

(No Model.)

J. F. BEAM & S. BRILLINGER.

WASHING MACHINE.

No. 279,522:

Patented June 19, 1883.

Fig. 1.

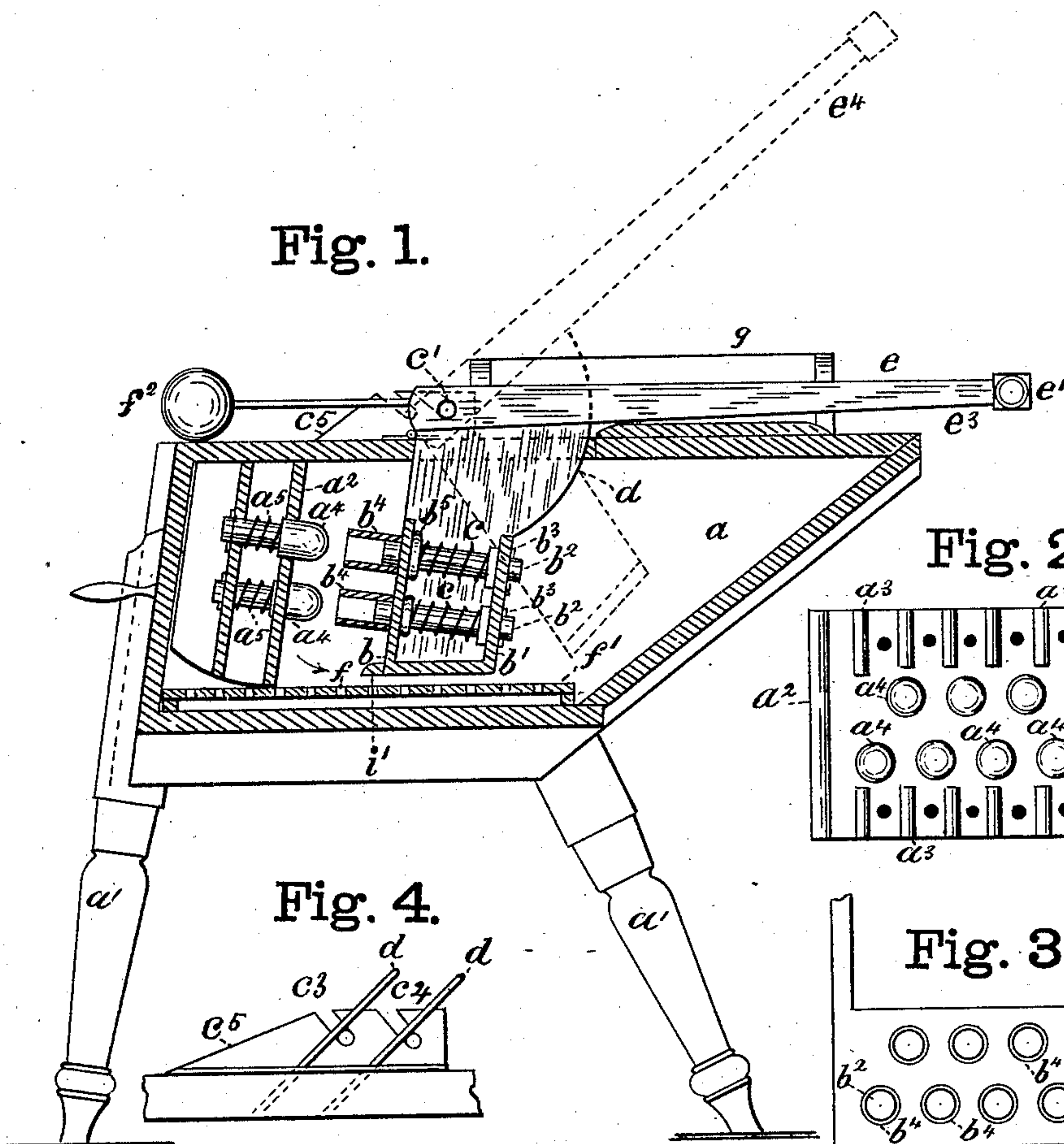


Fig. 2.

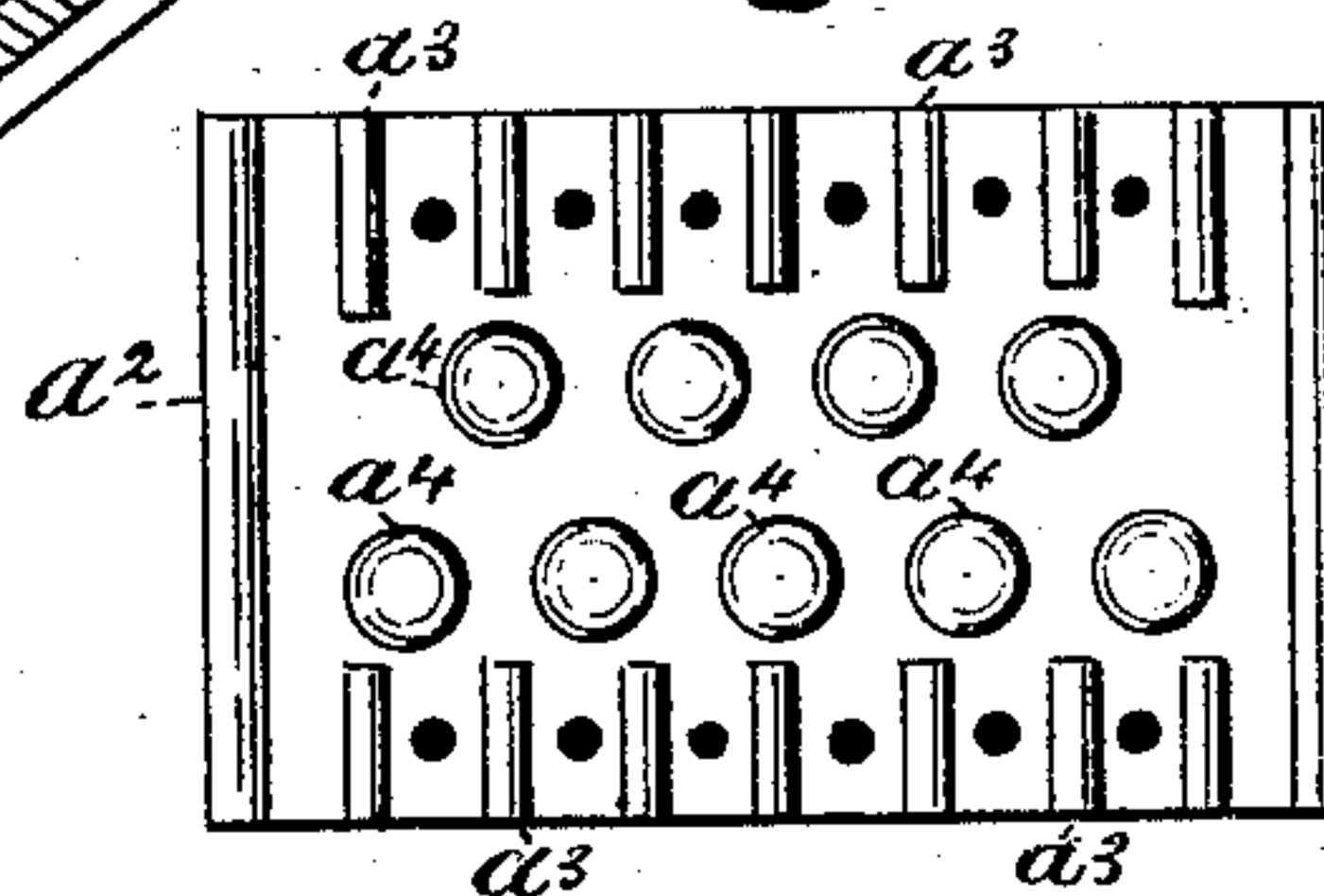


Fig. 3.

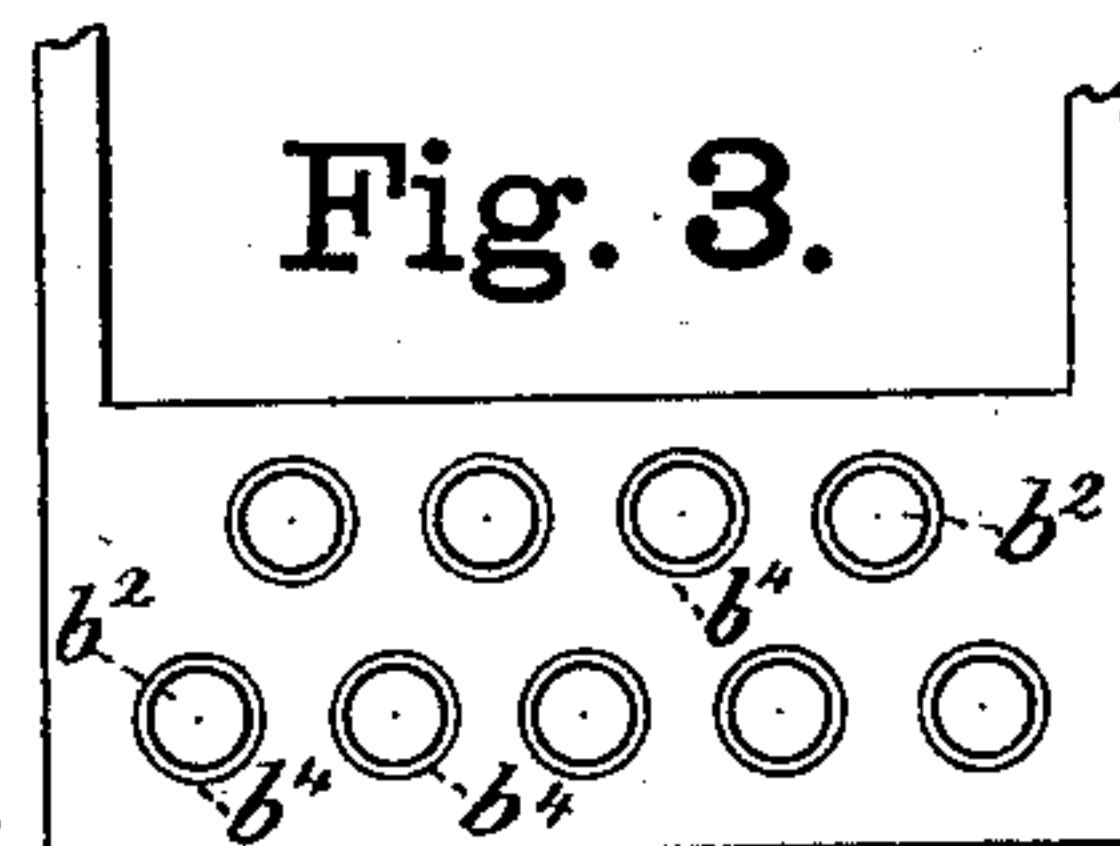


Fig. 4.

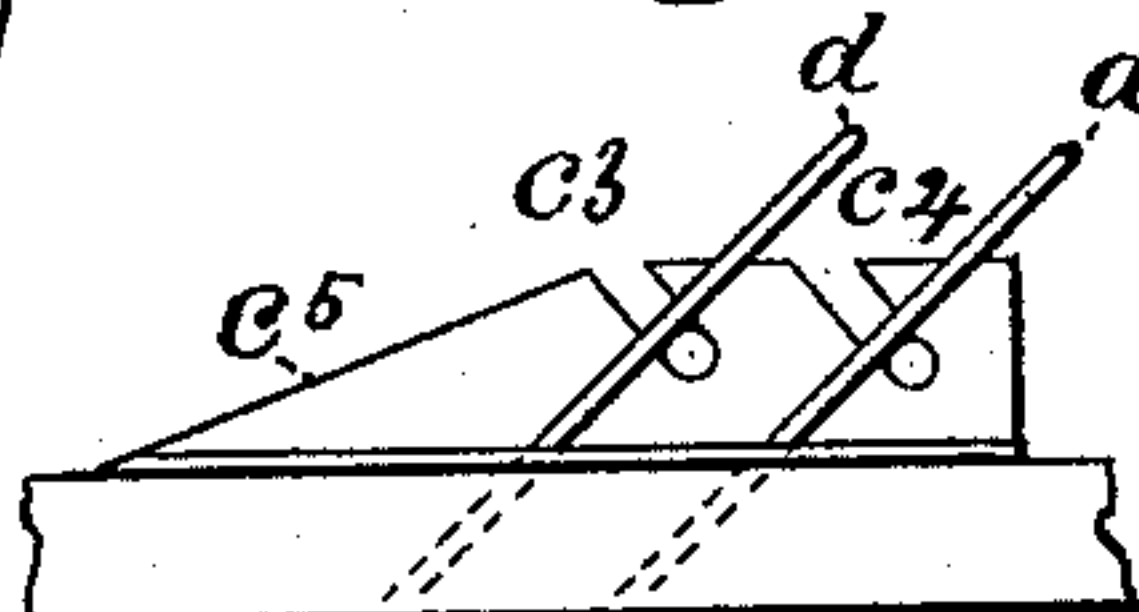
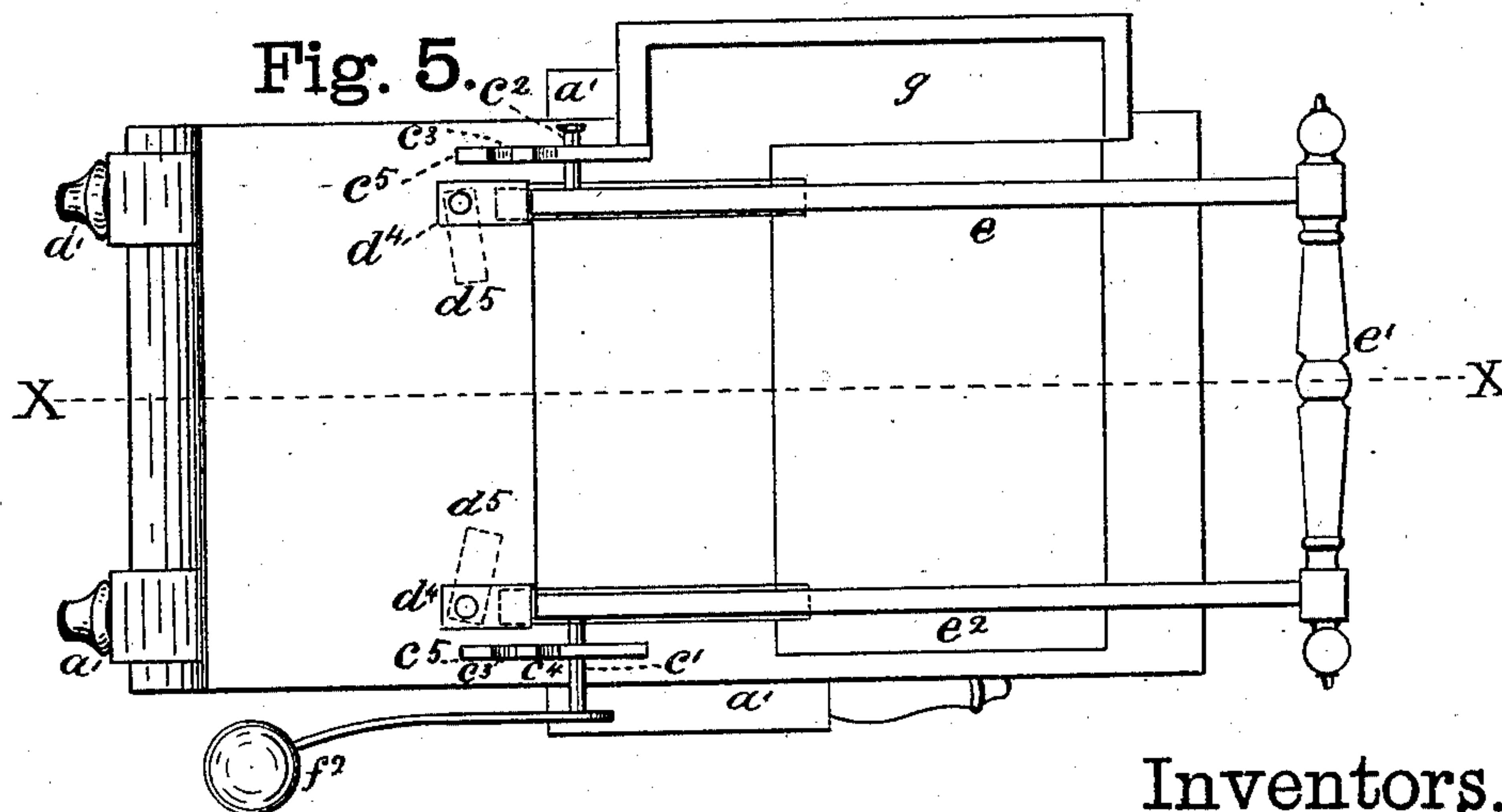


Fig. 5.



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JOSHUA F. BEAM, OF BUFFALO, NEW YORK, AND SAMUEL BRILLINGER, OF
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WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 279,522, dated June 19, 1883.

Application filed February 15, 1883. (No model.)

To all whom it may concern:

Be it known that we, JOSHUA F. BEAM and SAMUEL BRILLINGER, both subjects of the Queen of Great Britain, J. C. BEAM, residing in Buffalo, Erie county, New York, and SAMUEL BRILLINGER, in Sherkston, Ontario, Canada, have invented certain new and useful Improvements in Washing-Machines, of which the following is a specification.

10 The object of our invention is to produce a simple and efficient washing-machine capable of being adjusted for large or small washings, adapted for washing clothes, cotton, wool, &c., all of which will be fully and clearly hereinafter
15 shown by reference to the accompanying drawings, in which—

Figure 1 is a vertical longitudinal section through line *xx*, Fig. 5. Fig. 2 is a front view of the corrugated stationary spring washing-board. Fig. 3 is a front elevation of a portion of the pump-agitator device, showing a similar view of the agitators. Fig. 4 is an enlarged side elevation of the device for adjusting the machine for either large or small washings, and
25 Fig. 5 represents a plan or top view of the machine complete.

The washing-tub *a* is provided with the usual supporting-legs, *a'*. The spring washing-board *a''* is made easily removable by having its lower
30 portion rounded or beveled, as shown in Fig. 1, so that its lower end can be moved in the direction of the arrow and then taken out. It is provided with the ribs *a'''* and with the bars or plungers *a''''*, having a spring, *a'''''*, for keeping them forward, the construction being such that they may be forced back against a yielding pressure. The pump-agitating device is composed of the supporting-frame *b b'* and a series of fixed bars or plungers, *b''*, rigidly se-
40 cured to the part *b'* by pins *b'''*, and the collars on the bars *b''* on the opposite side of the part *b'*. (See Fig. 1, and for a face view of the same see Fig. 3.)

b'''' represents a series of sleeves adapted to
45 slide easily over the plungers *b''*. They pass over said plungers and through the portion *b* of the supporting-frame. Each of the sleeves *b''''* are provided with a head or flange, *b'''''*, for preventing them from coming through the frame portion *b*, and behind each sleeve is a

spiral spring, *c*, which keeps them all out in the position shown in Fig. 1.

The pump-agitating device is jointed to the machine by pins or bearings *c'* *c''*, which fit into the openings *c'''* or *c''''* in the boxes *c''''*. When
55 in place the bearings *c'* *c''* are held in position by the pins *d*.

It will be seen when the agitating device is secured in the openings *c'''* the plungers *a''''* are farther away from the sleeves and plungers *b''* *b''''*, and consequently there is more room between them, so that a larger amount of clothes can be washed than if it were secured in the openings *b''''*, as in that case the several parts would be nearer together, thereby adapting
65 the machine for a smaller washing or for washing smaller articles.

The agitating device is provided with two curved portions, *d'*, to keep the openings *d''* closed during the operation of washing. When
70 moving the agitating device back, so that its supporting-pins *c'* *c''* are placed in the openings *c'''*, an opening, *d'''*, is left behind the curved portions, which is covered by the pivoted plates *d''''*, which can be turned back out of the
75 way when not required for use, as shown by the dotted lines *d'''''*, Fig. 5:

e e' e'' represent the several parts of the handle by which the machine is operated. In operating with the machine the handle is moved
80 up and down, (see Fig. 1,) one position of the handle being shown by the letter *e''* and another position by the dotted lines *e''''*.

It will now be seen that when the clothes or other articles are put in place between the
85 agitating device and the washing-board and the handle moved from its upper stroke downward the sleeves are forced against the clothes, and as the handle moves down the said sleeves *b''''* are made to move over the plungers *b''* and
90 thereby force the water that is within them out over and through the clothes, the clothes being pushed against the yielding pins or bolts in the washing-board, the operation being such that the clothes are turned over during the
95 action of the machine and a continued circulation is kept up. The dirt as it leaves the clothes settles down through the perforations *f* in the perforated plate *f'*, so that it is separated from them, and they are easily and
100

quickly cleaned or washed. The perforated plate or bottom f' is made easily removable. The agitator is provided with a counterbalancing-weight, f^2 , so as to make it work easier.

5 g represents the ordinary device for attaching a wringer when required.

We claim as our invention—

1. In a washing-machine, a suds-box provided with a stationary washing-board having
10 projections, as set forth, in combination with an agitating device pivoted to the suds-box and having a series of fixed rods or bars mounted therein, sleeves and openings mounted upon
15 said bars, as described, said bars and sleeves being located in the agitator in the same order as the projections upon the stationary washing-board, as and for the purposes set forth.

2. In a washing-machine, a suds-box provided with a stationary washing-board having bars projecting from the face of the board, and
20 provided with springs to keep them in their advanced position, in combination with an agitating device pivoted to the suds-box, and having a series of fixed bars or rods provided with sleeves and openings, as described, said
25 bars and sleeves being located in the agitator in the same order, or substantially so, as the projections upon the stationary washing-board, as and for the purposes described.

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