

## **Specification of Francis Taylor : drying excrement.**

### **Contributors**

Taylor, Francis.

### **Publication/Creation**

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A.D. 1869, 28th OCTOBER. N° 3129.

S P E C I F I C A T I O N

OF

FRANCIS TAYLOR.

—  
D R Y I N G   E X C R E M E N T .  
—

L O N D O N :

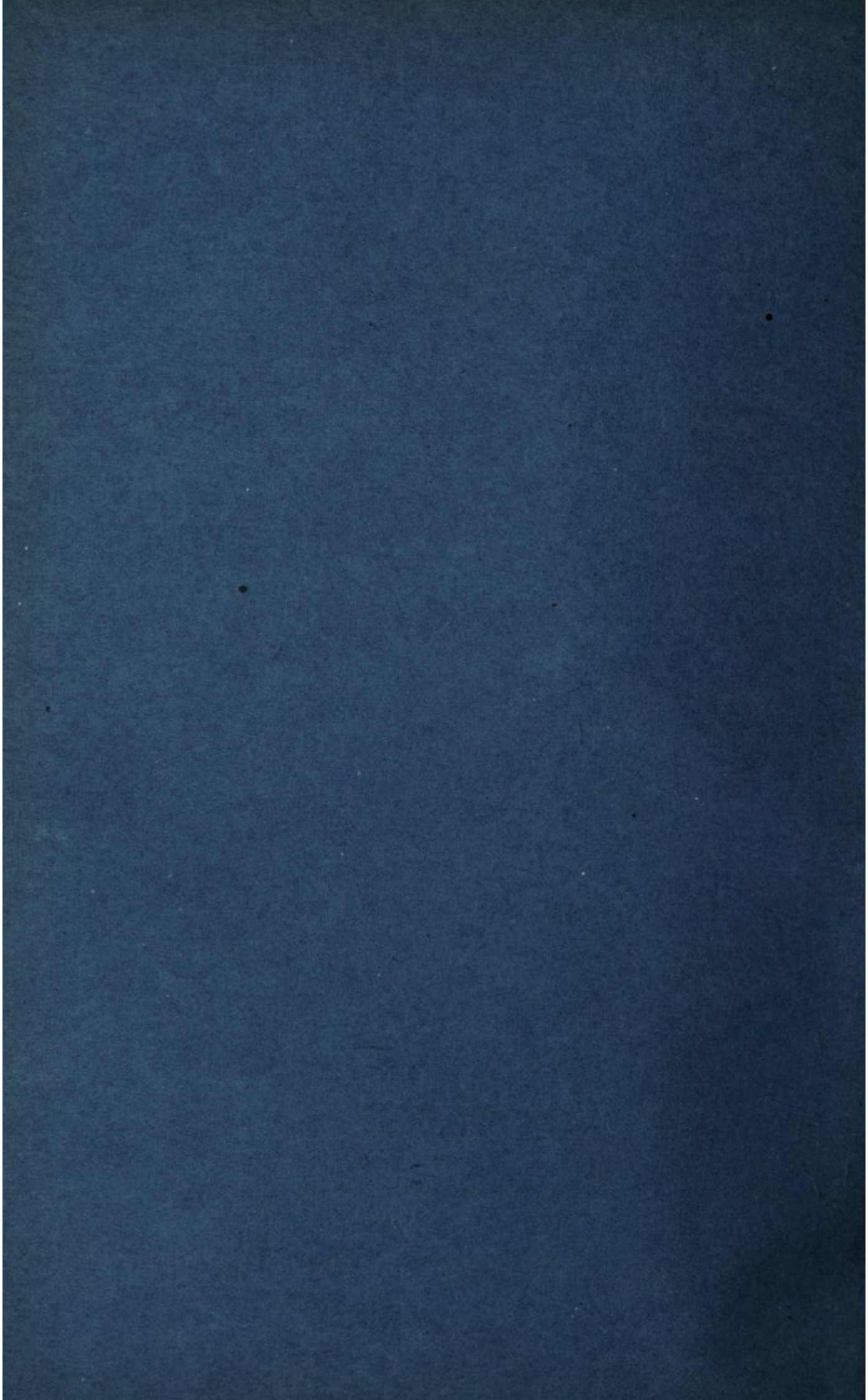
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Price 10d.

1870.









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A.D. 1869, 28th OCTOBER. N<sup>o</sup> 3129.

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**Drying Excrement.**

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**LETTERS PATENT** to Francis Taylor, of Romsey, in the County of Southampton, for the Invention of "IMPROVEMENTS IN APPARATUS FOR RECEIVING, DRYING, AND DEODORISING HUMAN EXCREMENT."

Sealed the 22nd February 1870, and dated the 28th October 1869.

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**PROVISIONAL SPECIFICATION** left by the said Francis Taylor at the Office of the Commissioners of Patents, with his Petition, on the 28th October 1869.

I, FRANCIS TAYLOR, of Romsey, in the County of Southampton, do hereby declare the nature of the said Invention for "IMPROVEMENTS IN APPARATUS FOR RECEIVING, DRYING, AND DEODORISING HUMAN EXCREMENT," to be as follows:—

This Invention has for its object improvements on the apparatus for receiving, drying, and deodorising human excrement described in the Specification of a Patent granted to me on the 9th day of April 1861,



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No. 876, and of a Patent granted to me on the 22nd day of August 1864, No: 2072, and of a Patent granted to me on the 24th day of October 1866, No. 2750. For this purpose I place under the pan of a privy seat a moveable floor, which is moved when the lid of the seat is moved, so that the solid matter deposited on it after the liquid has 5 been allowed to run off is scraped off and made to fall into a receptacle.

The object of this separation being for the purpose of drying the solid part of human excrement into guano it is very important that the liquid part should be thoroughly and completely separated, and yet that any quantity of slops may at any time be thrown into the pan. For this 10 purpose I attach to the sides and to one end of the floor of the pan an upright edge, and to this a flange so reverted as to conduct liquids thrown into the pan in any quantity back into the pan so as not to splash over on to the separated and dried solid matter. If the floor of the pan be made of wood or slate it has an upright edge of two inches, 15 to which is attached a mitred flange reverted slightly downwards towards the floor. This edge and flange are both outside the pan, but being firmly and well secured to the floor move with it. If the floor of the pan be made of metal or porcelain it has an upright edge at the sides and one end for an inch and a half, then it is curled and reflected so 20 as to conduct the wave of liquid back on to the floor of the pan to avoid as before described the splashing on to the drying solid matter. The open end of the floor of the pan conducts the liquid to a water shoot to be carried into a drain. The moveable floor may be attached to the pan by hanging swinging stirrup irons. In this case the floor 25 being curved to move in the arc of a circle it is necessarily made of metal or porcelain, or the floor may be made to move as an inclined plane over rollers or otherwise. In this case the floor and its edge and flange may all be made of wood or slate. Both these arrangement may be made to move by levers attached to the lid of the privy seat. A hopper 30 containing ashes or charcoal or soot slightly moistened with sulphuric, muriatic, or carbolic acid or mixed with super-phosphate of lime is so applied to the back of the pan that a small but sufficient quantity of ashes and other absorbent deodorising or disinfecting matters may be thrown on to the excrement and the soiled sides of the pan. 35

By the above improved arrangements I can allow any quantity of urine or slops to be thrown into the privy pan and yet am able to collect



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and dry by natural evaporation the solid excrement and gather it in an inodorous state fit for agriculture and other purposes.

**SPECIFICATION** in pursuance of the conditions of the Letters Patent,  
filed by the said Francis Taylor in the Great Seal Patent Office on  
5 the 28th April 1870.

**TO ALL TO WHOM THESE PRESENTS SHALL COME, I, FRANCIS TAYLOR,** of Romsey, in the County of Southampton, send greeting.

**WHEREAS** Her most Excellent Majesty Queen Victoria, by Her Letters Patent, bearing date the Twenty-eighth day of October, in  
10 the year of our Lord One thousand eight hundred and sixty-nine, in the thirty-third year of Her reign, did, for Herself, Her heirs and successors, give and grant unto me, the said Francis Taylor, Her special licence that I, the said Francis Taylor, my executors, administrators, and assigns, or such others as I, the said Francis Taylor, my executors,  
15 administrators, and assigns, should at any time agree with, and no others, from time to time and at all times thereafter during the term therein expressed, should and lawfully might make, use, exercise, and vend, within the United Kingdom of Great Britain and Ireland, the Channel Islands, and Isle of Man, an Invention for "**IMPROVEMENTS IN**  
20 **APPARATUS FOR RECEIVING, DRYING, AND DEODORIZING HUMAN EXCREMENT,**" upon the condition (amongst others) that I, the said Francis Taylor, my executors or administrators, by an instrument in writing under my, or their, or one of their hands and seals, should particularly describe and ascertain the nature of the said Invention, and in what manner the  
25 same was to be performed, and cause the same to be filed in the Great Seal Patent Office within six calendar months next and immediately after the date of the said Letters Patent.

**NOW KNOW YE,** that I, the said Francis Taylor, do hereby declare the nature of the said Invention, and in what manner the same is to  
30 be performed, to be particularly described and ascertained in and by the following statement thereof, that is to say:—

This Invention has for its object improvements on the apparatus for receiving, drying, and deodorizing human excrement, described in the



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Specification of a Patent granted to me on the 9th day of April 1861, No. 876, and of a Patent granted to me on the 22nd day of August 1864, No. 2072, and of a Patent granted to me on the 24th day of October 1866, No. 2750. For this purpose I place under the pan of a privy seat a moveable floor, which is moved when the lid of the seat is moved, so that the solid matter deposited on it after the liquid has been allowed to run off is scraped off and made to fall into a receptacle. 5

The object of this separation being for the purpose of drying the solid part of human excrement into guano it is very important that the liquid part should be thoroughly and completely separated, and yet that any quantity of slops may at any time be thrown into the pan. For this purpose I attach to the sides and to one end of the floor of the pan an upright edge, and to this a flange so reverted as to conduct liquids thrown into the pan in any quantity back into the pan, so as not to splash over on to the separated and dried solid matter. If the floor of the pan be made of wood or slate it has an upright edge of two inches, to which is attached a mitred flange reverted slightly downwards towards the floor. This edge and flange are both outside the pan, but being firmly and well secured to the floor move with it. If the floor of the pan be made of metal or porcelain it has an upright edge at the sides and one end for an inch and a half then it is curled and reflected so as to conduct the wave of the liquid back on to the floor of the pan to avoid, as before described, the splashing on to the drying solid matter. The open end of the floor of the pan conducts the liquid to a water shoot to be carried into a drain. The moveable floor may be attached to the pan by hanging swinging stirrup irons. In this case the floor being curved to move in the arc of a circle it is necessarily made of metal or porcelain, or the floor may be made to move as an inclined plane over rollers or otherwise. In this case the floor and its edge and flange may all be made of wood or slate. Both these arrangements may be made to move by levers attached to the lid of the privy seat. A hopper containing ashes or charcoal or soot slightly moistened with sulphuric, muriatic, or carbolic acid or tar or mixed with super-phosphate of lime is so applied to the back or to one side of the pan that a small but sufficient quantity of ashes and other absorbent deodorizing or disinfecting matters may be thrown on to the excrement and the soiled sides of the pan. 10 15 20 25 30 35

By the above improved arrangements I can allow any quantity of



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urine or slops to be thrown into the privy pan, and yet am able to collect and dry by natural evaporation the solid excrement and gather it in an inodorous state fit for agricultural and other purposes.

And in order that my said Invention may be most fully understood and readily carried into effect, I will proceed to describe the Drawings hereunto annexed.

## DESCRIPTION OF THE DRAWINGS.

Figure 1 is a side view partly in section, and Figure 2 is a front view, also partly in section, of apparatus arranged according to my Invention for receiving, drying, and deodorizing human excrement. *a, a*, is a pan with an opening at the bottom; *b*, a moveable floor immediately beneath, it is hung by arms *b<sup>1</sup>, b<sup>1</sup>*, from pivots at *b<sup>2</sup>, b<sup>2</sup>*, by links *c, c*, these arms are connected with other arms *d<sup>1</sup>, d<sup>1</sup>*, fixed upon the lid *d* in such manner that by lifting the lid the floor is caused to pass under the pan. By shutting down the lid the floor *b* is caused to traverse to the back and as it does so the edge of the pan scrapes from the floor any solid excrement and other material upon it, and deposits such excrement and material in the receptacle *e*, in which it is removed for use as manure.

Figures 3 and 4 are similar to Figures 1 and 2 respectively, but the lid *d* is in these latter Figures represented as it appears when shut down, whereas in Figures 1 and 2 it is shown raised and open. *f* is a hopper containing ashes or other drying and deodorizing material in the state of powder; it is suspended on pivots at the top and has an inclined opening at its lower end; *f<sup>1</sup>* is an arm fixed on the hopper and connected with the handle *g*, by moving which the hopper is shaken and caused to discharge a portion of its contents into the pan; *h* is a gutter to receive the urine and other liquids discharged into the pan; it collects the liquid and delivers it into the pipe *i*, by which it flows away. The peculiar form given to the edge of the floor *b* is clearly shown at *b<sup>x</sup>* in Figures 2 and 4. It is so fashioned in order to prevent any liquid put into the pan from escaping over the sides and backs of the floor, and that the whole may be directed to the front and pass away by the gutter *h* and pipe *i*.

Figures 5 and 6 are transverse sections of a modification of the above arrangement, in which the floor *b* is flat and arranged to slide in guides.



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In place of fixing the floor to the arms *b*<sup>1</sup> it is in this case connected with them by the links *b*<sup>2</sup>. The floor is made with an overlapping edge for the purpose already stated.

In witness whereof, I, the said Francis Taylor, have hereunto set my hand and seal, the Twenty-sixth day of April, in the year 5 of our Lord One thousand eight hundred and seventy.

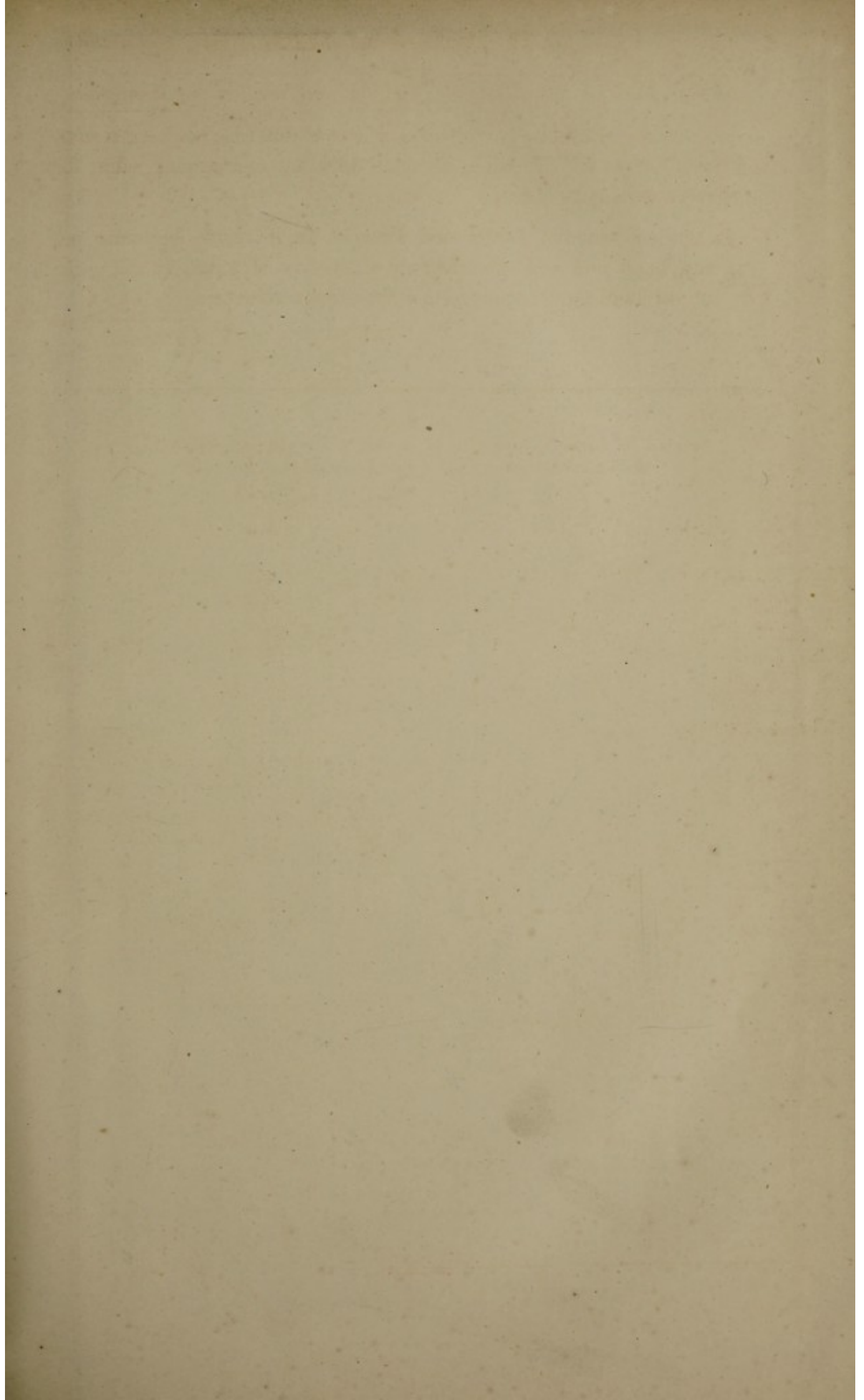
FRANCIS TAYLOR. (L.S.)

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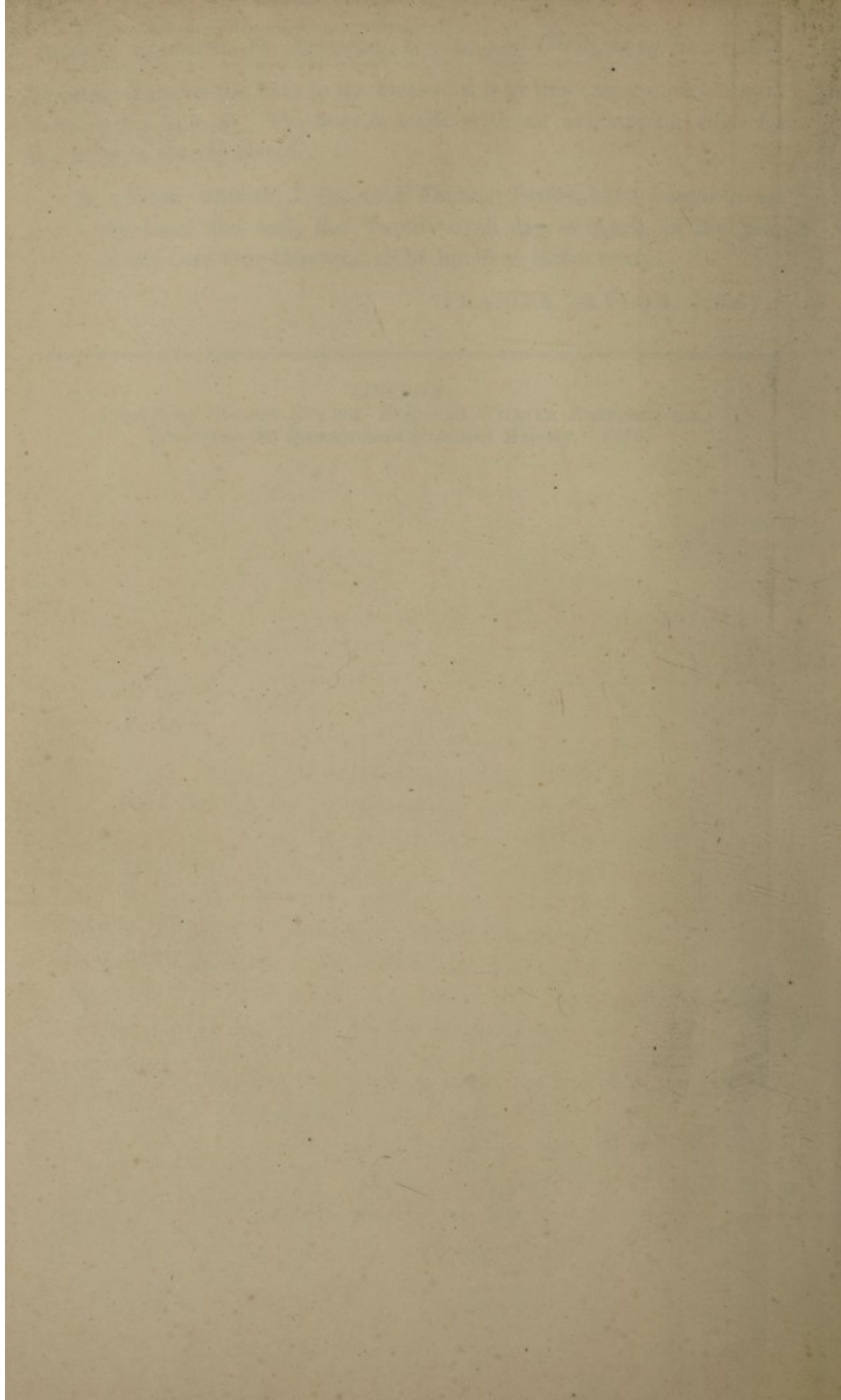




FIG. 1.

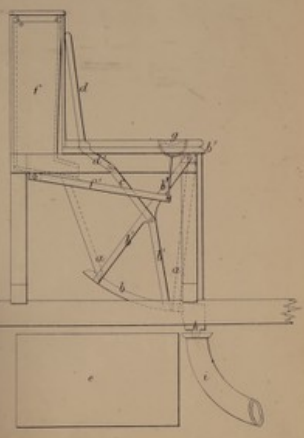


FIG. 2.

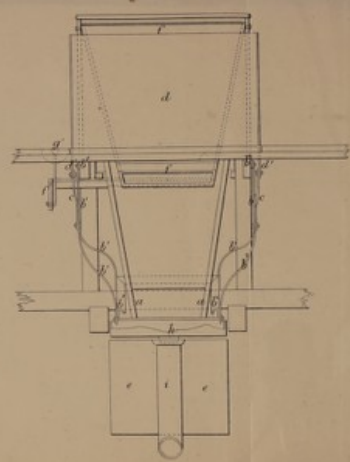


FIG. 3.

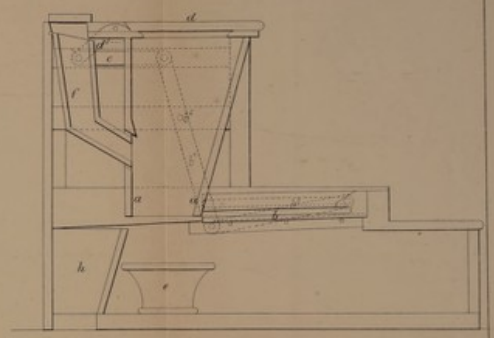


FIG. 3.

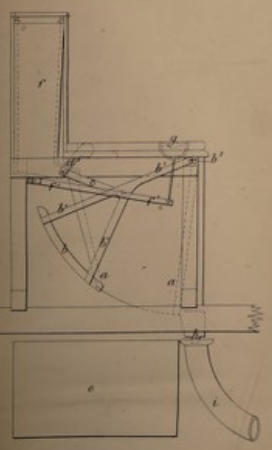


FIG. 4.

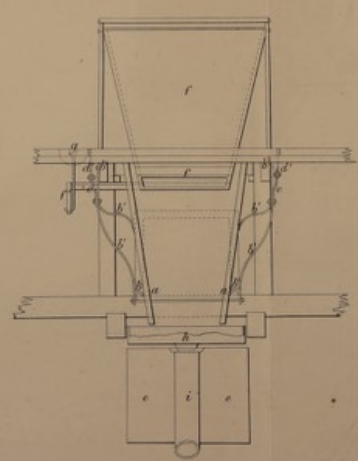
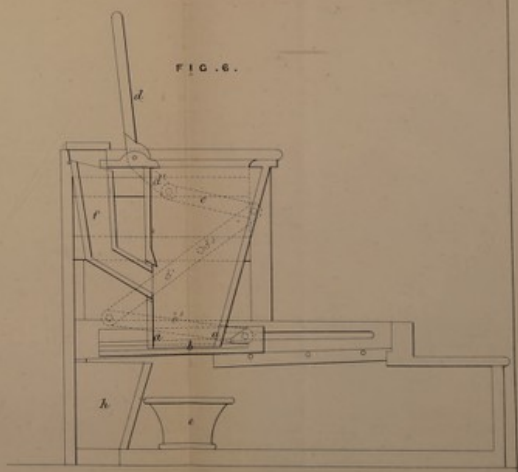


FIG. 6.



The filed drawing is partly colored.

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