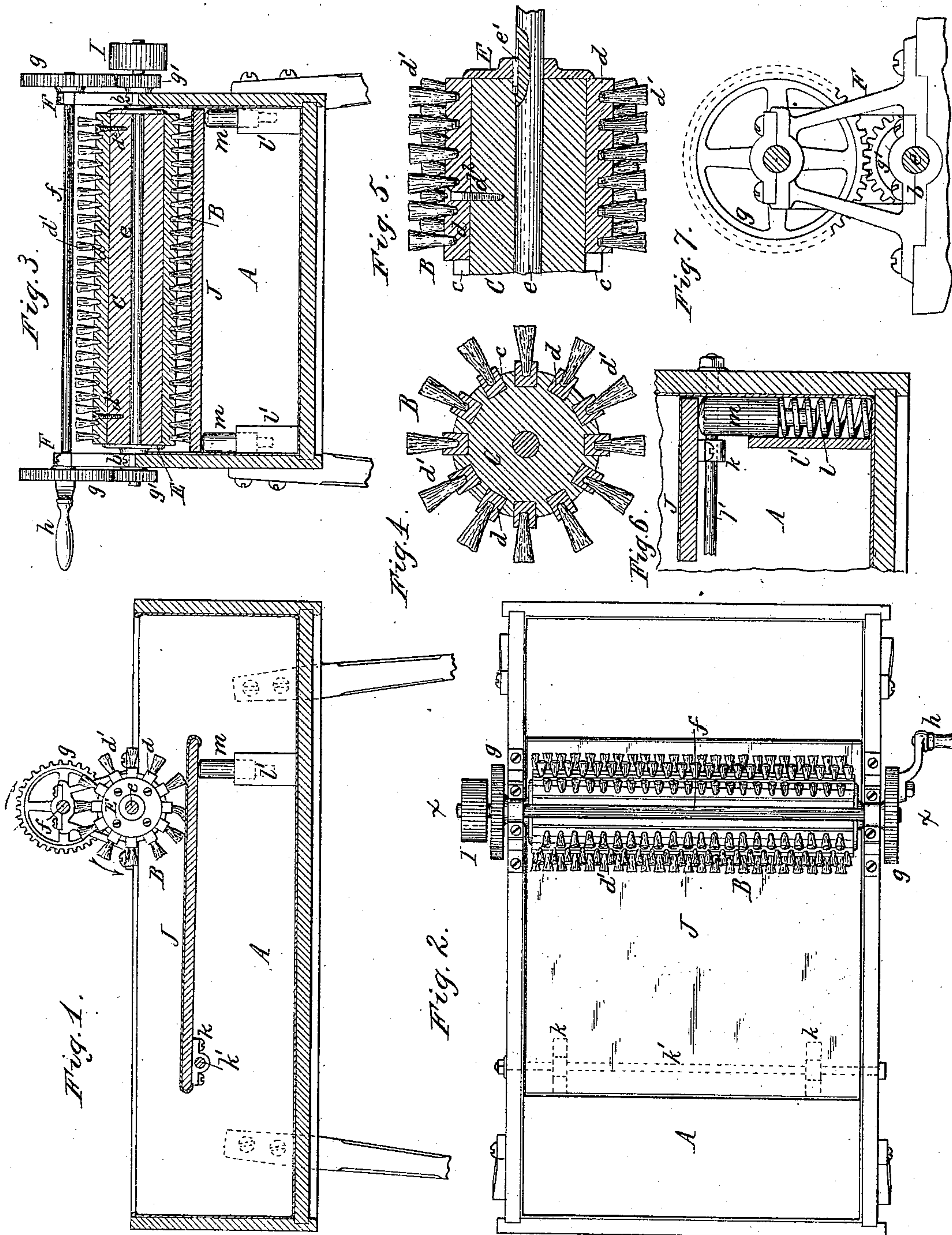


(No Model.)

F. SCHWARZ.
WASHING MACHINE.

No. 272,780.

Patented Feb. 20, 1883.



Edw. J. Brady
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Witnesses.

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UNITED STATES PATENT OFFICE.

FREDERICK SCHWARZ, OF BUFFALO, NEW YORK.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 272,780, dated February 20, 1883.

Application filed October 19, 1882. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK SCHWARZ, of the city of Buffalo, in the county of Erie and State of New York, have invented new and useful Improvements in Washing-Machines, of which the following is a specification.

The object of this invention is to construct a simple and efficient washing-machine embodying in its organization a revolving brush and a yielding bed on which the clothes to be washed are placed; and my invention consists of the particular improvements which will be hereinafter fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 represents a longitudinal section of my improved washing-machine. Fig. 2 is a top plan view thereof. Fig. 3 is a cross-section in line *x x*, Fig. 2. Fig. 4 is a cross-section, on an enlarged scale, of the rotary brush. Fig. 5 is a longitudinal section of one end thereof. Fig. 6 is an enlarged sectional view of one of the spring-supports of the yielding bed. Fig. 7 is an elevation of the driving mechanism.

Like letters of reference refer to like parts in the several figures.

A represents a trough or box, which receives the water and the clothes to be washed; B, a rotary brush, which is journaled in bearings *b*, secured to the trough A. The rotary brush B is composed of a cylinder, C, which is provided in its cylindrical surface with longitudinal grooves or sockets *c*, in which are secured the stocks *d*, which carry the tufts of the brushes *d'*.

The stocks *d* are secured to the grooves *c* by means of screws *d²* or any other suitable means.

e represents the horizontal shaft of the rotating brush, which extends axially through the cylinder C and is journaled in the bearings *b*.

E represents disks or circular heads secured to the ends of the cylinder C, and overlapping the ends of the brush-stocks *d*. The heads E are secured to the shaft *e* by keys *e'* or other suitable means.

f represents the horizontal driving-shaft arranged above the rotary brush B, and journaled in standard-bearings F, which are secured to the trough A.

g g represent gear-wheels secured to both ends of the shaft *f*, and meshing with wheels *g'*, secured to both ends of the brush-shaft *e*, so that the brush-shaft is set in motion by the rotation of the shaft *f*.

h represents a hand-crank secured to the driving-shaft *f* for operating the same.

I represents a pulley secured to the shaft *e*, for the purpose of rotating the brush by means of an endless belt running around said pulley, if so desired.

J represents a yielding bed arranged below the rotating brush, for the purpose of supporting the clothes upon which the brush operates. The bed J is attached to the trough or box A at one end by means of sockets *k*, hung on a transverse bolt, *k'*, which is secured to the side wall of the box A. The bed J rests near its opposite end upon springs *l*, which are seated in sockets *l'*, secured to the inner side of the box A. The springs *l* bear with their upper ends against the shoulders of a bolt, *m*, which slides vertically with its upper enlarged portion in the sockets *l'* and projects with its contracted lower portion into the spring *l*. One of these spring-supports is arranged on each side of the box A, so as to support the bed J on both sides.

The clothes to be washed are placed upon the bed J and introduced between the brush B and the bed, which former rotates in the direction of the arrow in Fig. 1, and by impinging against the clothes thoroughly cleanses the same. The yielding bed adjusts itself to the thickness of the layer of cloth between the brush and the bed and holds the clothes in contact with the brush.

I am aware that rotating brushes impinging against yielding beds are not broadly new, and do not wish to make any such claim; but I am not aware that such brushing mechanism has ever before been used in combination with a yielding bed having a general horizontal line, and adapted to operate as hereinbefore explained.

I claim as my invention—

1. The combination, with the box A and rotary brush B, of a yielding rubber or bed, J, having a general horizontal direction, pivoted at the end farthest from the brush, and having its opposite end supported upon yielding posts

or supports *m*, arranged substantially underneath the brush, whereby the contact of the brush will tend to force down the end of the bed, substantially as and for the purpose set
5 forth.

2. The combination, with the box A, of the yielding bed J, pivoted to the box A at *k*, and

supporting-bolts *m*, springs *l*, and sockets *l'*, applied to the opposite ends of the bed J, substantially as set forth.

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