A. B. Clark and Chas. Davis,

Washing-Machine.

No. 74,502. Fig. 1. Patented Feb. 18. 1868

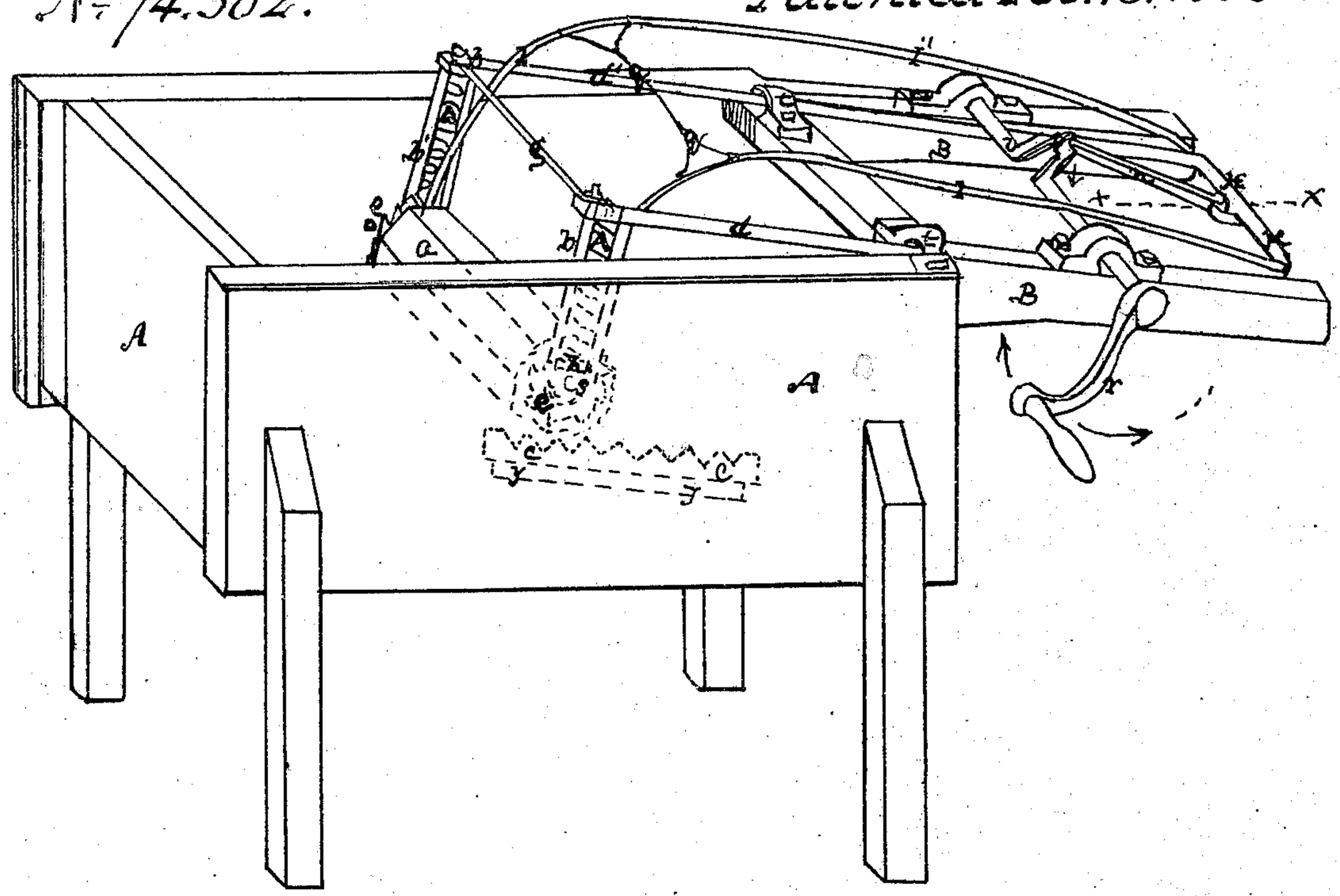
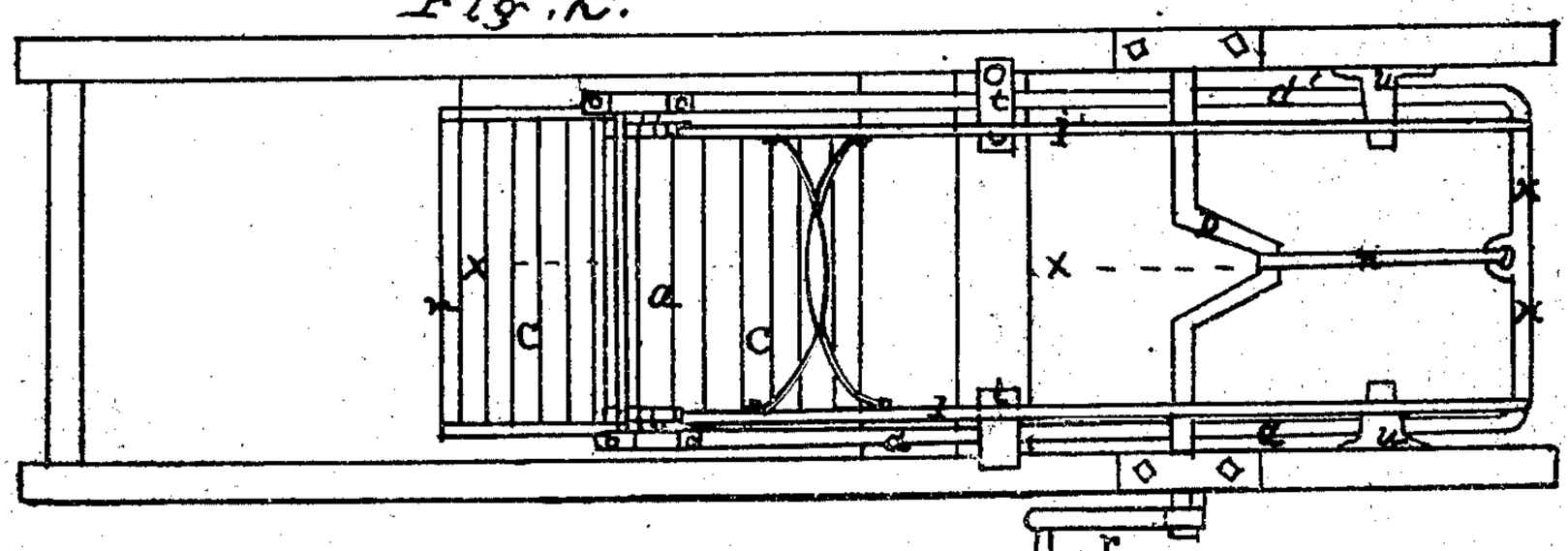


Fig. 2.



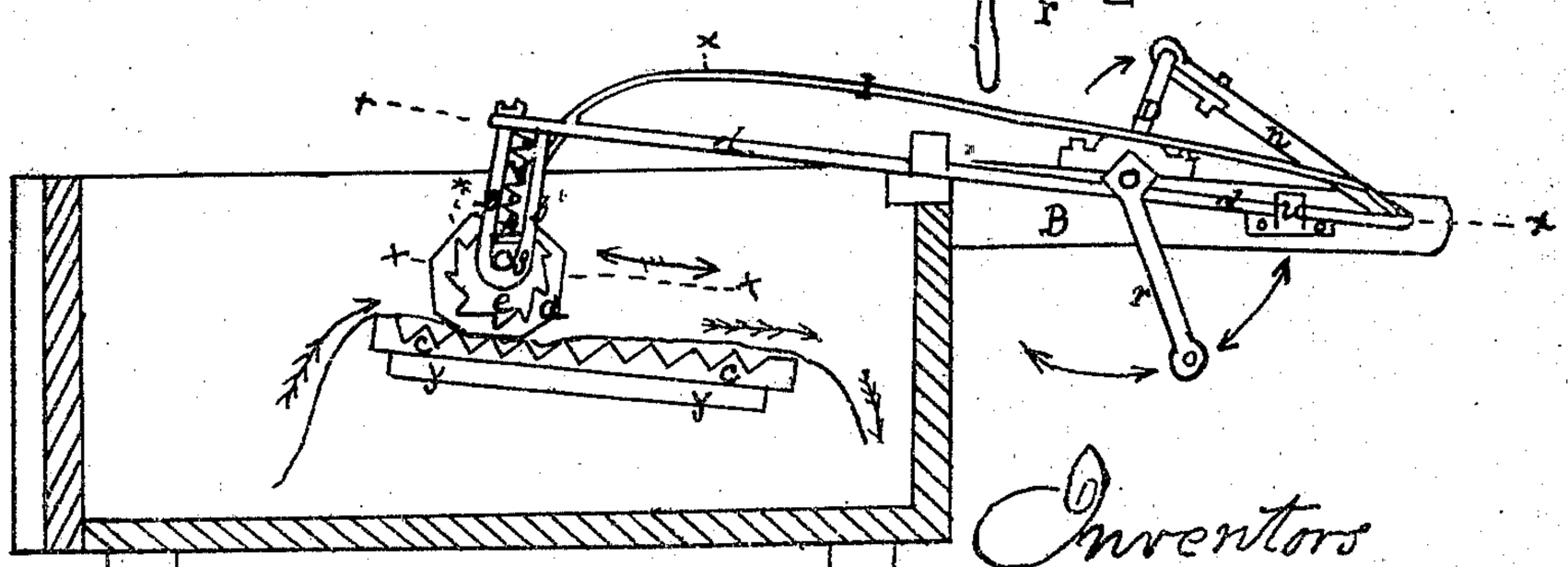


Fig. 3.

Witnesses
George Hoover
R Estill

Inventors
Alvin B Clark
Charles Davis
By Joseph Ridge
their attorney

United States Patent Office.

ALVIN B. CLARK AND CHARLES DAVIS, OF RICHMOND, INDIANA.

Letters Patent No. 74,502, *dated February* 18, 1868.

IMPROVED WASHING-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, ALVIN B. CLARK and CHARLES DAVIS, of the city of Richmond, and State of Indiana, have invented a new and useful Improvement in Washing-Machines; 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 perspective view,

Figure 2 is a horizontal section, and

Figure 3 a longitudinal section.

The same letters, in the different figures, relate to corresponding parts of the invention.

Our invention relates to a washing-machine, with which the operation of washing is performed by machinery, in a manner closely imitating the same operation as performed by hand. The rubbing, as when done by hand, may be applied to any particular portion of the clothing requiring extra labor.

To enable others skilled in the art to make and use our invention, we will proceed to describe its construction and operation.

A represents a rectangular box or tank, which, for convenience, is supported on legs. B and B represent beams, attached rigidly to said tank, for the purpose of supporting the extending-mechanism. An ordinary wash-board, or other corrugated device, is secured, temporarily or permanently, on the stationary platform *y*, which latter is fixed to the sides of the tank. *a* represents a roller, having its journal-bearings, S and S, in the hangers *b* and *b'*. *d* and *d* are reciprocating rods, having their bearings at *t* and *t'* and *u* and *u'*. A transverse rod or section of the same rods, connects them at end *x*. To the front ends of said rods are attached the hangers *b* and *b'*. D represents a crank-shaft, linked with pitman *n* to rod *x*. *e* and *e* are ratchets attached to the ends of roller *a*. I and I represent pawls that engage with said ratchets, the pawls being hinged to rod *x*. *g* represents stay-rods connecting pawls I and I. V and V are spiral springs acting on the journals of roller *a*, by which the pressure of the latter is modified.

The power is applied by means of crank *r*, thus imparting a reciprocating motion to rods *d* and *d*, by which roller *a* is made to traverse wash-board C. In its forward motion, roller *a* is prevented from rotating by the action of ratchets *e* and *e'*, but is allowed to rotate at the return stroke. Thus the clothing, after being placed by the operator on the wash-board, and within reach of roller *a*, is gradually carried through by the friction of said roller, as it slides over the surface of the board at each alternate stroke, and thus rubbing the clothing in a manner very similar to that of hand-washing. By a slight pressure of the hand on the garment, it may be stopped from feeding, and thus the rubbing is applied as long as necessary to any particular spot requiring extra labor. The position of the wash-board or corrugated surface C is inclined, with its rear end below the horizontal, thus favoring the feeding-operation of roller *a*. A friction-roller, *m*, is attached to the front end of the wash-board, or to the sides of tank A, in a suitable position, over which the clothing is lifted, from the bottom of said tank, thus also favoring the feeding-operation. The position of the bottom of tank A is inclining, the front end being the lowest, thus sliding the clothing back to the front of said tank, as it falls from the wash-board. The inclination of the bottom also serves to run all the water to the front of said tank, thus requiring less water than would otherwise be necessary for the operation.

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

1. We claim, in combination with wash-board C, (or other suitable surface,) the roller *a*, rotating and sliding at each alternate stroke, substantially as described and for the purpose set forth.

2. We claim the combination of the reciprocating rods *d* and *d*, hangers *b* and *b'*, springs V and V, ratchets *e*, and pawls I, with roller *a* and board C, all operating substantially as described and for the purpose set forth.

ALVIN B. CLARK,
CHARLES DAVIS.

Witnesses:

SAM'L G. DUGDALE,
JOSEPH RIDGE.