

Specification of James Barron : apparatus for feeding fires, &c.;

Contributors

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A.D. 1826 N° 5391.

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

OF

JAMES BARRON.

APPARATUS FOR FEEDING FIRES, &c.

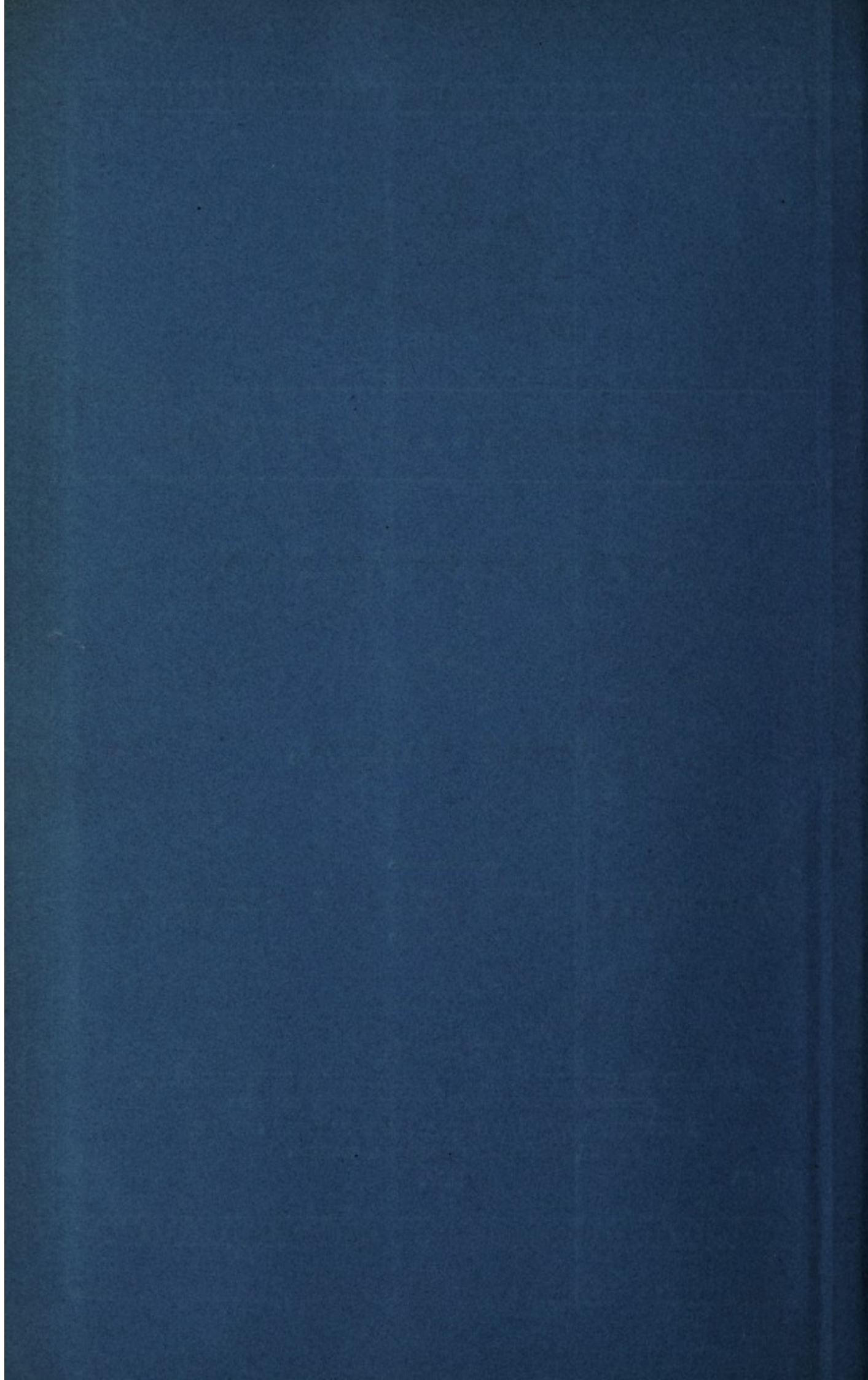
L O N D O N :

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A.D. 1826 N^o 5391.

Apparatus for feeding Fires, &c.

BARRON'S SPECIFICATION.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, JAMES BARRON, of Birmingham, in the County of Warwick, Brass Founder, send greeting.

WHEREAS His present most Excellent Majesty King George the Fourth, by His Letters Patent, under the Great Seal of Great Britain, bearing
5 date at Westminster, the Twenty-fourth day of July, One thousand eight hundred and twenty-six, in the seventh year of His reign, did, for Himself, His heirs and successors, give and grant unto me, the said James Barron, His especial licence, that I, the said James Barron, my exors, admors, and assigns, or such others as I, the said James Barron, my exors, admors, or
10 assigns, should at any time agree with, and no others, from time to time and at all times during the term of years therein expressed, should and lawfully might make, use, exercise, and vend, within England, Wales, and the Town of Berwick-upon-Tweed, my Invention of "A COMBINATION OF MACHINERY OR APPARATUS FOR FEEDING FIRE WITH FUEL, WHICH MACHINERY OR APPARATUS IS
15 APPLICABLE TO OTHER PURPOSES;" in which said Letters Patent is contained a proviso obliging me, the said James Barron, by an instrument in writing under my hand and seal particularly to describe and ascertain the nature of my said Invention, and in what manner the same is to be performed, and to cause the same to be inrolled in His Majesty's High Court of Chancery
20 within six calendar months next and immediately after the date of the said in part recited Letters Patent, as in and by the same, reference being thereunto had, will more fully and at large appear.

NOW KNOW YE, that in compliance with the said proviso, I, the said James Barron, do hereby declare that my apparatus is so constructed that
25 a regulated quantity of coal or other fuel may be delivered into the fire at stated periods of time, (that is to say):—

Barron's Improvements in Apparatus for Feeding Fires, &c.

I construct a series of chambers or compartments with false bottoms, in which chambers I place the coal, and by means of the going part of a clock with the assistance of other apparatus (which will hereafter be described in referring to the Drawings hereunto annexed) the contents of one of these chambers at a time will be discharged into the fire.

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DESCRIPTION OF THE DRAWINGS.

Drawing marked A represents a perspective view of an apparatus with thirteen chambers to contain the fuel, to each of which a door is constructed for the convenience of putting in the coal, likewise forms a front of each chamber when closed; the bottoms of these chambers are hung upon pins or hinges. *a* represents a number of levers, which support the bottoms of the chambers in a horizontal position; these levers work on a stud or pin at *b*, and are loaded at the parts marked *c* for the purpose of overbalancing the coal placed on the bottoms of the chambers (shewn on a larger scale in Drawing B, which represents a horizontal and vertical section of the bottoms of the chambers, and of the levers *a*); *d* the mover (shewn separate at X in Drawing B); *e* the framework which guides the mover; *i* the parts of the framework on which the loaded levers rest; *n* clicks or catches to support the loaded levers when drawn up by the mover *d*. The Drawing A represents the apparatus at work, the four bottom chambers as having discharged their contents, and the fifth in the act of discharging the weight of the clock work, continuing to raise the mover, will at a proper time bring it in contact with and raise the sixth lever, the small part of which will be thus removed from under the bottom of the chamber; the weight of the coal placed in the sixth chamber will cause it to descend into the fire, and thus each chamber will be unloaded as the mover rises. *o* is a cord or chain fastened to the mover, and passing over a pulley or pulleys is made fast to the weight *p*, which is made somewhat heavier than would be necessary for keeping the clock work in motion for the purpose of raising the mover. The time for discharging the coal from the chambers may be regulated by the pendulum. When the quantity of coal contained in the chambers is required to be delivered quickly the pendulum is to be shortened, and when slowly it is to be lengthened. This apparatus may be applied for the purpose of actuating a rake D, which being forced up between the bars clears out the ashes; the action of this part of the apparatus will be clearly understood by a description of the Drawing marked C, which represents a section of the lower part of the apparatus; *q* the balance drop, which is hinged on a stud at *r*; *s* is a perpendicular rod which supports the drop. The lower end of this rod is fixed by a

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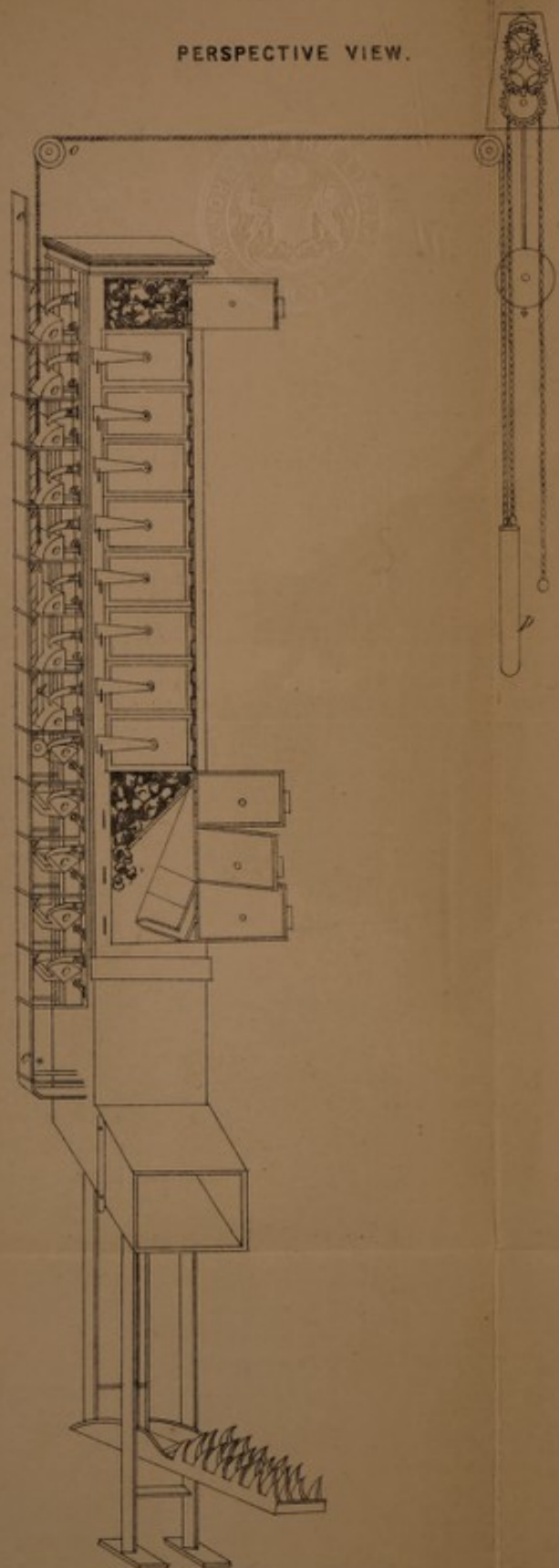
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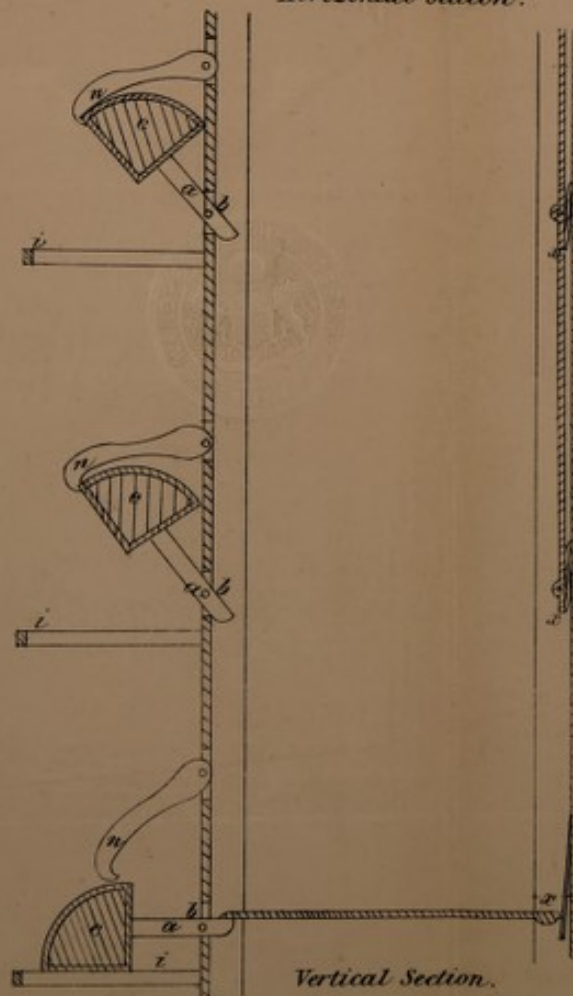
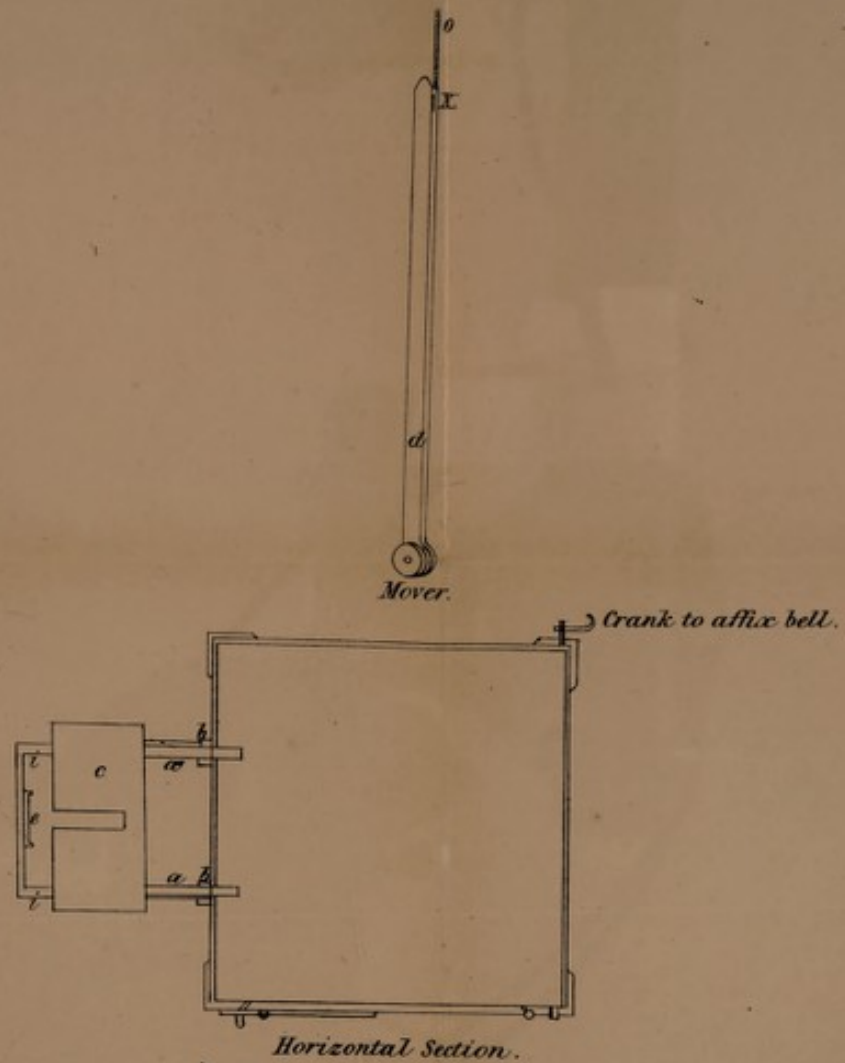
PERSPECTIVE VIEW.



The enrolled drawing is colored.

Drawn on Stone by Malby & Sons

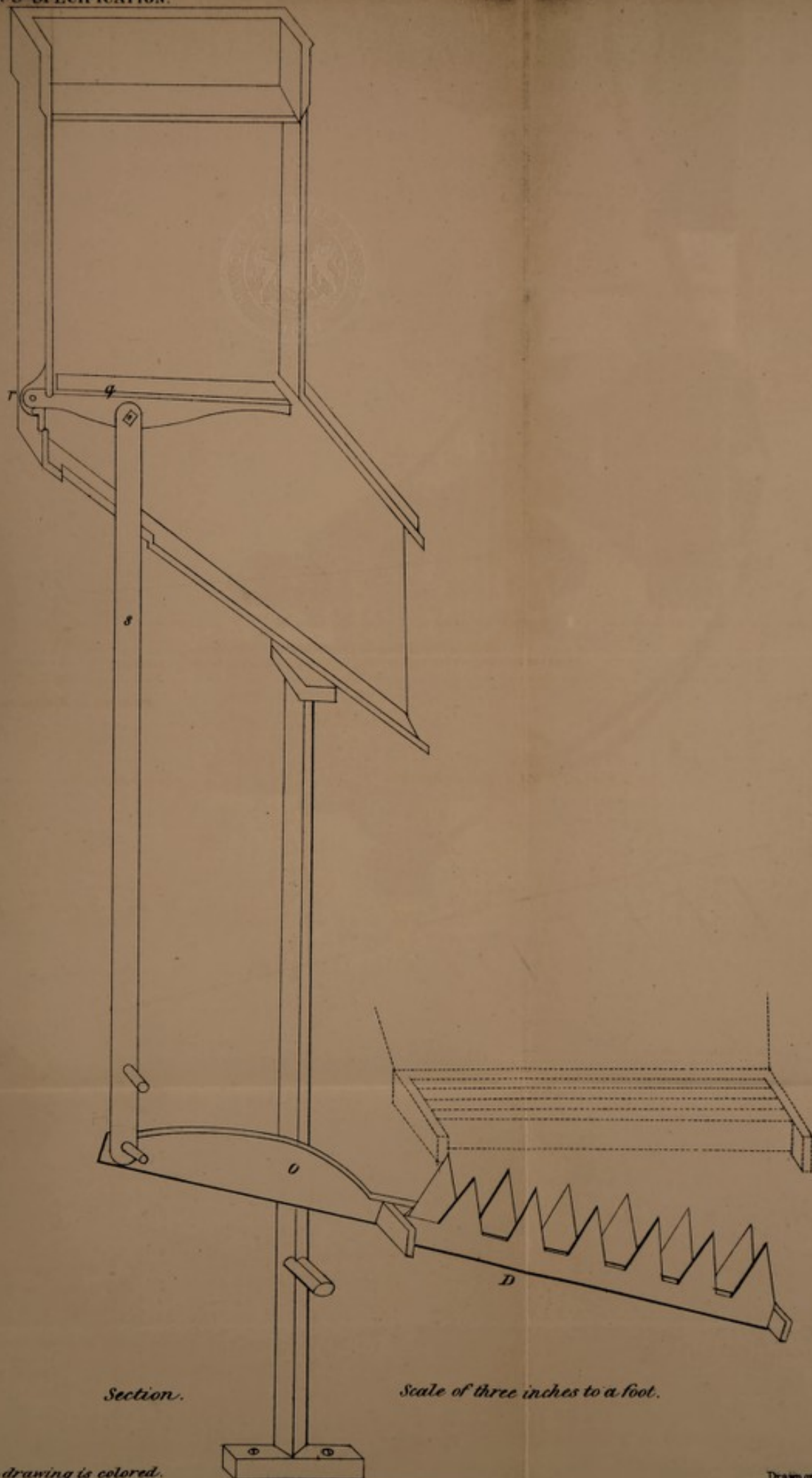




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Barron's Improvements in Apparatus for Feeding Fires, &c.

pin or screw (but allowed to turn) to the rake D, and thus it will be evident that on the discharge of the coal from the chambers above it will fall on the ballance drop and force it down, by which means the rake D will be forcibly raised up between the bars, and thus stir out the ashes prior to the coal
 5 coming on to the fire, the drop will then resume the position shewn in this Drawing. Another purpose to which this apparatus may be applied is the affixing of a bell, by means of a crank or otherwise, to any of the pins on which the bottoms of the chambers are suspended, so that when the bottom falls the bell will ring, and thus give notice to the attendant; for instance, if
 10 the bell be fixed to the top chamber it would give notice that the apparatus required feeding on the discharge of the coal contained in the last or uppermost chamber. To again charge the apparatus all the doors must be thrown open, the false bottoms raised upwards (and are kept so by the spring *x*), as shewn in vertical section, Drawing B, the lowest loaded lever is then to be
 15 unhooked from the click or catch *n* and allowed to rest on the frame *i*, the bottom to this chamber is then let down, and is supported by the end of the lever as above described. This chamber is to be filled with fuel, then the lever next above is to be unhooked, and the next bottom brought down, the first door is then closed and the chamber filled with fuel, and continue thus till
 20 all the chambers are full. But it should here be observed, that prior to unhooking any of the loaded levers that the clock work should be wound up, and the mover will fall down to the part marked * of the framework. In the Drawings the parts colored grey are to represent iron, and the parts colored yellow, brass; the ends *c* of the loaded levers are lead coated with
 25 brass, but the whole may be made of iron or any other suitable material or materials, and the shape and size of the apparatus may be varied to suit the situation of the place in which it is to be applied. The apparatus above described is constructed as follows:—The four angles are made of brass and the sides of sheet iron, and rivetted together with studs, or they may be screwed.
 30 The frames of the doors are brass with sheet iron pannels.

I have now described the manner of combining the machinery or apparatus to constitute my Invention, but would have it understood that I lay no claim to the parts separately, but claim as my Invention an apparatus combined as above described for the purposes herein set forth.

35 In witness whereof, I, the said James Barron, have hereunto set my hand and seal, this Sixteenth day of January, in the year of our Lord One thousand eight hundred and twenty-seven.

JAMES (L.S.) BARRON.

Barrow's Improvements in Apparatus for Feeding Fires, &c.

STEPHEN.
AND BE IT REMEMBERED, that on the Sixteenth day of January, in the year of our Lord 1827, the aforesaid James Barron came before our said Lord the King in His Chancery, and acknowledged the Specification aforesaid, and all and every thing therein contained and specified, in form above written. And also the Specification aforesaid was stamped according to the tenor of the 5 Statute made for that purpose.

Inrolled the Twenty-fourth day of January, in the year of our Lord One thousand eight hundred and twenty-seven.

LONDON:

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