

C. F. & F. Blood, Washing Machine,

N^o 66,450.

Patented July 9, 1867.

Fig. 1

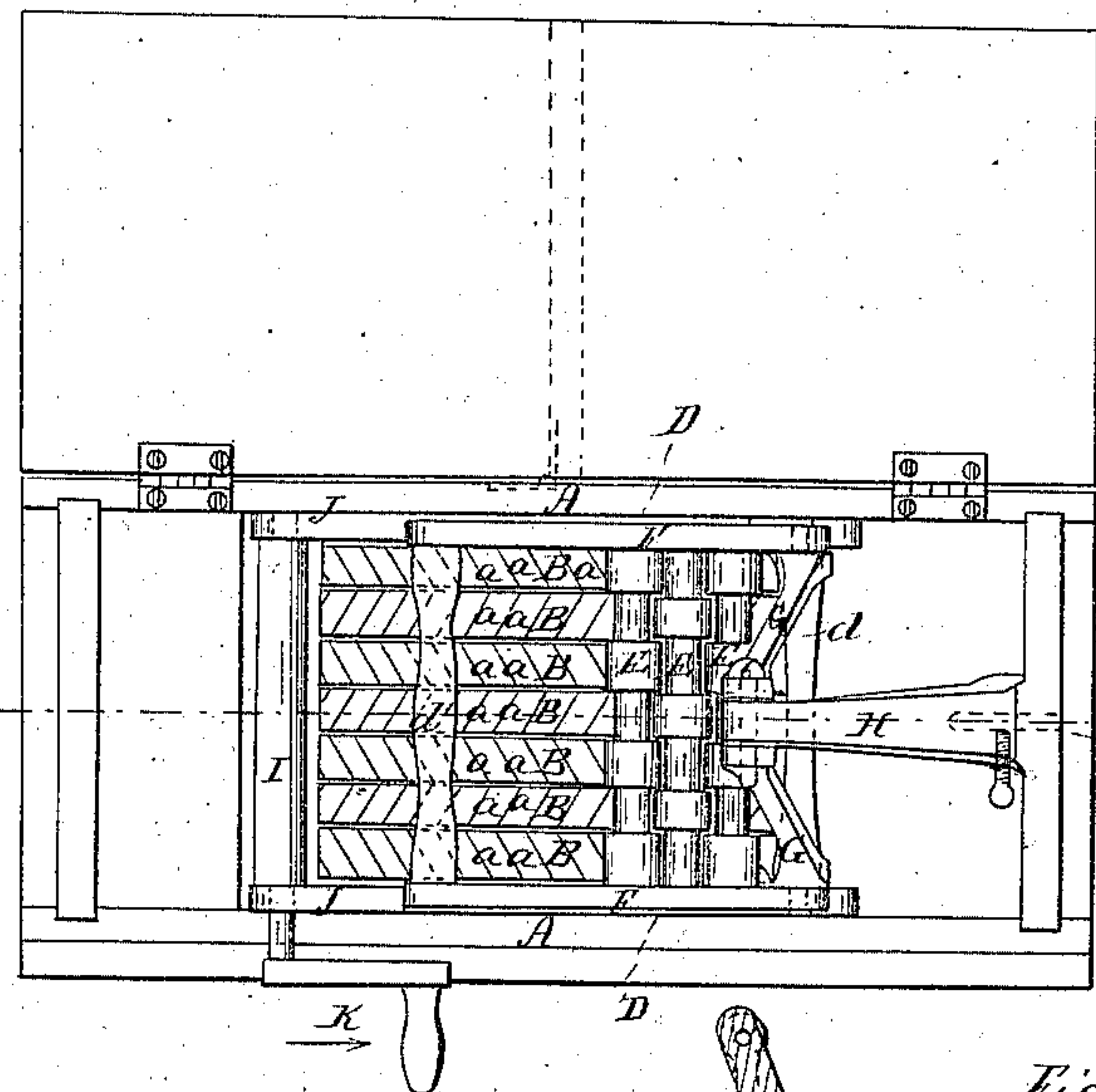


Fig. 3.

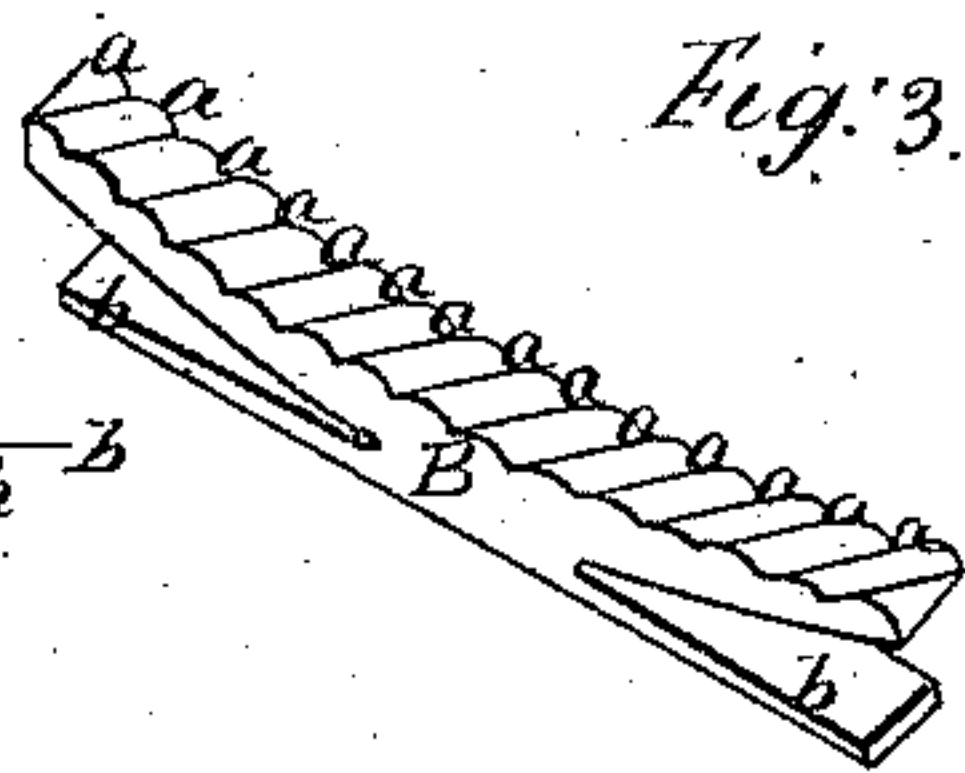


Fig. 4

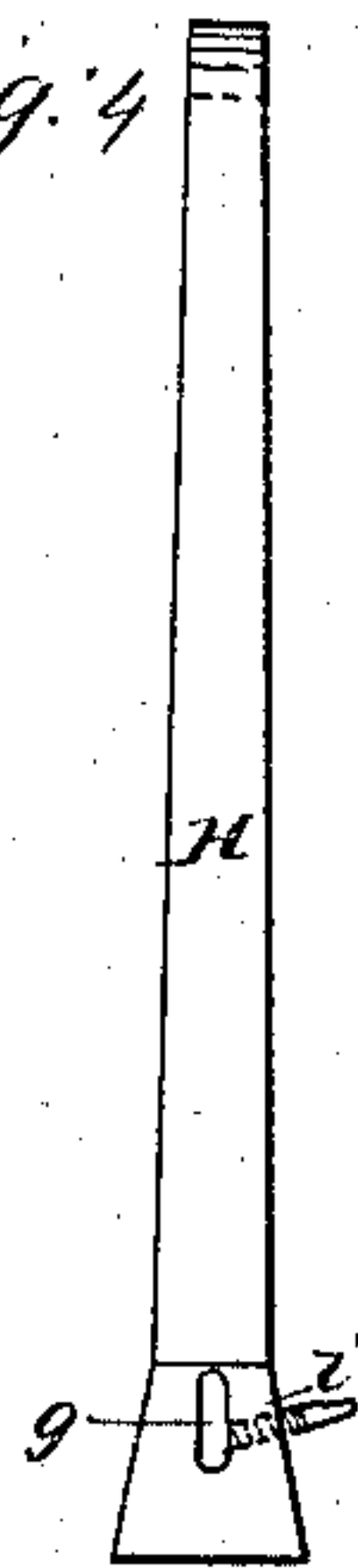


Fig. 5.

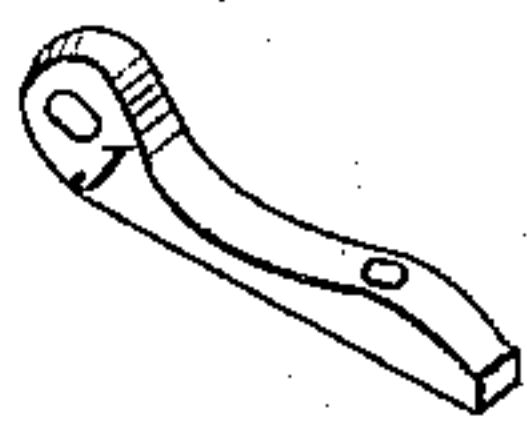
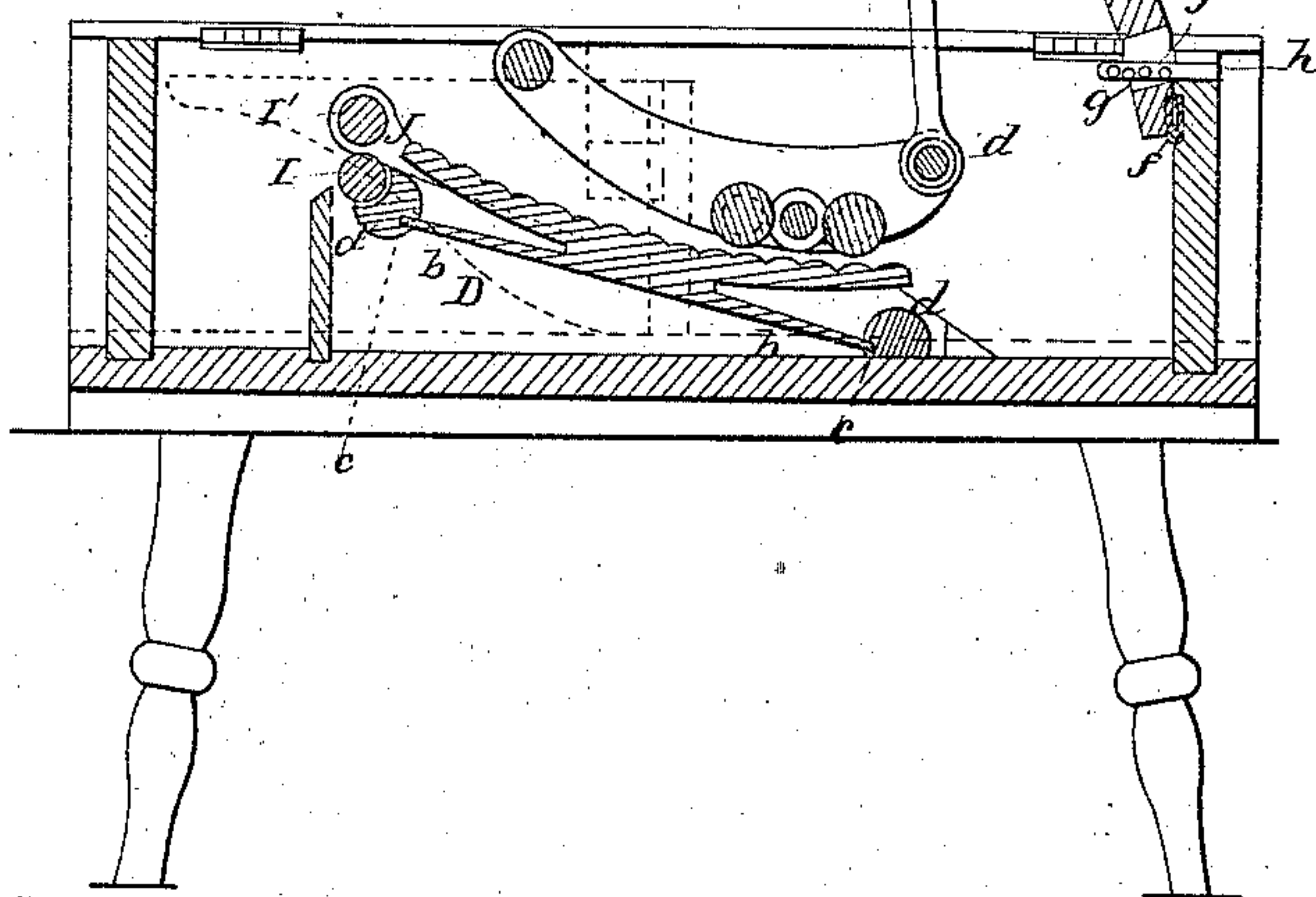


Fig. 2.



Witnesses;
Jos. B. Howell
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Inventor;
C. F. Blood
Franklin Blood
By this Attorney
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United States Patent Office.

C. F. BLOOD AND FRANKLIN BLOOD, OF GRAVESVILLE, WISCONSIN.

Letters Patent No. 66,450, dated July 9, 1867.

IMPROVED WASHING AND WRINGING MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, C. F. BLOOD and FRANKLIN BLOOD, of Gravesville, in the county of Calumet, and State of Wisconsin, have invented a new and improved Combined Washing and Wringing Machine; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of our invention mainly consists in constructing a washing machine and wringer such a manner as to make the wringer perform the double function of drawing the clothes from the washing apparatus as the washing is completed, and wringing them at one operation. It also consists in a novel mode of constructing the bed of the washing apparatus in spring sections, which yield independently of each other in accommodation to variations in the thickness of the clothes being washed; and so constructing the parts to which the rubber is attached that they may be folded with the latter in the washing-box. The construction and operation of the combined washer and wringer will be understood by the following description. In the accompanying drawings, which make a part of this specification—

Figure 1 is a plan or top view of the combined washing machine and wringer.

Figure 2 is a vertical section of ditto at the red line *a b* of fig. 1.

Figure 3 is an isometrical view of one of the bed-pieces B.

Figure 4 is a face view of the hinged post H.

Figure 5 is an isometrical view of one of the spring-journal bearings J.

Like letters in all the figures indicate the same parts.

A is a box which contains the washing and wringing apparatus. The bed upon which the clothes are laid to be rubbed consists of a series of pieces, B, which have angular grooves or depressions *a*, the said depressions running right and left on the contiguous pieces, so as to form a more perfect bed for the clothes. The pieces B have a spring, *b*, at each end, formed out of the body of the piece itself, as represented in detail in fig. 3. The springs may, however, when found most convenient, be made of separate strips to run the whole length of the grooved piece, and confined at the middle to the under side of the same. The resilient parts of the springs are confined to the cross-pieces C C by means of longitudinal grooves *c*. The pieces C C are permanently secured to the side pieces D D, so as to form a frame for holding the bed in place, and making it portable. E E E are headed rollers, whose journals turn in the side pieces of the frame F as the series is moved back and forth over the clothes. By means of the connecting-rods G G the said frame is jointed to the upper end of the hinged post H to provide for the oscillation of the frame, the said rods partially turning at their lower ends on journals formed near the ends of the cross-piece *d* of the frame F, and at their upper ends on the pin *e*, which connects them with the post. The latter is connected to the contiguous ends of the box A by means of the hinge *f*, so as to provide for its being folded up with its attachments in the box when the machine is not in use. When in the position seen in the drawings, the post is secured by means of the slot *g*, pin *h*, and set-screw *i*. The outer end of the pin is fast in the end of the box. The pin has conical depressions *j* to receive the point of the screw when the post is adjusted at the proper angle. The angle of the post is intended to be varied to elevate or depress the rubbing-rollers E in accommodation to thick or thin layers of clothes.

We combine with the washing apparatus a wringing device, consisting of the lower roller I, whose journals turn in the side pieces D D, and the upper roller I', which is supported by the spring bearings J J, one of which is represented in detail in fig. 5. On one end of the shaft of the roller I' there is a handle or crank, K.

The operation is as follows: The clothes being placed in position on the grooved or fluted bed B, which is properly covered with water, and the post H secured in position, the operator takes hold of the stretcher *d'* of the frame F, and moves the rubbing-rollers back and forth over the clothes until the latter are sufficiently washed, and then enters them between the wringing-rollers I and I', and turns the handle K in the direction of the arrows, whereby the clothes are drawn from the bed B and wrung as they pass through said rollers, at one operation.

What we claim as new, and desire to secure by Letters Patent, is—

1. The fluted springing pieces B, arranged and operating substantially in the manner hereinbefore described and for the purpose specified.

2. The combination of the suspending post H with the box A by means of the hinge *f*, pin *h*, and screw *i*, substantially in the manner and for the purposes above set forth.

3. The combination and arrangement of the rollers I and I' with the bed B, for the double purpose of drawing the clothes from the latter when washed, and wringing them at one operation, substantially as described.

In testimony that the above is our invention, we have hereunto set our hands and affixed our seals this 16th day of April, 1867.

C. F. BLOOD. [L. s.]
FRANKLIN BLOOD. [L. s.]

Witnesses:

EDWIN ALDEN,
C. VAUGHAN.