

**Specification of William Jeffries : apparatus for sweeping chimneys, for the prevention of smoke, &c.;**

**Contributors**

Jefferies, Bill.

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A.D. 1844 . . . . . N<sup>o</sup> 10,164.

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

OF

WILLIAM JEFFRIES.

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APPARATUS FOR SWEEPING CHIMNEYS, FOR  
THE PREVENTION OF SMOKE, &c.

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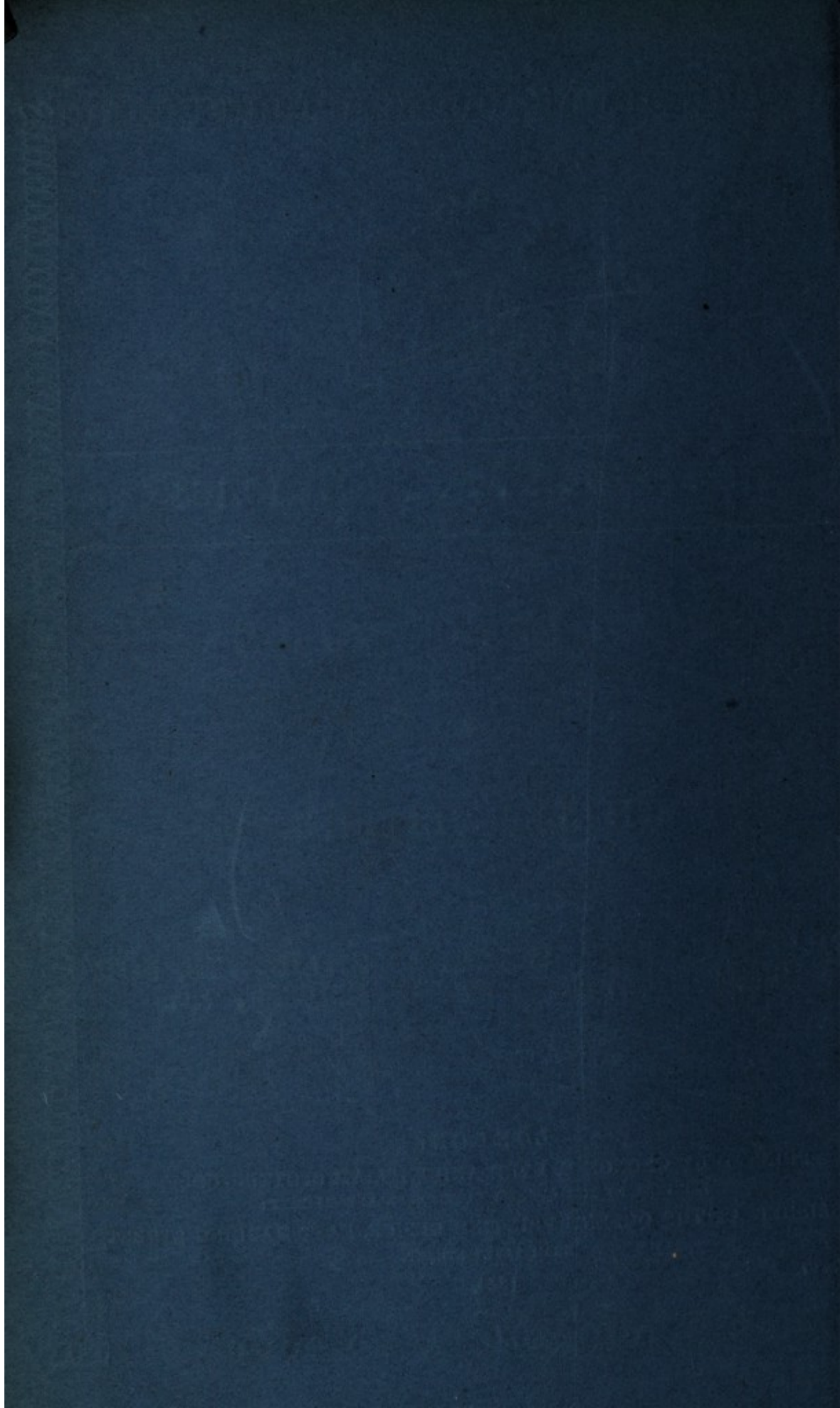
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Apparatus for Sweeping Chimneys, for the Prevention  
of Smoke, &c.

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JEFFRIES' SPECIFICATION.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, WILLIAM JEFFRIES, of Little Sussex Place, Hyde Park Gardens, in the County of Middlesex, send greeting.

WHEREAS Her present most Excellent Majesty Queen Victoria, by Her  
5 Letters Patent under the Great Seal of Great Britain, bearing date at Westminster, the Thirtieth day of April, in the seventh year of Her reign, did, for Himself, Her heirs and successors, give and grant unto me, the said William Jeffries, Her especial licence, full power, sole privilege and authority, that I, the said William Jeffries, my exors, admors, and assigns, or such  
10 others as I, the said William Jeffries, my exors, admors, or 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 "IMPROVEMENTS IN SWEEPING CHIMNEYS AND IN  
15 APPATUS FOR PREVENTING CHIMNEYS FROM SMOKING;" in which said Letters Patent is contained a proviso that I, the said William Jeffries, shall cause a particular description of the nature of my said Invention, and in what manner the same is to be performed, to be inrolled in Her said Majesty's High Court of Chancery within six calendar months next and immediately  
20 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.



*Jeffries' Improved Apparatus for Preventing Chimneys from Smoking.*

NOW KNOW YE, that in compliance with the said proviso, I, the said William Jeffries, do hereby declare that the nature of my said Invention and the manner in which the same is to be performed, are fully described and ascertained in and by the following statement thereof, reference being had to the Drawings hereunto annexed and to the figures and letters marked thereon, 5 that is to say:—

My Invention relates, first, to the use of apparatus when sweeping chimneys, that the soot may as it descends enter into a suitable bag or receptacle, so placed in connection with a chimney that the soot cannot escape into the room; secondly, my Invention relates to improvements in apparatus for 10 sweeping chimneys; and, thirdly, my Invention relates to improvements in apparatus to be applied to the upper parts of chimneys to prevent the smoke being driven down the chimney when such apparatus is applied; and in order that my Invention may be most fully understood and readily carried into effect, I will proceed to describe the means and apparatus employed by me. 15

## DESCRIPTION OF THE DRAWINGS.

Figure 1 represents a side section of a fire-place and part of a chimney with apparatus applied thereto suitable for carrying out the first part of my Invention; Figure 2 shows part of a front view of the apparatus; Figures 3 and 4 show views of separate parts of the apparatus. The construction of the 20 apparatus is such that the soot as it falls from the chimney enters an apparatus which directs it into a bag or such like receptacle, which is connected with the apparatus placed and secured in the mouth of the chimney; and there are to be suitable sleeves for the hands and arms of the operator, in order to his passing his arms and hands into them, and thus be enabled to use 25 a suitable sweeping and scraping apparatus without admitting the soot into the room as it falls. *a, a*, is a bag or receptacle for receiving the soot as it falls down the chimney; this bag or receptacle I prefer to make of leather, tho' other material may be employed, so long as the receptacle is suitable for preventing the soot passing thro' as it falls into it. The upper part or mouth 30 of the bag is affixed to the light metal spout *b*, which is suitably formed to enter a groove *e, e*, formed in the quadrangular opening *f, f*, into the chimney, and there is a funnel *g* fixed in the quadrangle opening into the chimney, as is shown; or these parts may be otherwise arranged, so long as the parts are properly formed to receive the soot as it falls, and direct it into a close receiver 35 without allowing it to pass into the room. *h, h*, are two sleeves which allow the sweep to introduce his hands and arms into the interior of the apparatus, so as to work a proper sweeping apparatus without allowing the soot to pass



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thro' the same into the room, and there is a bag *i* to receive the parts of the rod, the mouth of the bag opening into the apparatus *a* thro' the flexible mouth piece *a*<sup>1</sup>, as is shown; by this arrangement the sweep can successively add parts of the rod to the sweeping or scraping apparatus employed, and he  
 5 can move the rod, and consequently the cleansing apparatus applied thereto, up and down within the chimney. *j, j*, are hooks to sustain the apparatus in its place when being used, such hooks being supported by studs *k* affixed on either side of the chimney. When a register is not employed to the stove, then I use a bag or receptacle such as is shown at Figure 5, which is a front  
 10 view of part thereof in section; this receptacle is to have the sleeves and other bag, as in the previous case, but which are not shown in this Figure. The mouth of the bag is capable of expanding and contracting by means of the springs *l, l*, affixed to the hoop or frame *m*; these springs have a tendency to open outward, so that they will cause the mouth of the bag or receptacle to fit  
 15 various sizes of chimneys. I would remark in respect to the first part of my Invention that the object is to employ close receptacles so arranged in connection with a chimney that the soot falling may enter this receptacle; hence it should be understood this part of my Invention is not confined to the use of a leather bag, as is shown, though I believe it to be the best arrangement for  
 20 the purpose.

The operation of sweeping a chimney being completed, the sweep will reduce the length of the rod and place the parts thereof into their separate bag; the sweeping apparatus being lowered into the bag or receptacle, the mouth of the receptacle is to be lowered, and the cover *n* placed thereon, when  
 25 the receptacle and apparatus may be removed with the soot and apparatus. A cover *n* may also be used to close the opening *f*, as shown by dotted lines at Figure 4, in order to prevent soot or particles of dust coming into the room, and in case of fire in the chimney to prevent a current of air passing up the chimney, when the fire would soon exhaust itself.

30 I will now proceed to describe the second part of my Invention, which relates to a mode of constructing the joints of the parts of the rod used for raising, lowering, and working the cleansing apparatus employed. Figure 6 shows an external view of the upper and lower end of two parts of a rod. Figures 7 and 8 show two sections of the same parts joined together. *o, p*, are  
 35 the two parts of a rod, the ferules of which are joined by means of the springs *q*, which by their catches hold on the projecting ring *r*, as shown, the lower parts of the springs being fixed in the ferule of the lower part of the rod, and in order to prevent the springs collapsing when the rod is in use, the slide *s* is used, which ensures the springs being expanded, their natural



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tendency being to remain expanded; when it is desired to separate the parts *o, p*, the slide is raised up and the springs pressed towards each other, which removes the catches out of the upper parts of the springs from the projecting ring.

Another improvement in apparatus for sweeping chimneys is shown in plan 5 and side view at Figures 9 and 10, and consists in combining a series of scrapers *t, t*, with a brush *v, v*, as shown; this apparatus is arranged in such manner as to be raised and lowered by means of a chain or cord attached thereto; such chain or cord, when it is desired to work the sweeping and scraping apparatus from below, passing over a pulley at the upper part of the 10 chimney, as has heretofore been practised.

Another improvement in apparatus for sweeping chimneys is shown at Figure 11. This apparatus is suitable for being used with a rod, such as has heretofore been employed, or a rod with its parts joined as above described. Figure 12 is a plan of the apparatus, and Figure 13 shows different views of 15 the brushing parts of the apparatus separately. On the upper part of the rod are pulleys or rollers to come against the sides of a chimney when not vertical. *u, u*, are a series of spring arms, each carrying brushes, such as are shown at *w, w*, or wire brushes, such as are shown at *x, x*, and at the end of the arms are placed rollers *y, y*, as shown in the Drawings; hence, when this apparatus 20 is raised up and down, the spring arms will assume the positions shown by the red lines in Figure 11.

I will now describe the third part of my Invention, which consists in applying metal apparatus within the upper part of a chimney, by which will be prevented what is called smoking. Figure 14 shows a section of a stack 25 of five chimneys, each having an apparatus applied to it according to my Invention. Figure 15 shows a transverse section of one of the chimneys, the others being all similar; and Figure 16 shows one of the apparatus separately. *z, z*, show the apparatus of metal, the shape of which is clearly shown; these apparatus are larger at their lower than their upper ends, the lower ends being 30 made to fit within the chimney, and it gradually decreases as it ascends, *z<sup>1</sup>* being a projecting cap which rests on the upper part of the chimney, as shown; and I prefer that where there are several such apparatus near to each other, that they should not be all the same height, but that they should alternately succeed each other, a short one, then a taller one, then a short one, 35 and so on.

Having thus described the nature of my Invention, and the best means I am acquainted with for performing the same, I would have it understood that I do not confine myself to the details herein shown and described, so long as



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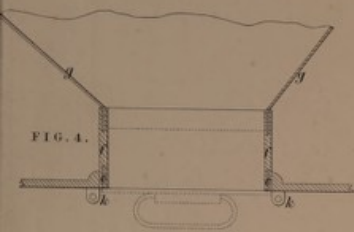


FIG. 4.

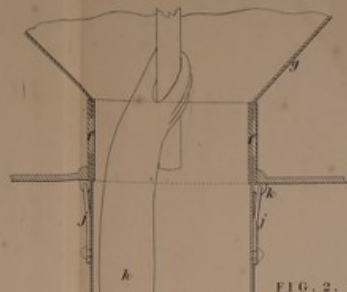


FIG. 2.



FIG. 5.

FIG. 1.

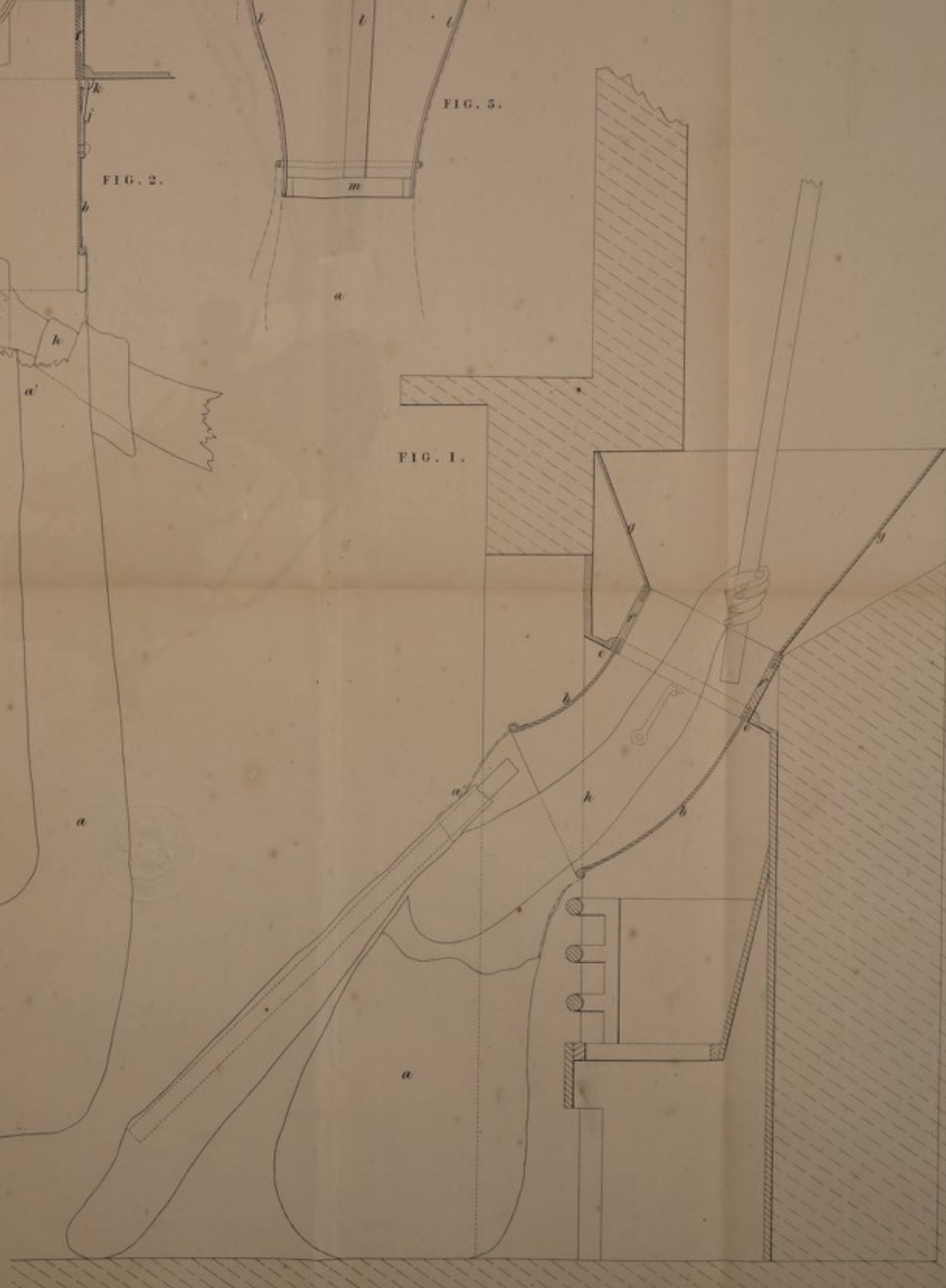
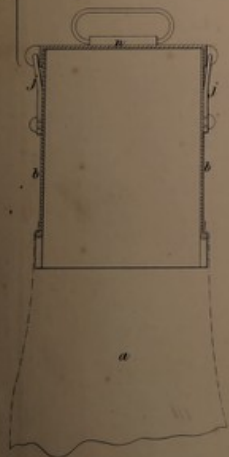


FIG. 3.



The Envelled Drawing is partly colored.







FIG. 9.

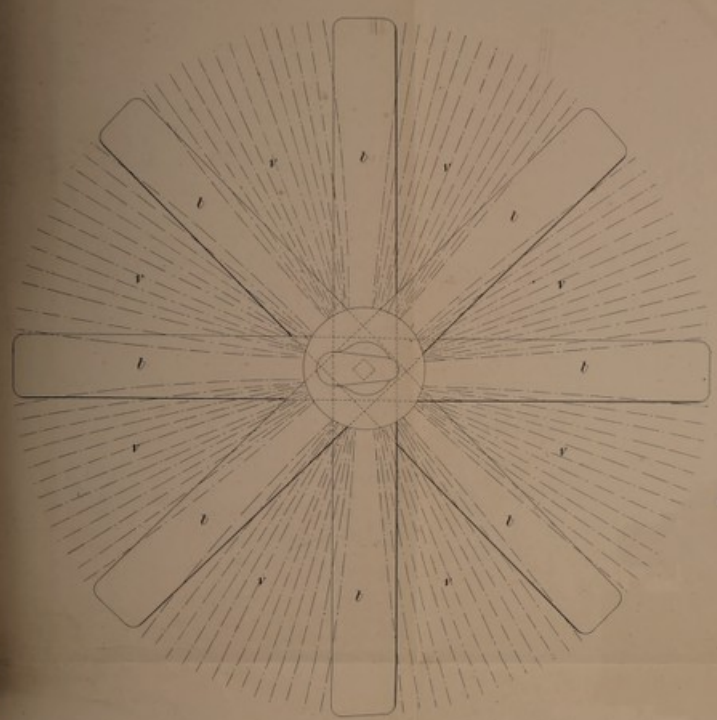


FIG. 8.

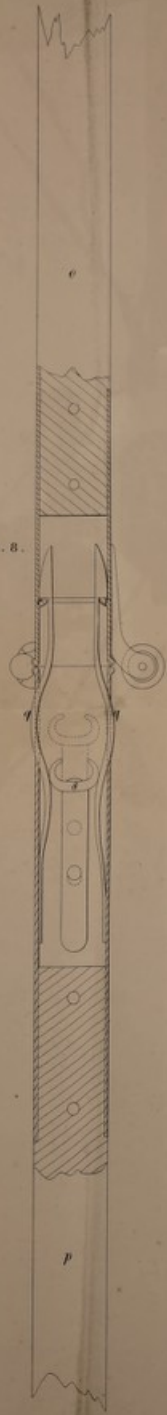


FIG. 7.

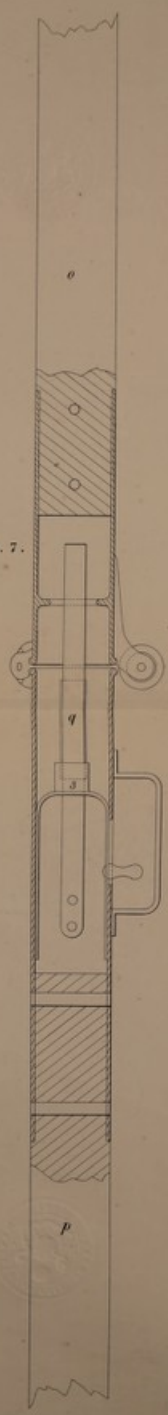


FIG. 6.

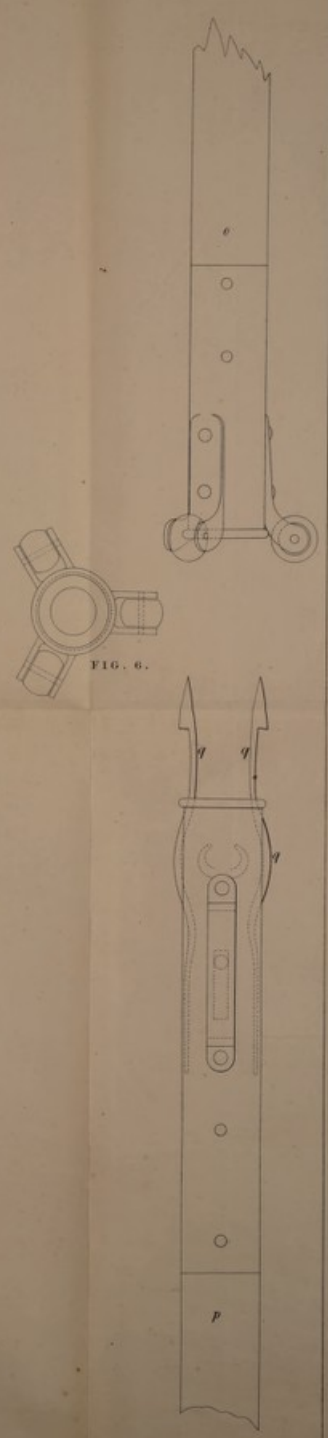
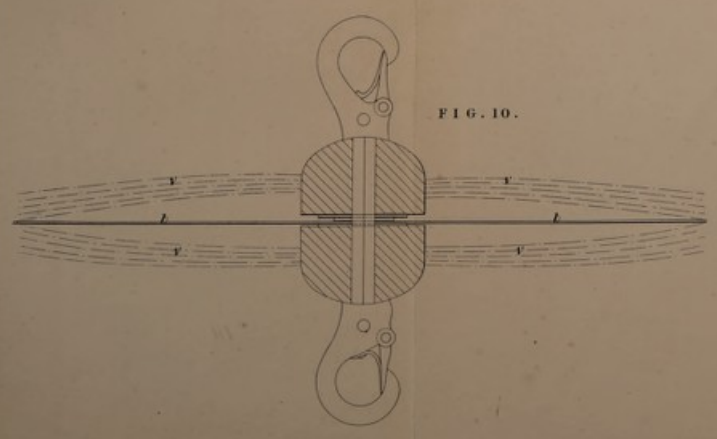
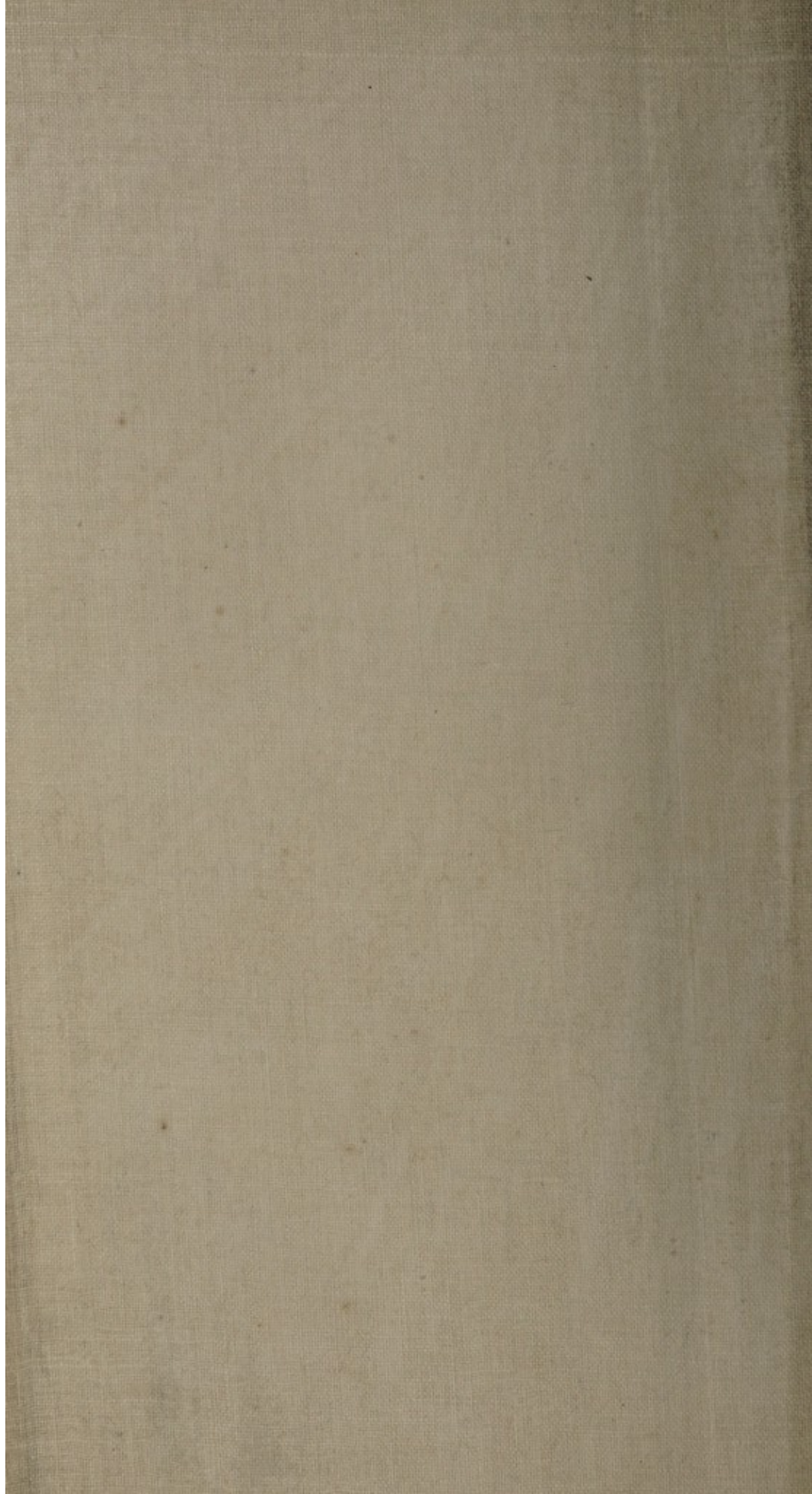


FIG. 10.



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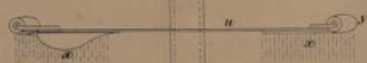
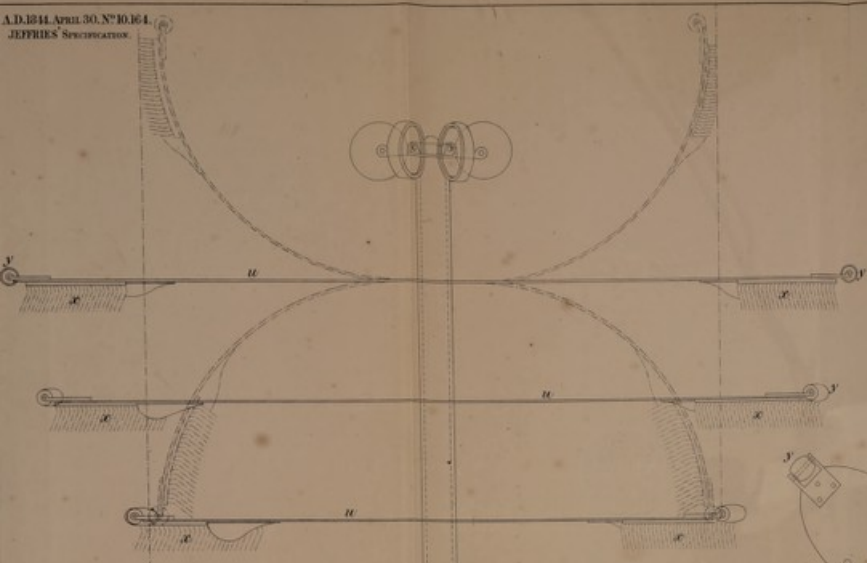


FIG. 11.

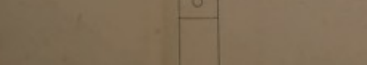
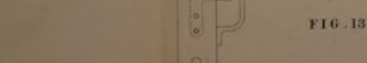
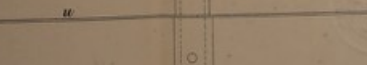
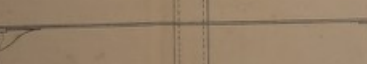
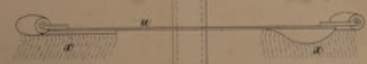


FIG. 13.

FIG. 12.

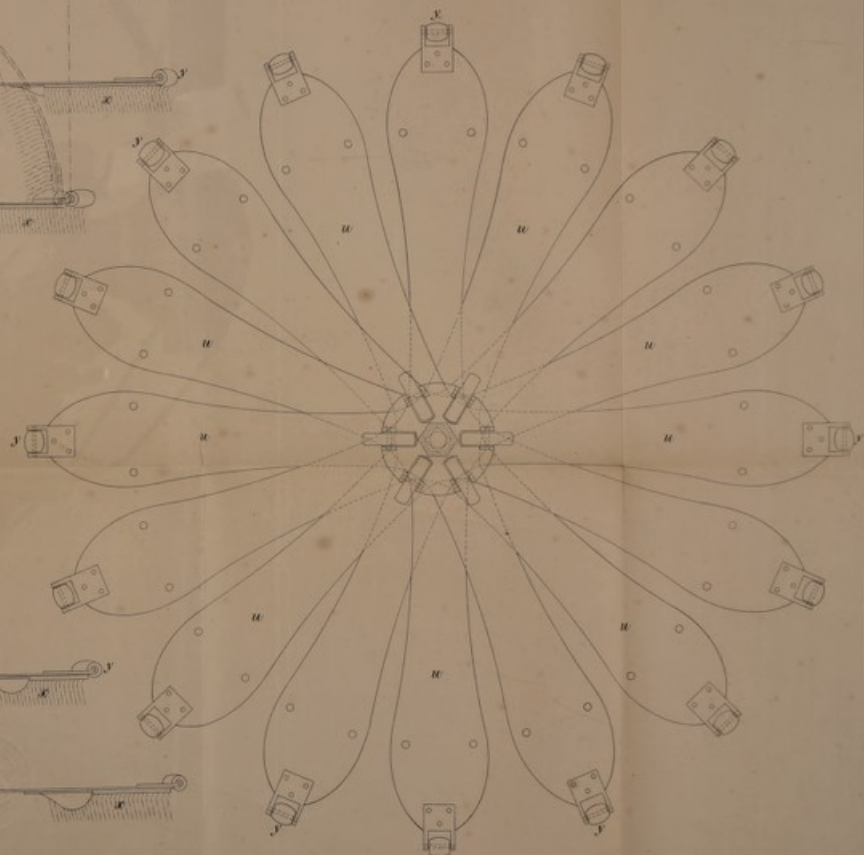
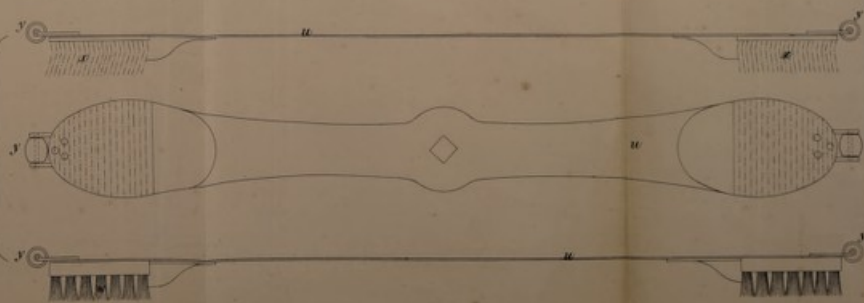


FIG. 13.



The Enrolled Drawing is colored.







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FIG. 14.

FIG. 15.

Top View.

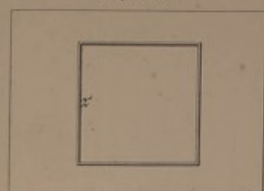
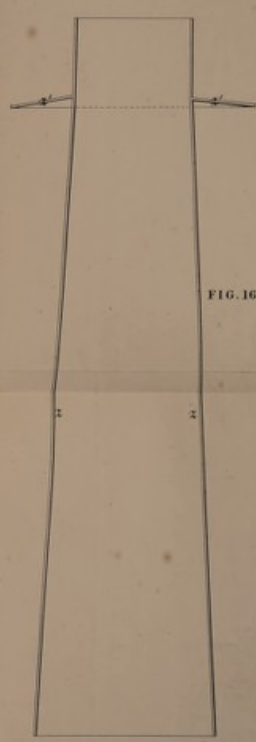
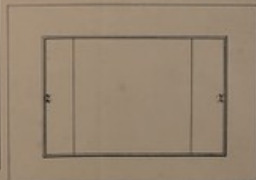


FIG. 16.

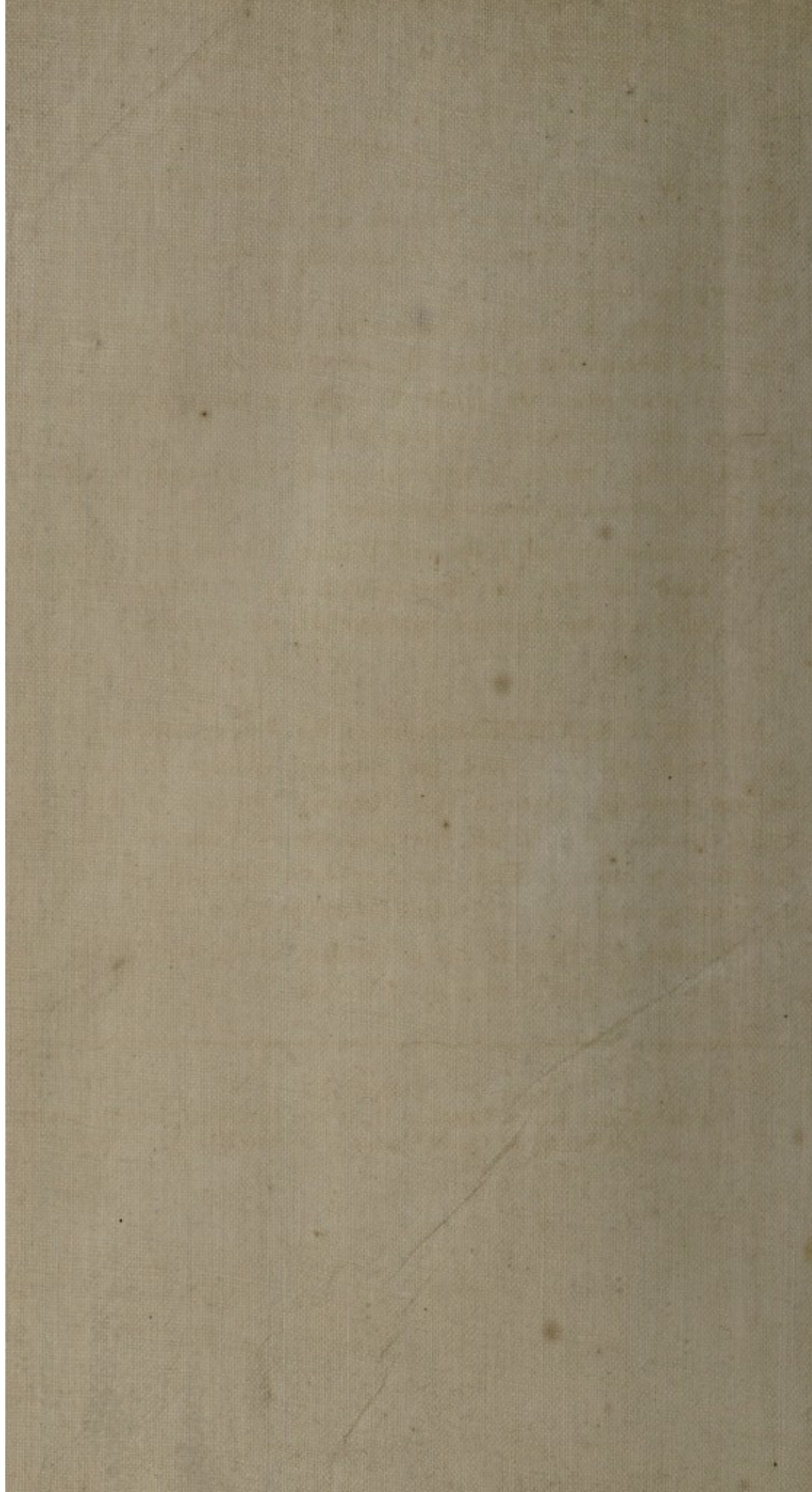


View looking upwards.



The Envelled Drawing is partly colored.







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the peculiar character of either part of my Invention be retained. But what I claim is, first, the mode of sweeping chimneys by employing a closed receptacle in connection with the chimney, with suitable apparatus for causing the soot to descend and enter into such receptacle.

5 Secondly, I claim the mode of constructing the joints for rods of apparatus for sweeping chimneys.

And I claim the mode of constructing apparatus for sweeping chimneys shown and described in respect to Figures 9 and 10.

And I also claim the mode of arranging the apparatus for sweeping  
10 chimneys shown at Figures 11, 12, and 13.

And, thirdly, I claim the apparatus described in respect to Figures 14, 15, and 16, for preventing chimneys smoking.

In witness whereof, I, the said William Jeffries, have hereunto set my hand and seal, this Twenty-sixth day of October, in the year of  
15 our Lord One thousand eight hundred and forty-four.

WILLIAM (L.S.) JEFFRIES.

AND BE IT REMEMBERED, that on the Twenty-sixth day of October, in the year of our Lord 1844, the aforesaid William Jeffries, came before our said Lady the Queen in Her Chancery, and acknowledged the Specification aforesaid, and all and everything therein contained and specified, in  
20 form above written. And also the Specification aforesaid was stamped according to the tenor of the Statute made for that purpose.

Enrolled the Thirtieth day of October, in the year of our Lord One thousand eight hundred and forty-four.

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DREW.

