

Specification of Robert Ferryman : bathing machines.

Contributors

Ferryman, R.

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A.D. 1794 N° 1989.

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

OF

ROBERT FERRYMAN,

BATHING MACHINES.

LONDON:

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE

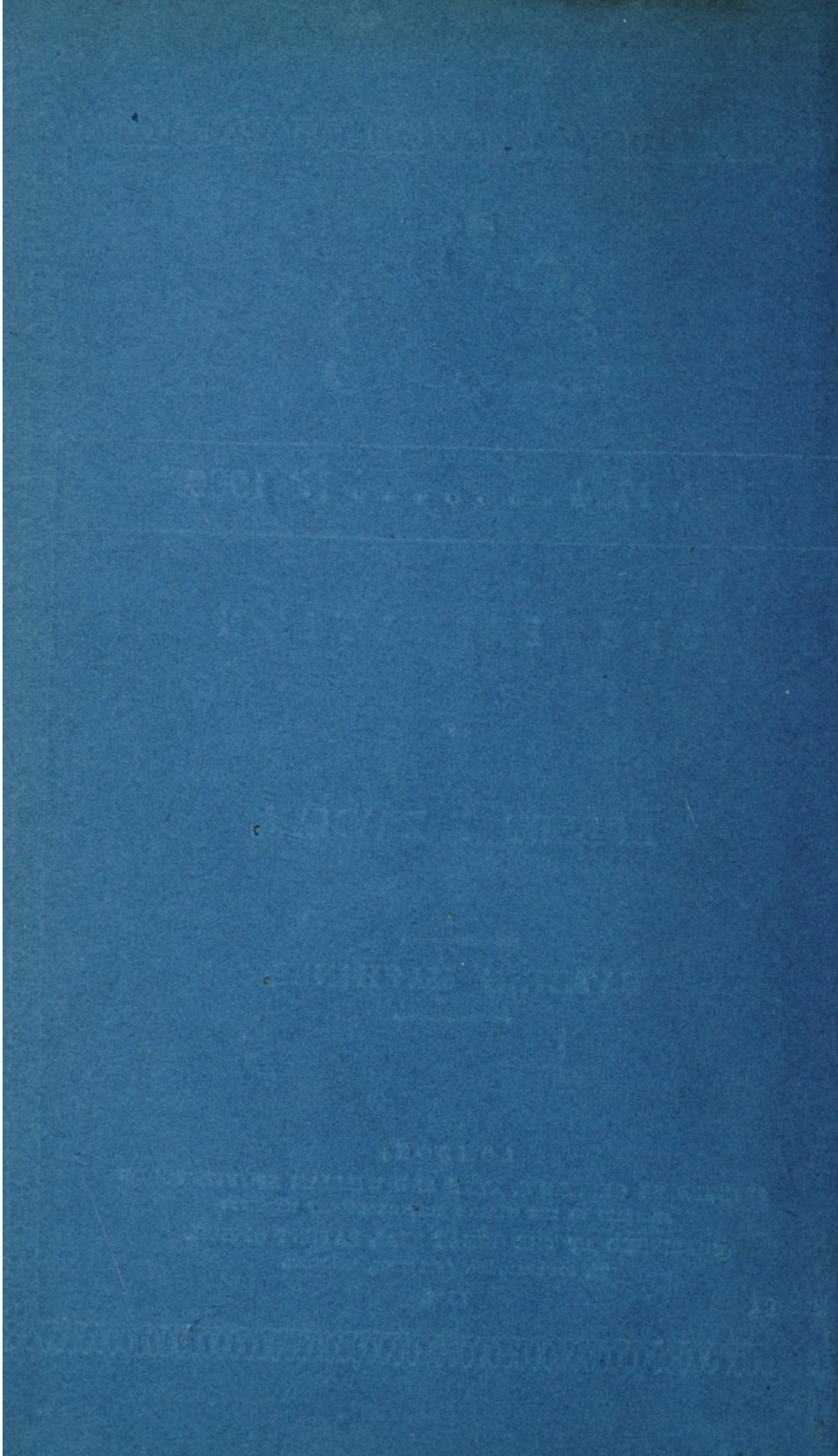
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY:

PUBLISHED AT THE GREAT SEAL PATENT OFFICE,

25, SOUTHAMPTON BUILDINGS, HOLBORN.

6d.

1856.





A.D. 1794 N° 1989.

Bathing Machines.

FERRYMAN'S SPECIFICATION.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, ROBERT FERRYMAN, of West Drayton, in the County of Middlesex, send greeting.

WHEREAS the King's most Excellent Majesty, by Letters Patent under the Great Seal of Great Britain, bearing date at Westminster, the Thirteenth day of May last past, gave and granted unto me, the said Robert Ferryman, my executors, administrators, and assigns, His Majesty's special licence, full power, sole privilege and authority, for me, the said Robert Ferryman, my executors, administrators, and assigns, and every of them, by myself and themselves, or by my and their deputy or deputies, servants or agents, or such others as I, the said Robert Ferryman, my executors, administrators, or assigns, should at any time agree with (not exceeding the number of five), and no others, from time to time and at all times thereafter during the term of years therein expressed, to make, use, exercise, and vend my Invention of "A BATHING MACHINE EITHER FIXED OR MOVEABLE, THAT MAY BE USED AS A HOT OR COLD BATH, IN SALT OR FRESH WATER, AND IN ALL WEATHERS, CALCULATED FOR THE BETTER ACCOMODATION OF INVALIDS AND TIMID PERSONS, AND TO REMOVE THE POSSIBILITY OF ANY ACCIDENTS FROM ROUGH WEATHER OR INEXPERIENCED GUIDES; TOGETHER WITH SUCH A COCK TO THE BOILER AS WILL PREVENT ANY WASTE OF HOT WATER, A STOP TO THE DOOR TO GUARD AGAINST THE MISCHIEFS THAT FREQUENTLY HAPPEN FROM THE WIND SHUTTING THEM WITH VIOLENCE, AND A SCRAPER TO THE OUTER DOOR NECESSARY TO KEEP THE INTERIOR PARTS OF THE BATH PERFECTLY FREE FROM DIRT, AND TO REMEDY THE MANY INCONVENIENCES WHICH HAVE ARISEN FROM THE SCRAPERS AT PRESENT IN USE," within that part of His Kingdom of Great Britain called England, Dominion of Wales, and Town of

Ferryman's Bathing Machine.

Berwick-upon-Tweed, in such manner as to me, the said Robert Ferryman, my executors, administrators, and assigns, or any of them, should in my or their discretions seem meet, to have, hold, and enjoy the said licence, power, privilege, and advantage to me, the said Robert Ferryman, my executors, administrators, and assigns, for the term of fourteen years from the date of the 5
said Letters Patent next and immediately ensuing, and fully to be complete and ended, according to the Statute in that case made and provided; in which said Letters Patent is contained a proviso that if I, the said Robert Ferryman, should not particularly describe and ascertain the nature of my 10
said Invention, and in what manner the same is to be performed, by an instrument in writing under my hand and seal, and cause the same to be inrolled in His Majesty's High Court of Chancery within one calendar month next and immediately after the date of the said Letters Patent, that then the said Letters Patent, and all liberties and advantages whatsoever thereby granted, should utterly cease, determine, and become void, anything therein-before con- 15
tained to the contrary notwithstanding.

NOW KNOW YE, that I, the said Robert Ferryman, in pursuance of the said proviso in the said Letters Patent contained, do hereby describe and ascertain the nature of my said Invention, and the manner in which the same is to be performed, as follows, that is to say:— 20

The inconvenience of baths and bathing machines, and the serious difficulties and dangers to which invalids and timid bathers have for ages been exposed; these, and the solicitations of many good friends, have induced me to construct a machine, which I hope will remedy the evils complained of, and be found pleasant and useful either as a hot or a cold bath in fresh or salt water. It 25
is unpleasant and confessedly very injurious to persons not in the habit of bathing to go slowly inch by inch into the water, and it is painful and unsafe for weak persons and cripples to be borne in the arms of others down wet and slippery steps, and to depend wholly on the strength and attention of wearied guides. 30

No 1, in the annexed Drawing, is a section of a bath either fixed over a spring or a reserved water, or on wheels to be drawn in and out with a horse or a rope. A is a domed skylight, supported by four hollow columns B, B, B, B; C, part of the floor made to sink; D, D, railing of about six feet high, enclosing three sides of the sinking floor C; E, E, E, E, four ropes, 35
or iron rods and chains, one of which is fastned to each corner of the sinking floor C at F, F, F, F, passing through the columns B, B, B, B, over the pullies G, G, G, G, G, G, to the large roller H; I is a large wheel with teeth and a catch J, fixed on the end of the roller H; K, a scale fastened by

Ferryman's Bathing Machine.

a rope or chain to the roller H, to receive a weight or counterbalance near the weight of the sinking floor and the person or persons bathing, in order to ease the labour of the attendant; L is a ladder fastened at one end to the floor by hinges (this is better seen in the sunk floor M), the other end rising
 5 and falling with the sinking floor; this, when down forms a fence to the fourth side of the sinking floor, and affords an opportunity to the person bathing to go in and out as in a common bath if so enclosed; N, a seat for one or more persons. The person or persons bathing are seated on this seat. The attendant puts a proper weight into the balance scale K, then takes off
 10 the catch J, and by turning the wheel I, lets out the ropes or chains E, E, E, E, and lowers the floor C with the bathers to a sufficient depth into the water, and, by turning the wheel the contrary way raises the floor gently up again. By this it impossible that the timid bather can avoid being covered with water, it is impossible that the invalid can be inconvenienced,
 15 and it is impossible that any accident can arise from sudden cramps, violent seas, or carelessness, and sometimes wantonness in the person bathing, for however untoward the circumstances may be, while the attendant does his duty at the wheel, he can always raise the bathers safe out of the water into the room. To convert this into a hot bath: O is a boiler; P, a pump to fill
 20 the boiler from the sea or reservoir; Q, a large vessel made water-tight, and moving freely in a groove under the floor of the bathing room. When it is wanted as a hot bath the vessel Q, by a roller, is brought under the sinking floor C; the hot water is let out of the boiler O by means of a cock R into the vessel Q. S is another cock to let in cold water, and by means of a thermo-
 25 meter the water is brought to that degree of heat which the physician prescribes. The person to be bathed is then let down into the vessel Q, in the same manner as before described into the cold water. As the other parts in this small scale cannot well be shewn in their proper places, I shall describe them separately. In certain delicate cases, great exactness may be required
 30 in the degree of heat; it is not only necessary that the attendant is enabled to give that degree with the greatest facility and precision, but care is to be taken that it suffers no material change during the time of bathing. For which purpose I have made two new cocks. No. 2 is a cock intended to be fixed to the boiler *b, b, b*, the opening through which the liquor flows;
 35 *c*, a plug nicely ground into the narrow part of the opening *b, b, b*; *d*, a hollow pin on which the plug moves freely, which pin is supported in the internal part of the cock by the rising part *e, e*; *f*, a pin turning freely; *g*, a projecting part from the side of the pin *f*; *h*, a lever fitted on the end of the pin *f*; when this lever is raised it turns the pin *f*, and the projecting part *g*

Ferryman's Bathing Machine.

presses against the bottom of the plug *c*, and raises it so that the water flows freely. When the lever *h* is loosed the plug *c* falls by its own weight into its place, and the flowing of water is stopt. No. 3 is another cock placed in the large vessel Q, to admit at pleasure the cold water. *b, b, b*, the opening through which the liquor flows; *c, c, c*, a plug nicely ground into the narrow 5 part *d*; *e*, a screw at the end of the projecting part of the plug *c, c, c*, working in the box or female screw *f*; when this is turned back by means of a key or a lever on the square at *g*, it forces back the large part of the plug into the wide part of the opening *b, b, b*, and the liquor flows. When the plug is turned forward it draws the plug into the narrow part *d*, and the flowing 10 is securely stopt. Experience must shew which of these two cocks ought to be preferred; they will both perhaps be found useful for their different purposes.

It certainly is very necessary that the floor whereon delicate constitutions are to tread barefooted should be kept as neat and as free from mire as possible. The scrapers and brushes in common use are very inadequate to their intended 15 purpose; I have therefore invented a new kind of scraper, which will be less objectionable than those now in use and much more useful. No. 4 in the annexed Drawing is a section of a scraper and its movements. A is a box; B, a drawer; C, an opening on the upper side of the box; D, a flap exactly fitting the opening C, working on two centres; E, a scraper; F, a 20 brush fixed on the flap D, and moving with it; G, a pinion wheel fitted on the back centre of the flap D; H, a rack working in the pinion wheel G; I, a lever jointed at the upper end of the bar of the rack at J, moving in a centre at K; L, a knob; M, an upright bar of iron or piece of wood to support the lever I. When a person scrapes or brushes his shoes on his feet, a 25 something is always wanted to rest the hand and stay the body. The hand rested on the knob L brings down that end of the lever which raises the bar and rack H, which, working in the pinion wheel G, brings up the scraper and brush E and F. When the shoes are scraped and made clean, by raising the end of the lever the rack is forced down, and the brush and scraper, with 30 the dirt scraped from the shoes, turned down into the drawer, and all is clean and smooth on the top. These principles, by a small alteration in the mode of fixing, may be adapted to any situation.

That nothing may be wanting which can possibly contribute to the perfection of this bathing machine, and the accomodation of the sick and feeble, I have 35 endeavoured to guard against the unpleasant alarm that is sometimes occasioned by the noise and jarr arising from the violent shutting of the door by wind or other means. No. 5 is a door moving on hinges as in the common way, or on centres *a* and *b*. B is a common mortice lock, to which are added two

Ferryman's Bathing Machine.

movement *c* and *d*; *e* is a bar moving freely in the front edge of the door, and jointed at *f* to another bar *g*, laid in a groove in the bottom of the door moving on a centre at *h*, with a part at the end *i* turned downward and coming through the bottom plate; J is a semicircular plate laid in the floor, 5 with holes at small distances from each other to admit the projecting end of the bar *i*. When the day bolt is drawn back by turning the knob, as in the usual way, it forces back the upper end of the movement *d*, the lower end of which raises the hind end of the movement *c*, and forces downward the fore end, which pressing on the end of the bar *e*, forces it downward, which 10 raises the hind end of the lower bar *i* out of one of the holes in the circular plate J, when the door moves freely; but so soon as the hand is taken from the knob the day bolt returns to its place, and the projecting end of the lower bar *i* drops into one of the holes in the semicircular plate J, and the door is securely stayed in the state it is in at the time the hand is taken from the 15 knob.

In witness whereof, I, the said Robert Ferryman, have hereunto set my hand and seal, the Eleventh day of June, in the year of our Lord One thousand seven hundred and ninety-four.

ROBT (L.S.) FERRYMAN.


20 AND BE IT REMEMBERED, that on the Twelfth day of June, in the year above mentioned, the aforesaid Robert Ferryman came before our Lord the King in His Chancery, and acknowledged the Specification aforesaid, and all and every thing therein contained, in form above written. And also the Specification aforesaid was stamped according to the tenor of the Statute 25 in that case made and provided.

JOHN ORD.

Inrolled the same Twelfth day of July, in the year above written.

LONDON:

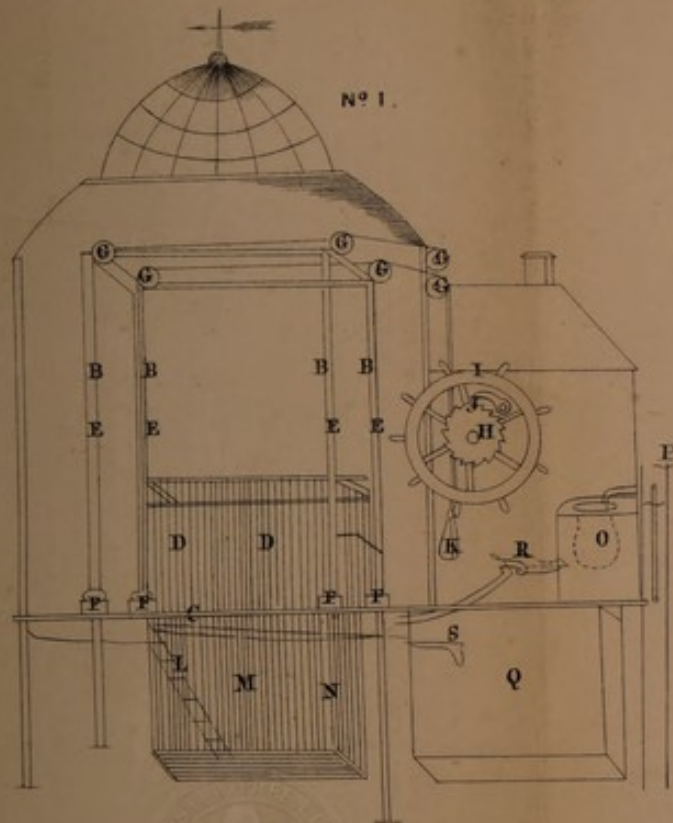
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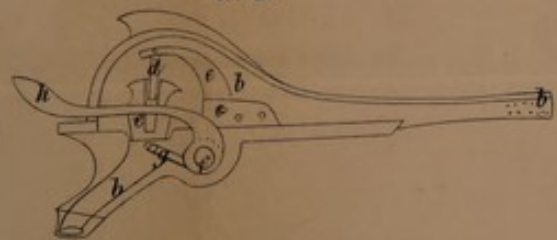
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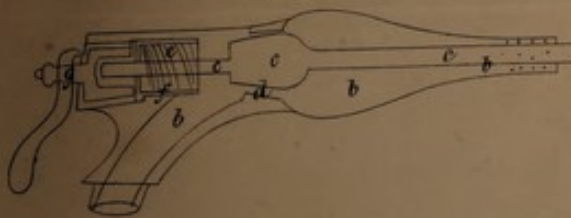
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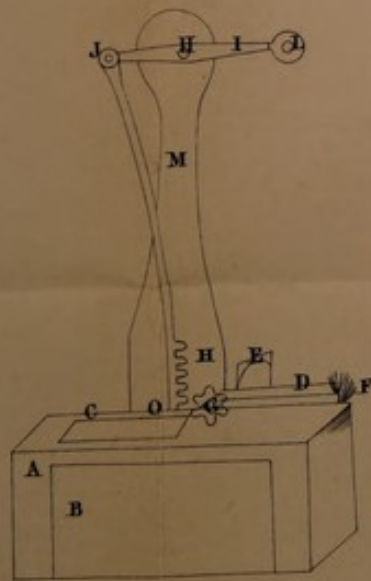
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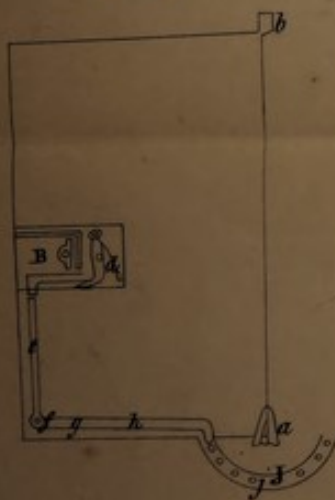
N° 3.



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N° 5.



The enrolled drawing is partly colored

Drawn on Stone by Malby & Sons.

