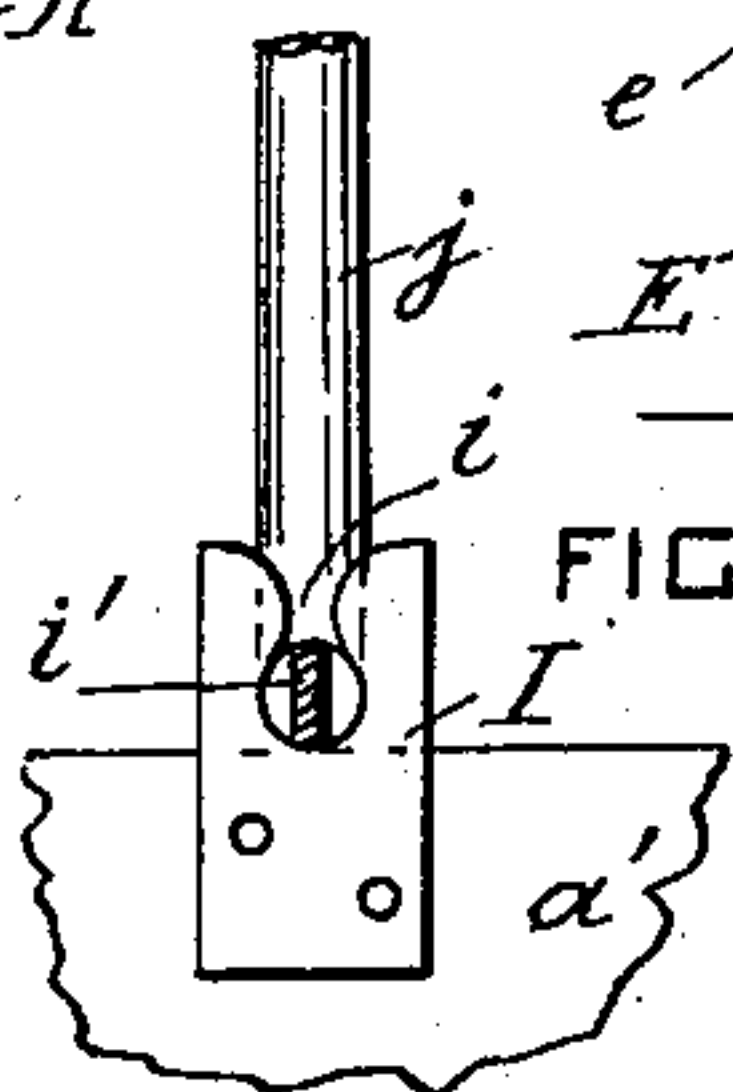
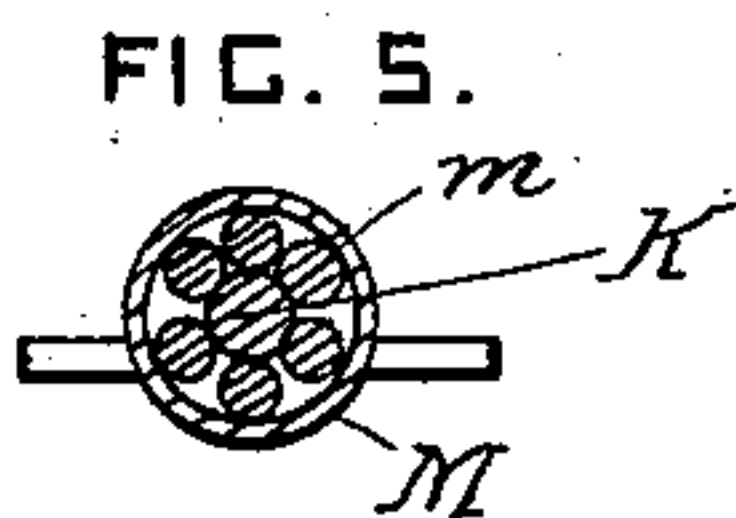
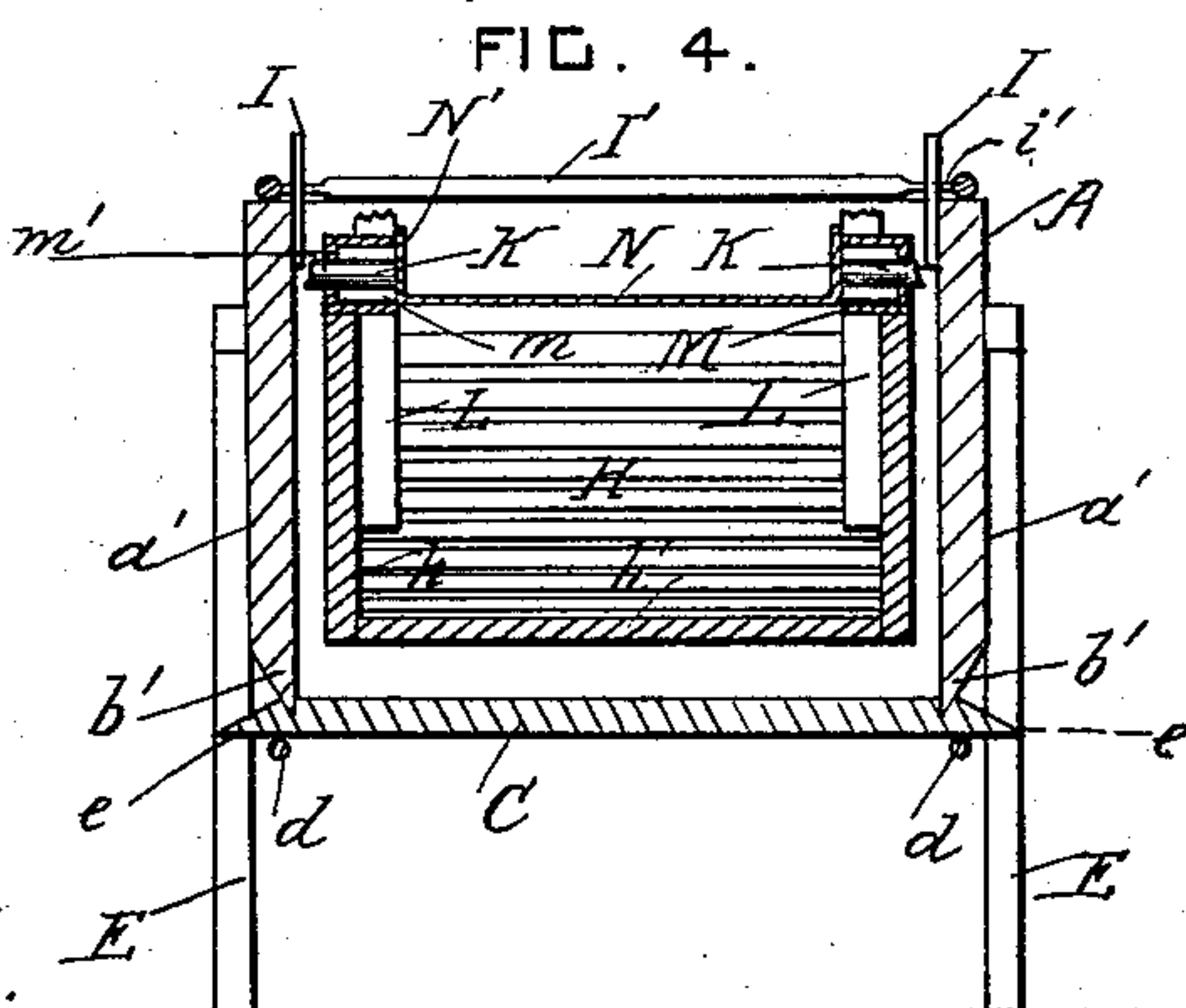
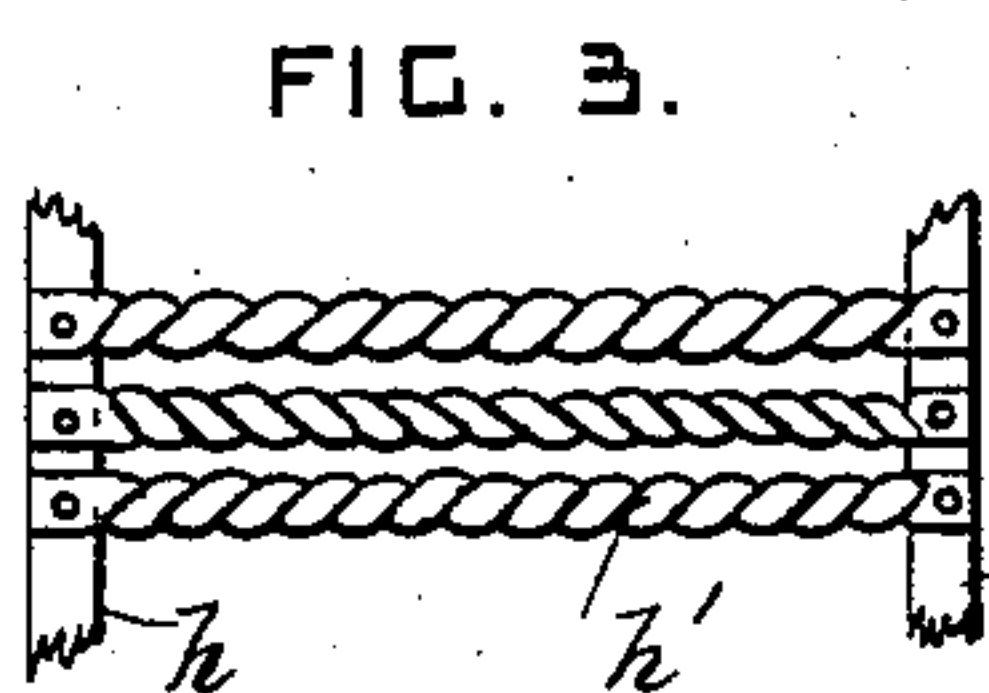
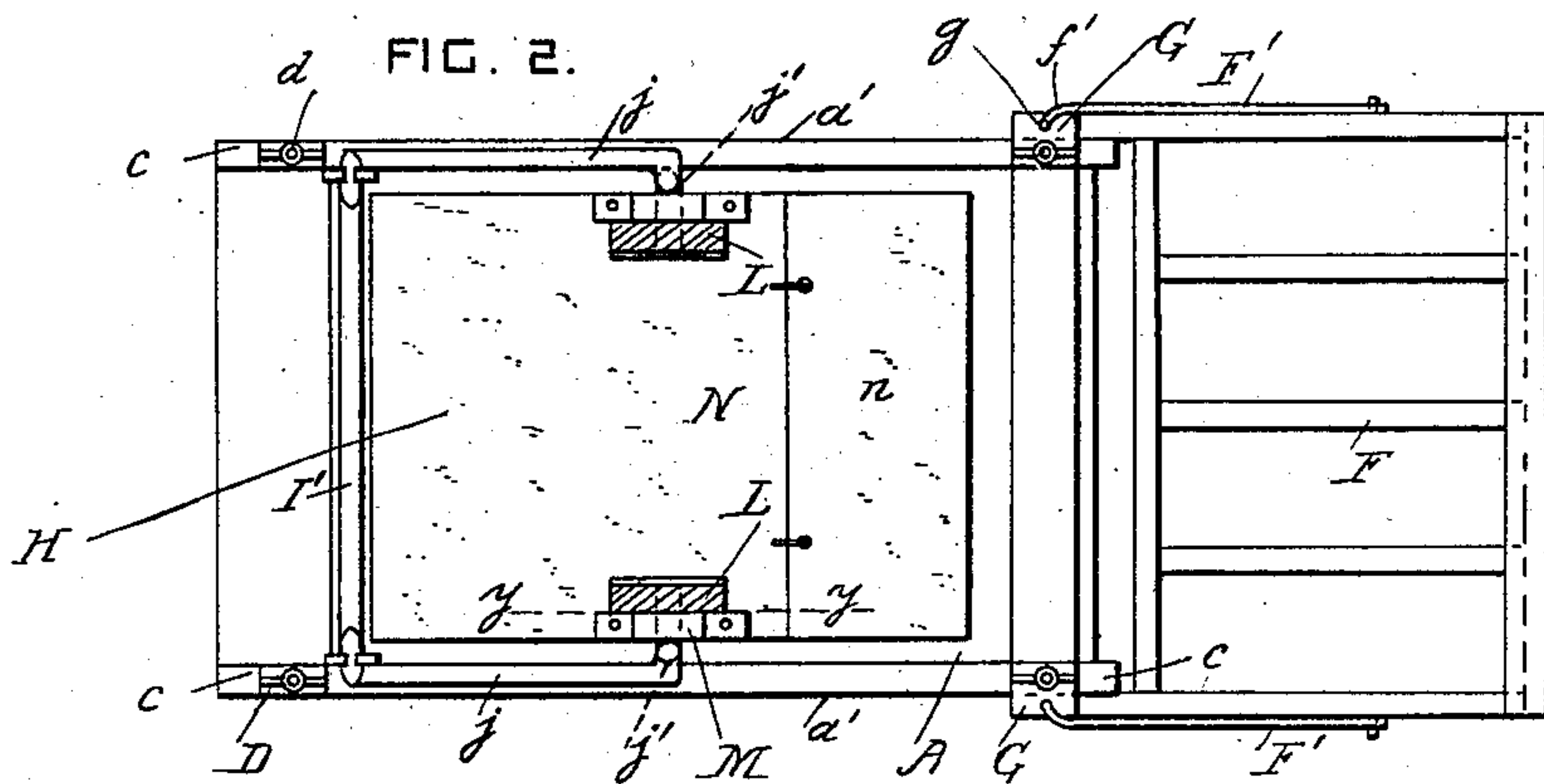
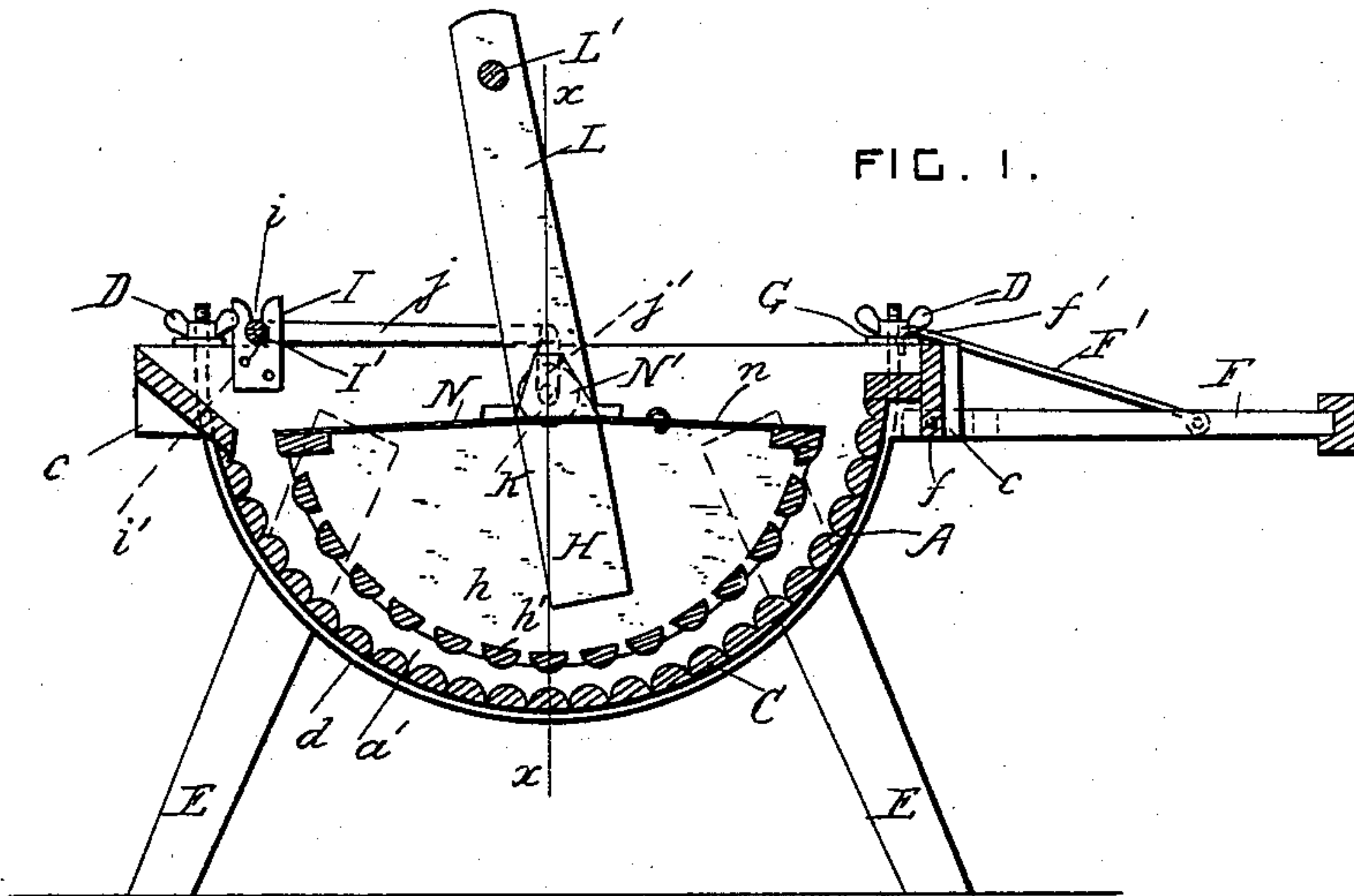


(No Model.)

G. M. BECK.  
WASHING MACHINE.

No. 592,229.

Patented Oct. 26, 1897.



WITNESSES

J. Spring Poole  
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Attorney



# UNITED STATES PATENT OFFICE.

GEORGE M. BECK, OF LEBANON, INDIANA.

## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 592,229, dated October 26, 1897.

Application filed January 14, 1897. Serial No. 619,180. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE M. BECK, a citizen of the United States, residing at Lebanon, in the county of Boone and State of Indiana, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to washing-machines; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed.

In the drawings, Figure 1 is a longitudinal section through the washing-machine. Fig. 2 is a plan view of the washing-machine. Fig. 3 is a detail view of three of the rubber-bars. Fig. 4 is a section taken on the line  $x x$  in Fig. 1. Fig. 5 is a section taken on the line  $y y$  in Fig. 2. Fig. 6 is a detail side view of one of the brackets I, showing the narrow portion  $i'$  of the rod I' in section and in a position to be removed from the bracket.

A is the tub, provided with sides  $a'$ , having substantially semicircular bottom portions. The bottom portions have beveled edges  $b'$ , which are let into grooves in the longitudinally-corrugated slats C, which form the bottom of the tub. The sides  $a'$  have projections  $c$  at each end, and  $d$  are rods bent to semicircular form and extending under the end portions of the slats C. The upper parts of the rods  $d$  are passed through holes in the projections  $c$ , and D are thumb-nuts screwed on the projecting ends of the rods above the sides. The tub is kept water-tight by tightening up the nuts D. The ends of the slats C project beyond the sides  $a'$  and are provided with notches  $e$  for the legs E of the tub to engage with. The legs are attached to the sides of the tub and are rigidly secured against displacement by the notches  $e$ .

F is the drip-board, formed of bars and pivoted by pins  $f'$  to one end of the tub, and F' are brace-rods pivoted to the sides of the drip-board. The rods F' are provided with hooked ends  $f'$ , which engage with holes  $g$  in washers G, secured to the tub by two of the said nuts D.

H is the rubber, provided with substantially

semicircular sides  $h$ , and rubber-bars  $h'$ , secured thereto. The bars  $h'$  have spiral grooves in their outer semicircular surfaces, and these bars are arranged with their spiral grooves running to the right and to the left alternately. This feature in connection with the parallel corrugations of the bottom of the tub is found to be very efficient in rubbing the dirt out of the clothes.

I are brackets secured to the sides of the tub and provided with recessed notches  $i$ .

I' is a rod provided with narrow portions  $i'$  near its ends. This rod is inserted in the notches  $i$  when the portions  $i'$  are in a vertical position, so that the said narrow portions drop into the recessed notches, and the rod is secured in the notches by partially revolving it. The rod is free to turn in the notches, but it cannot be lifted out of them without first bringing the narrow portions  $i'$  to a vertical position. The rod I' has arms  $j$  at its ends, and  $j'$  are downwardly-projecting cranked portions at the free ends of the arms  $j$ .

K are pivots which project inwardly from the cranked portions  $j'$ . The arms  $j$  are supported by the sides of the tub when there are no clothes in the tub.

L are arms secured to the sides of the rubber and affording a means for operating it.

L' is a handle carried by the arms L.

M are bearing-bushes let into the arms L concentric with the pivots K, and  $m$  are anti-friction-rollers arranged between the said pivots and bushes. The top of the rubber is formed of a plate N, provided with a hinged portion  $n$ , permitting access to be had to the interior of the rubber.

N' are flanges on the plate N, which form covers for preventing the rollers  $m$  from slipping out of the bushes. These flanges are secured to the arms L. The bushes M have shoulders  $m'$ , which prevent the rollers from sliding out of them in the opposite direction from the cover plates or flanges. The arms  $j$  permit the rubber to be raised and hold it in a proper position in the tub while it is being operated.

What I claim is—

The combination, with a tub, and brackets I secured to the tub and provided with recessed notches  $i$ ; of a rod I' provided with

narrow portions I' near its ends, arms *j* at  
the extreme ends of the rod, downwardly-  
bent cranked portions *j'* at the ends of the  
arms *j*, and pivots K projecting inwardly from  
5 the lower ends of the cranked portions *j'*; and  
a rubber journaled on the said pivots, the  
said rod being revoluble in and extending  
through the notches *i* but only free to disen-

gage from them when the rubber is lifted out  
of the tub, substantially as set forth. 10

In testimony whereof I affix my signature  
in presence of two witnesses.

GEORGE M. BECK.

Witnesses:

JOHN L. LEWIS,  
H. P. NEW.