

# S & L A Davis, Washing Machine.

N<sup>o</sup> 34,292.

Patented Feb 4, 1862.

Fig. 3.

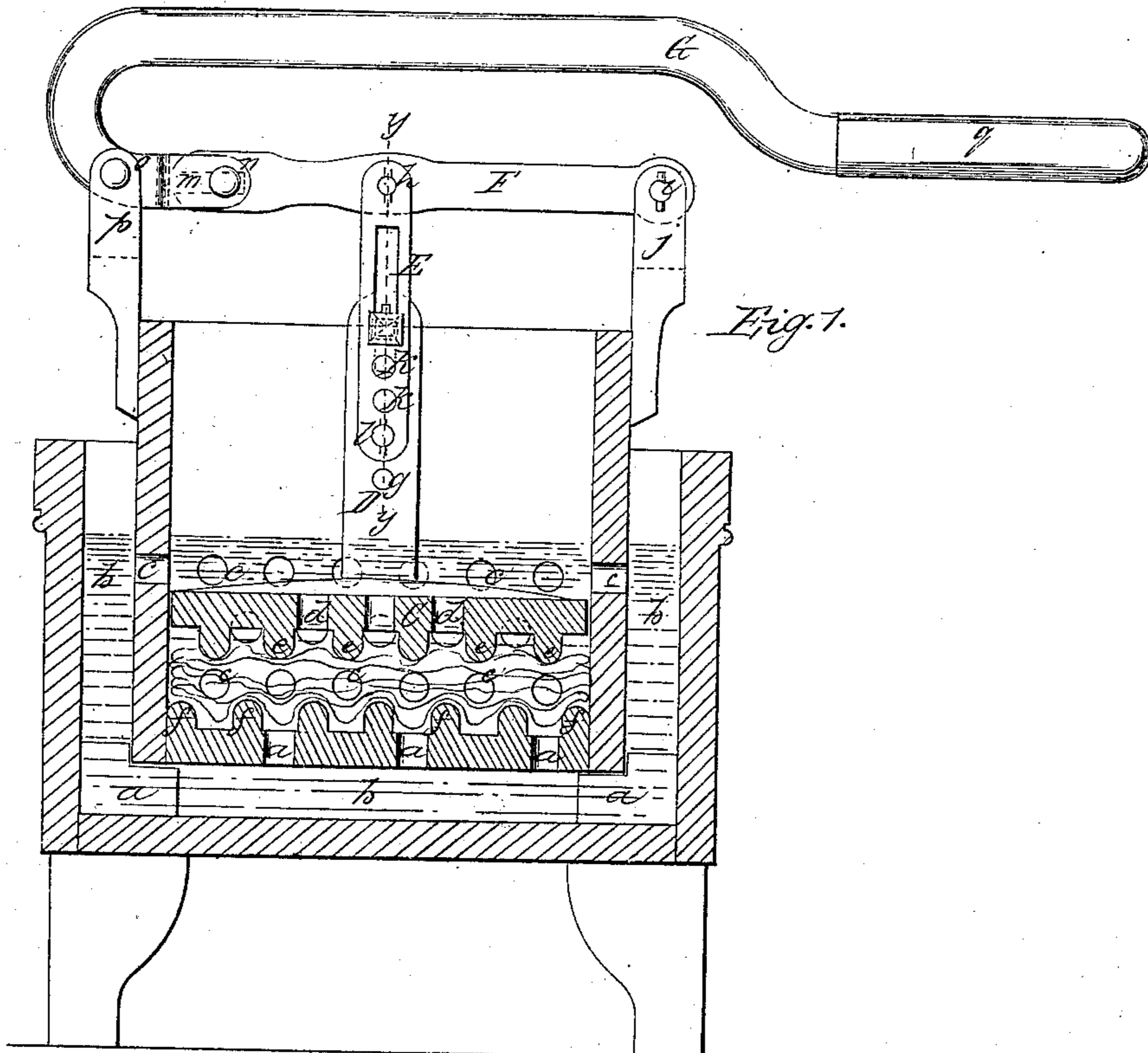
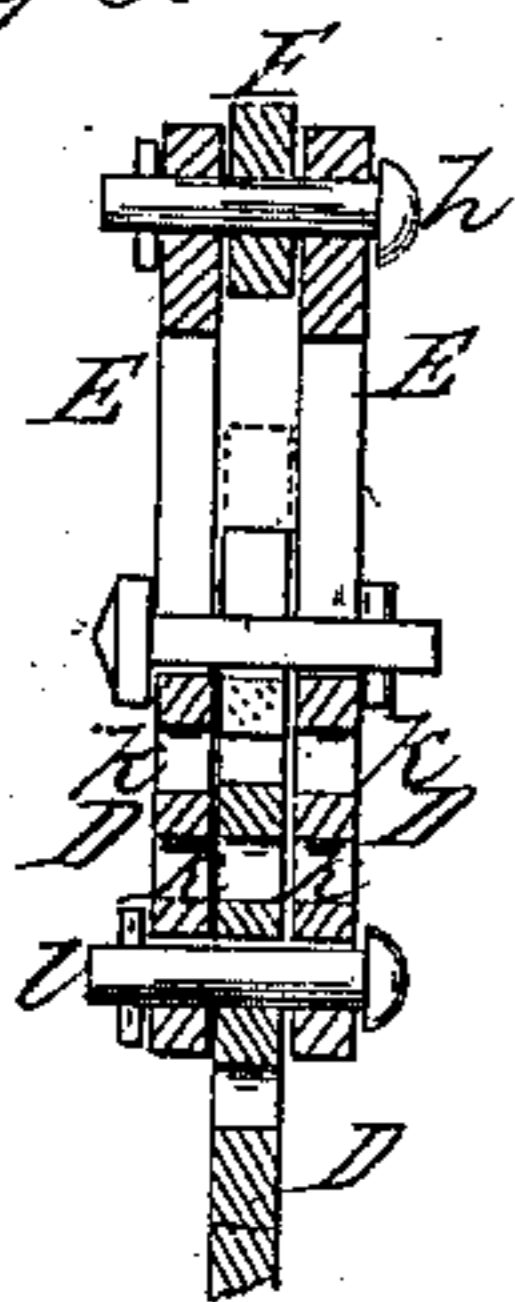


Fig. 1.

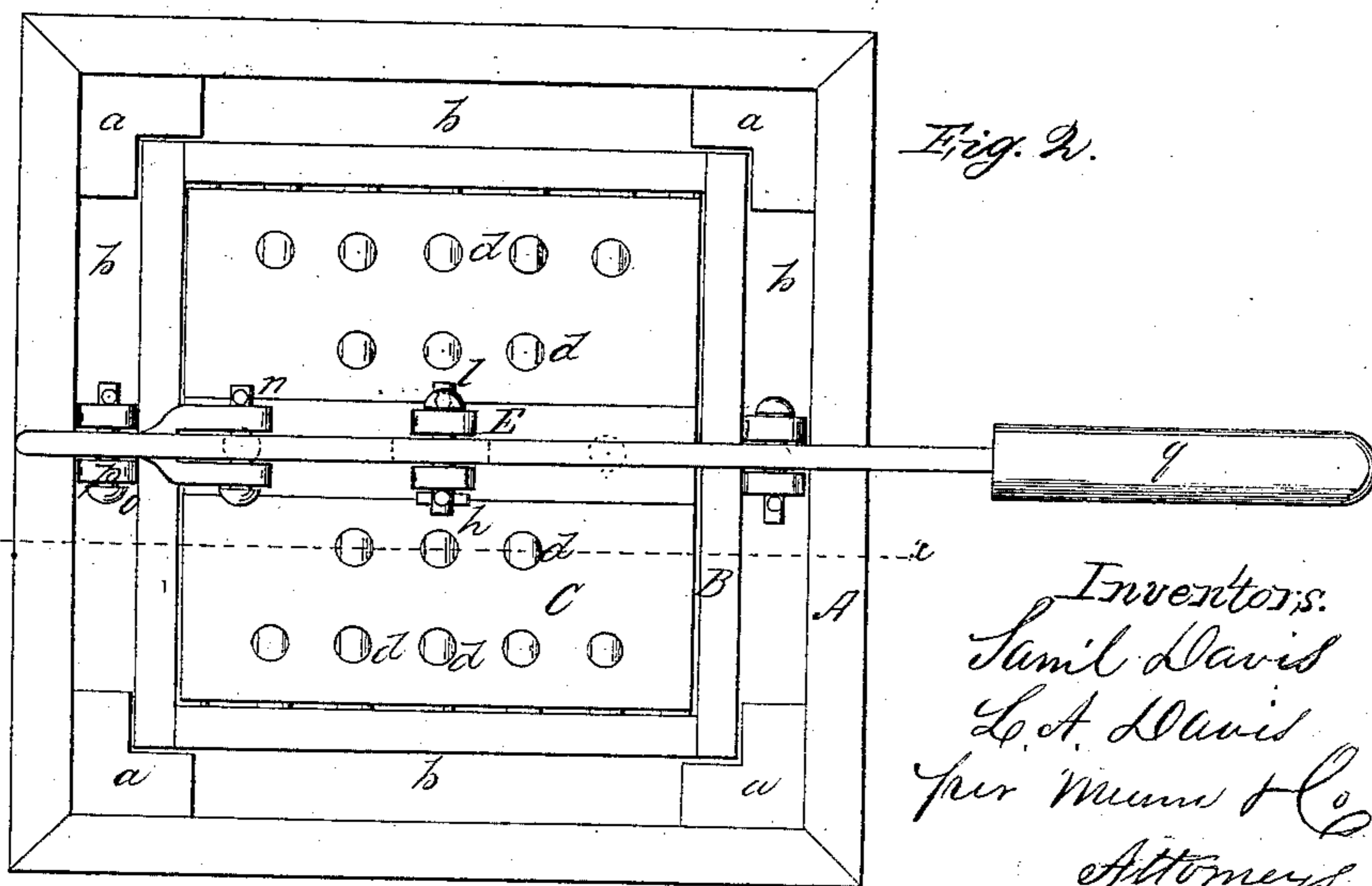


Fig. 2.

Witnesses.

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# UNITED STATES PATENT OFFICE.

SAMUEL DAVIS AND LEANDER A. DAVIS, OF PROVIDENCE, RHODE ISLAND.

## IMPROVED WASHING-MACHINE.

Specification forming part of Letters Patent No. 34,292, dated February 4, 1862.

*To all whom it may concern:*

Be it known that we, SAMUEL DAVIS and LEANDER A. DAVIS, both of Providence, in the county of Providence and State of Rhode Island, have invented a new and Improved Clothes-Washing Machine; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a vertical section of our invention, taken in the line  $x x$ , Fig. 2; Fig. 2, a plan or top view of the same; Fig. 3, a section of a portion of the same, taken in the line  $y y$ , Fig. 1.

Similar letters of reference indicate corresponding parts in the several figures.

The object of this invention is to obtain a clothes-washing machine which will effectually cleanse the clothes from dirt without subjecting them to the usual friction by rubbing—an operation which has a tendency to injure as well as to divest them of buttons.

The invention consists in the employment or use of two suds-boxes placed one within the other with a suitable space between, the inner box being perforated and provided with a plunger, underneath which the clothes to be cleansed are placed, the plunger being operated in a novel way, and all arranged, as hereinafter fully shown and described, to effect the desired result.

To enable those skilled in the art to fully understand and construct our invention, we will proceed to describe it.

A represents a box, which may be of wood, of rectangular form, and of any suitable dimensions.

B is a box which corresponds in form to the box A, but it is somewhat smaller and is fitted within the box A and rests on cleats  $a$ , so as to admit of a space  $b$  all around between it and the box A. The sides of the smaller box B are perforated with holes  $c$ , and within the box B there is placed a plunger C, which is also perforated with holes  $d$ , and is provided with a corrugated bottom formed by parallel cleats or ribs  $e$ . The bottom of the box B is also perforated, as shown at  $a'$ , and is corrugated or provided with parallel cleats or ribs  $f$ .

The plunger C has an upright bar D at-

tached centrally to it, which is perforated with holes  $g$ , and E E are two bars, the upper ends of which are attached to a lever F by a bolt  $h$ , said lever having its fulcrum-pin  $i$  passing through an upright  $j$  at one side of the box B. The bars E E are also perforated with holes  $k$ , through any of which and any of the holes  $g$  of bar D a bolt  $l$  passes.

The end of the lever F opposite to the end through which the fulcrum-pin  $i$  passes is slotted longitudinally, as shown at  $m$ , and this slotted end of the lever is fitted on a pin  $n$ , which is at the lower end of a curved lever G, the fulcrum-pin  $o$  of which passes through an upright  $p$  at the side of the box B, opposite to that where the upright  $j$  is attached. The lever G, it will be seen by referring to Fig. 1, is in the same plane with the lever F, directly over it, and terminates in a handle  $q$  at its outer end.

The operation is as follows: The boxes A B are supplied with a requisite quantity of suds, and the clothes to be washed are placed in the box B underneath the plunger C. The lever G is then operated, moved up and down, and the plunger C rises and falls, in consequence of being connected to lever G, through the medium of the bars D E E and lever F. The plunger C as it descends forces the suds through the texture of the clothes, and as it rises draws upward and loosens the clothes, as a certain degree of suction is produced. This loosening of the clothes by the upward movement of the plunger prevents the packing of the same at the bottom of the box B—a contingency which would otherwise occur by the downward movement and pressing action of the plunger. The suds, it will be understood, are allowed to pass freely from the box A into box B, and vice versa, on account of the perforations  $c a'$  in box B. By this means the suds effectually cleanse the clothes, and as the latter are not subjected to any rubbing process they consequently cannot be injured by friction and buttons will not be broken.

The two levers F G admit of a considerable purchase, so that the plunger may be operated with a moderate application of power, and in order to remove the plunger C from the box B all that is required is to elevate or turn up the lever G so that its pin  $n$  will be free from the slot  $m$  in lever F, and the plun-

ger may then be lifted out from box B. The clothes, therefore, may be placed into and removed from said box B with facility. The plunger is adjusted higher or lower or nearer to or farther from the lever F, according to the thickness of the layer of clothes in B, by inserting the pin *l* in the proper holes *g k k* in the bars D E E.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination of the two suds-boxes A B, the latter being fitted within the former,

perforated at its sides and bottom, and provided with a perforated reciprocating plunger C, substantially as and for the purpose herein set forth.

2. The two levers F G, when arranged and connected together, as shown, and with the plunger C, and used in connection with the boxes A B, as and for the purpose set forth.

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LEANDER A. DAVIS.

Witnesses:

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