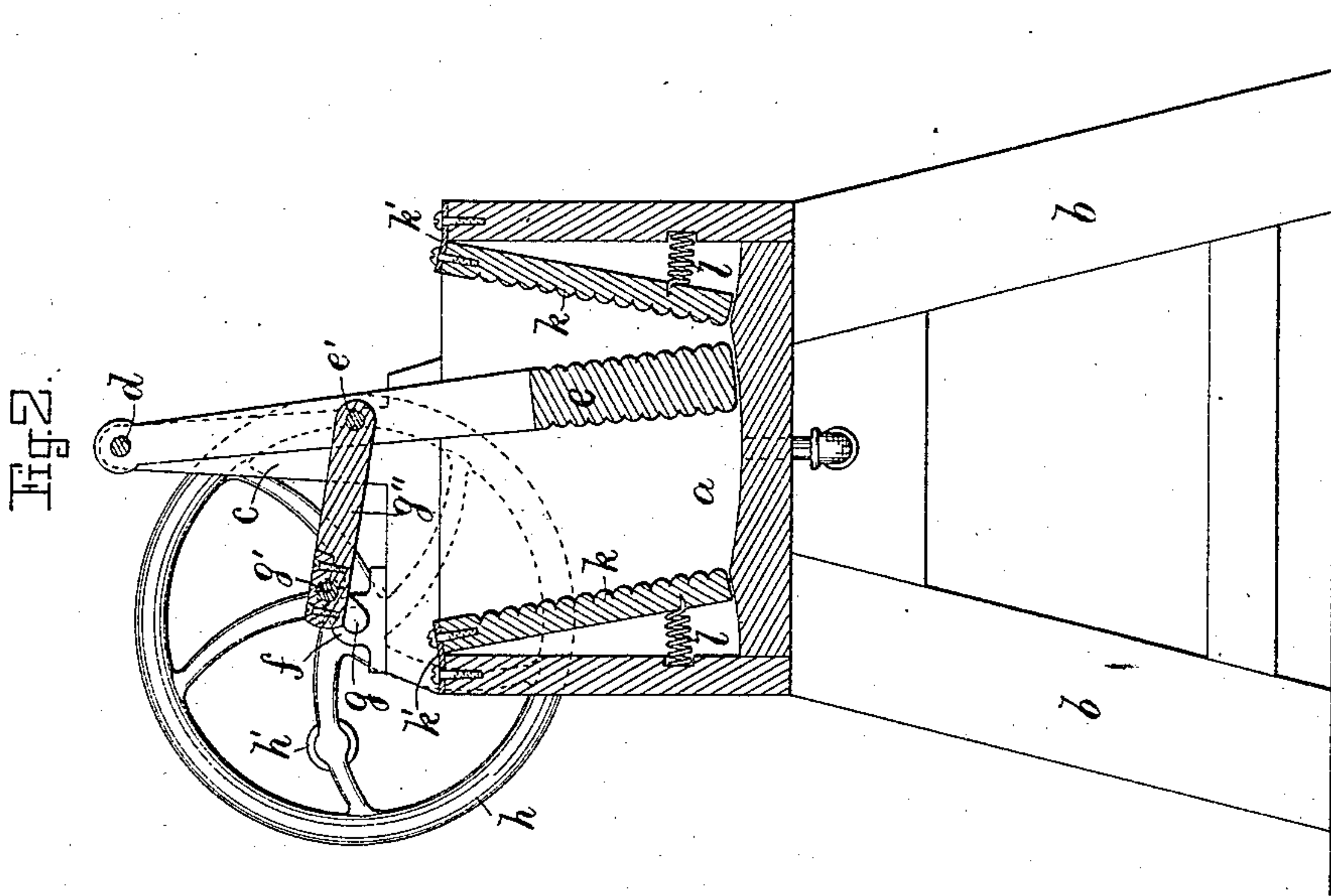
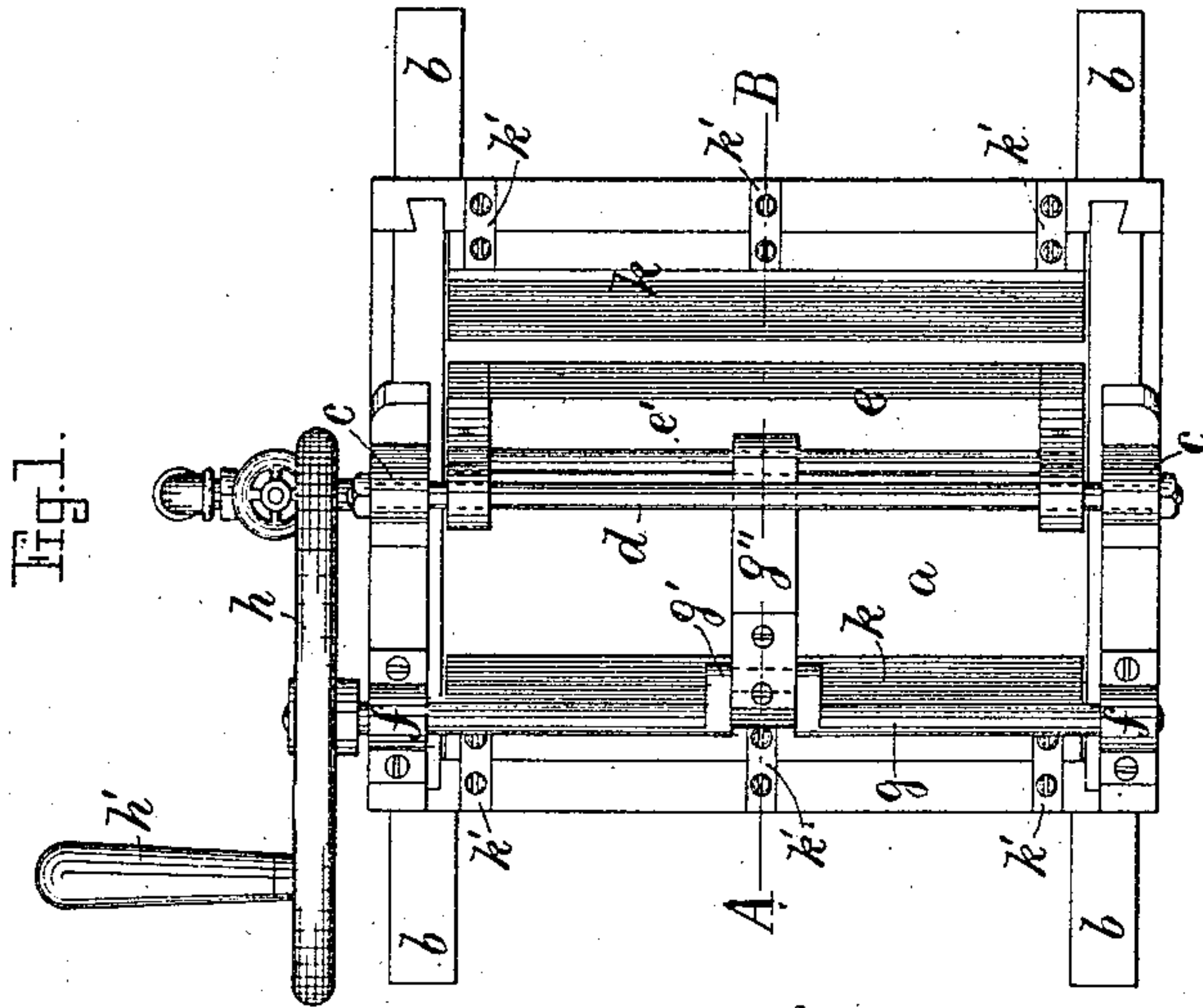


(No Model.)

T. H. PAGE.  
CLEANSING MACHINE.

No. 334,132.

Patented Jan. 12, 1886.



Witnesses  
Henry Chadbourne.  
John Miller

Inventor  
Thomas H. Page  
by *Alban Andrieu*  
his atty.



# UNITED STATES PATENT OFFICE.

THOMAS H. PAGE, OF WATERTOWN, MASSACHUSETTS.

## CLEANSING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 334,132, dated January 12, 1886.

Application filed February 2, 1885. Serial No. 154,686. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS H. PAGE, a citizen of Great Britain, now residing at Watertown, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Cleansing-Machines; and I do hereby declare that the same are fully described in the following specification and illustrated in the accompanying drawings.

This invention relates to improvements in cleansing-machines for cleansing garments or fabrics, gloves, or other articles of wearing-apparel, or for other similar purposes to which it may be applicable, and it is carried out as follows, reference being had to the accompanying drawings, where—

Figure 1 represents a plan view, and Fig. 2 represents a cross-section on the line A B, shown in Fig. 1.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

*a* is the box or receptacle adapted to receive the cleansing-fluid and the articles to be cleansed. It is supported on suitable legs, *b b*, as usual.

To the ends of the box *a* are secured the uprights *c c*, to the upper ends of which is secured the bolt *d*, on which is hung loosely the swing-pounder *e*, the sides of which may be made plain or corrugated, as may be desired. The swing-pounder *e* may be made solid, or perforated in whole or part, according to the work to be done.

To one side of box *a* are secured suitable bearings, *f f*, for the rotary crank-shaft *g*, that is provided with a crank, *g'*, having link *g''*, by which it is connected to a bolt or rod, *e'*, located on the swing-pounder *e*, between its fulcrum *d* and lower end, as shown in Fig. 2.

To shaft *g* is secured the crank or crank-wheel *h*, having handle *h'*, as shown in the drawings.

From the above it will be seen that the swing-pounder *e* is oscillated within the box *a* by rotating the crank-wheel *h* and its crank-shaft *g*.

By connecting the reciprocatory mechanism to swing-pounder *e* at a place below its point of suspension, and between it and its lower

end, I obtain a very easy motion on said pounder without loss of motion and power-consuming jerks, so common where the reciprocatory mechanism is connected to a place above the point of suspension on the pounder.

On two opposite sides of the interior of the box *a*, I arrange yielding side boards, *k k*, which may be made plain, corrugated, solid, or perforated, as may be desired. Each of said side boards, *k*, has attached to its upper edge one or more flat steel springs, *k' k'*, the outer ends of which springs are secured to the sides of the box *a*. The object of said flat steel springs *k'* is to retain the yielding side boards, *k*, in their normal positions when not acted on by the oscillating pounder *e* and the garments or fabrics interposed between it and the said side boards. Said flat springs *k'* also serve to prevent the side boards, *k*, from being forced too far out into the box *a* by the action of the springs *l l*, interposed between the back of each side board, *k*, and the inside of the box *a*, as shown in Fig. 2. In fact, it is necessary to have independent springs on the yielding side boards, *k*, one set to counteract the other, and thus prevent hard blows being given while the pounder *e* is in the act of moving toward or moving from each respective side board, *k*. This is accomplished by the yielding springs *l l* and the counteracting-springs *k' k'* in a manner as described.

By having the swing-pounder *e* operated from a place below its point of suspension, as described, combined with the yielding side boards, *k k*, having the resistance-springs *l l* and reaction suspension-springs *k' k'*, the machine can be run without any noise or jarring, with very slight power as compared with others, and it will perform its work of cleansing fabrics or garments, without any injury to them, in a very rapid and efficacious manner.

The operation of the improved cleansing-machine is as follows: The cleansing-fluid is introduced in box *a*, and the articles to be cleansed are put in the box on opposite sides of the swing-pounder *e*. I now reciprocate the latter by turning the crank-shaft *g*, and as the swing-pounder is moved forward and back it alternately compresses and rolls over the fabrics or garments between its side and the yielding side boards, *k k*, thereby imitat-

ing, as near as possible, the art of cleansing by hand, with increased speed in the execution of the work.

I am aware of the Letters Patent granted to  
5 Nathaniel Crockett, September 19, 1871, No. 119,125, in which a reciprocating pounder is used, combined with yielding side boards hinged loosely to the box. In said patent there is only one spring for each yielding side  
10 board, the latter being suspended by means of ordinary hinges, and I wish to state that I do not claim as my invention the features as claimed in the said Crockett patent; but

What I wish to secure by Letters Patent and  
15 claim is—

In a cleansing-machine, the receptacle *a* and swing-pounder *e*, combined with the yielding side boards, *kk*, constructed and arranged substantially as described, each one being provided with a lower spring, *l*, to force its lower 20 end inward against the influence of the upper flat spring, *k'*, secured to the upper ends, respectively, of the yielding board and case *a*, as and for the purpose set forth.

In testimony whereof I have affixed my sig- 25 nature in presence of two witnesses.

THOMAS H. PAGE.

Witnesses:

ALBAN ANDRÉN,  
HENRY CHADBURN.