves, emerges from the left-hand door and stands where he is.

Section 4

On the construction of the peacock and what is connected to it. It stands on the roof of the castle

A hollow peacock is made from jointed copper, large enough to contain the water that is dispensed for ritual ablutions. It is in a standing position, the neck curved down from its centre to its lower end. Its beak and its head are slightly lower than its belly. In its neck is a narrow siphon, one end of which is on its back and the other end on the floor of its belly. Then one makes for it a round hollow tail, the width of the cavity such that a finger can be inserted in it. This tail is erected at the rear end of the peacock, as if he were making a display. Then an opening is made between the cavity in the tail and the cavity in the peacock so that if water is poured into the top of the tail it will flow into the interior of the peacock's body. The tail is then divided half way up by a thin plate so that the tail becomes two chambers. If water is now poured into the top of the tail the upper half will fill since the water has no outlet. In the centre of the plate which divides the tail into two chambers a hole is made, in which the tip of the little finger can be inserted. A ground valve is made on this hole, watertight and of sound workmanship. The plug goes down into the seat from above. On the plug is a rising rod, the end of which is bent towards the back

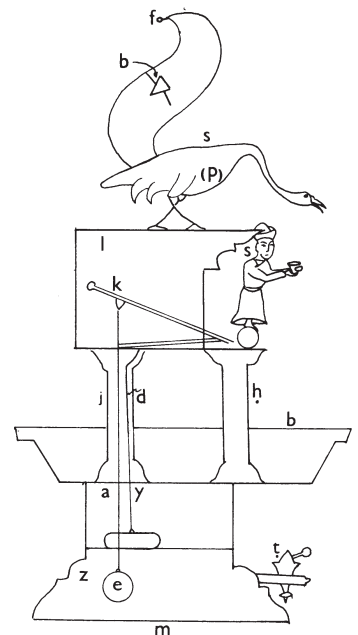
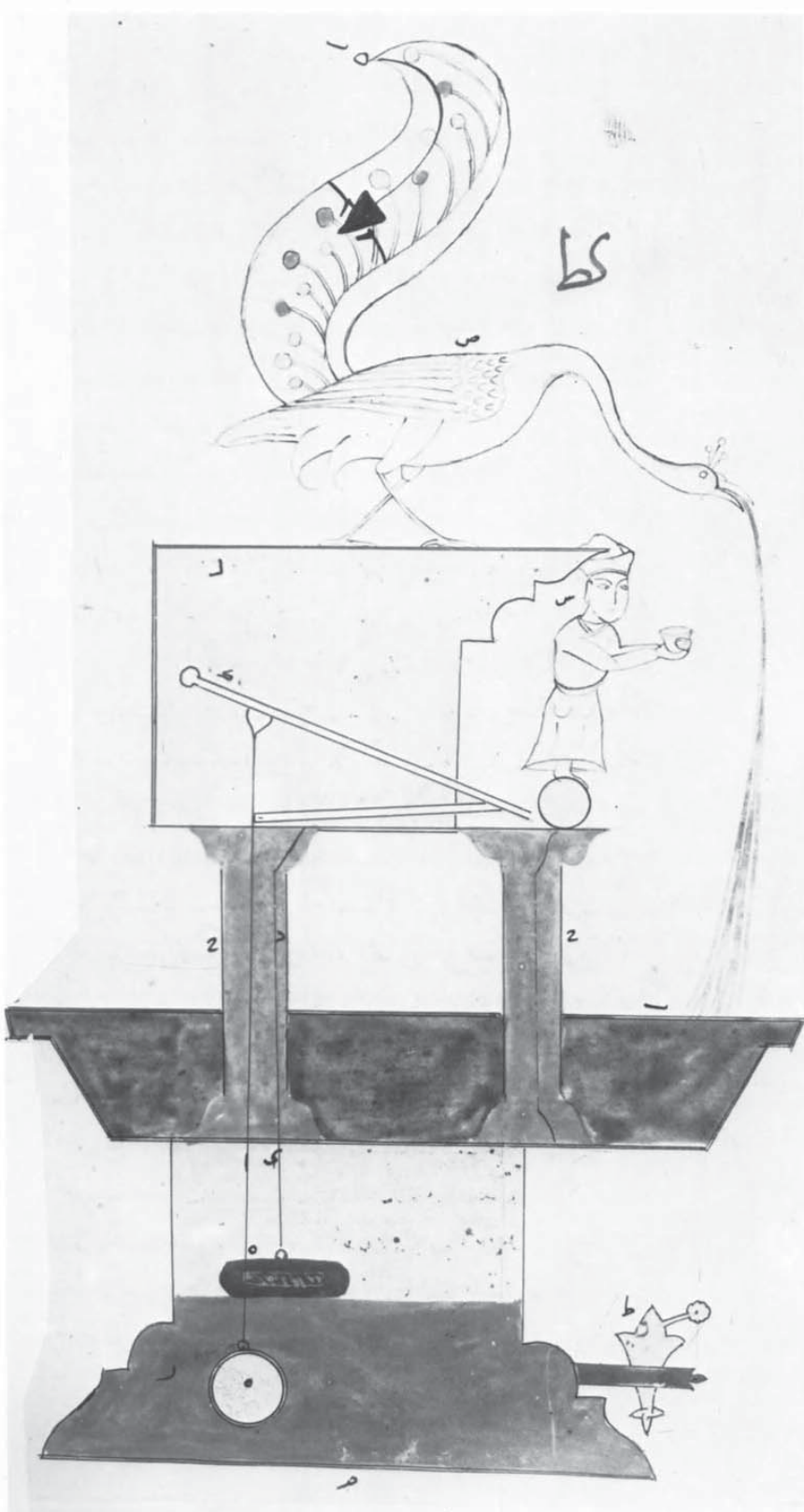


Fig. 118.

of the tail. In it is a ring which moves upwards stiffly in a narrow slit. In the top of the tail a wide aperture is made through which the water is poured. There is a cover on it, and when this is in position the join cannot be seen. When the cover is taken off and the ring lifted, the valve opens. Then water is poured in at the top of the tail until the body of the peacock and half the tail are filled, and water rises through the ground valve, this being observed visually. At this juncture

the water has not reached the bend in the siphon in the peacock's neck but is slightly below it. Then the ring is pushed down stiffly in the slit, closing the valve, and water is poured into the upper half of the tail until it is full. Then the ring is pulled up, opening the valve and the water [from the lower chamber] mixes with the water [from the upper chamber] and rises above the bend in the siphon. The water issues from the peacock's beak because the ground valve is wider than the siphon. This [flow] continues until all the water in the body of the peacock is discharged. Then the peacock's legs are placed apart on the roof of the castle and soldered securely. The head of the peacock is towards the front of the axle so that it discharges into the empty half of the basin [i.e. the half outside the columns].

I have shown the picture [Fig. 118] of that: the basin *b*; the two columns *h* on the centre of the basin; the column *j* on the edge of the basin with an aperture in its foot, and the other column *d*; the pedestal – its tap *t* and its bottom *m*; the float's chamber *z*, the float *e* and on its top a rod *a*, which goes up through the column with the aperture in its foot; a second float on the surface of the water on the top of which is a rod *y* which goes up through column *d*; the castle *l*; the figure of one slave *s* holding the jar with the vegetable soda and standing on an axle on which is a bar *k* the end of which extends to the top of the column with the aperture in its foot; the other slave holding the towel is hidden but there is no need to illustrate him since he is of the same pattern; the peacock *p* with the end of the siphon is his beak and its other end *p* in his belly; its tail is divided into two chambers and in the plate between the two chambers is a ground valve with a plug *b* on which is a rod whose end is bent to the outside of the tail and has a ring *f* on it.

It is very clear that: the cover on the peacock's tail is lifted off and the ring is pulled up, lifting the valve's plug. Water is poured into the top of the tail until the body of the peacock is filled to [a level] half way up the tail, and the water rises over the ground valve, whereupon the ring is pushed back to where it was before. The rest of the tail is filled with water and its cover is replaced. When the basin is called for the servant places it in front of the master, pulls the ring quickly without anyone noticing, and waits. The water mixes, one part with another, and rises above the bend in the siphon and issues from the peacock's beak on to the master's hands. The water flows, and runs down through the aperture in the foot of column *j* and fills chamber *z*. Float *e* rises and rod *a* rises, lifting bar *k*. The slave tilts and emerges from the door and stands [there]. The master takes vegetable soda from the jar – the water is running – and performs his ablutions until he has finished washing his hands. The [rest of] the water runs from the floor of the basin into the pedestal until it is almost full. Float *y* has risen and [now] the bar on the axle of the slave holding the towel rises. [The slave] tilts, opens the leaves, emerges from the door and stands where he is. The master takes the towel, dries his hands, and returns the towel to him. The servant takes the basin, opens the tap, and tilts the basin towards the tap until there is no more water in the pedestal or in the float's chamber. Then he closes the tap and puts the basin aside until such time as it is required for use.

On completion of what I have described the basin, pedestal and castle are scraped, the peacock and the slaves are painted in various colours, and everything is coated in Sandarac oil and cured by drying in the sun.

That is what I wished to describe clearly.

[Now] I will describe what I made, namely a basin for washing the hands.