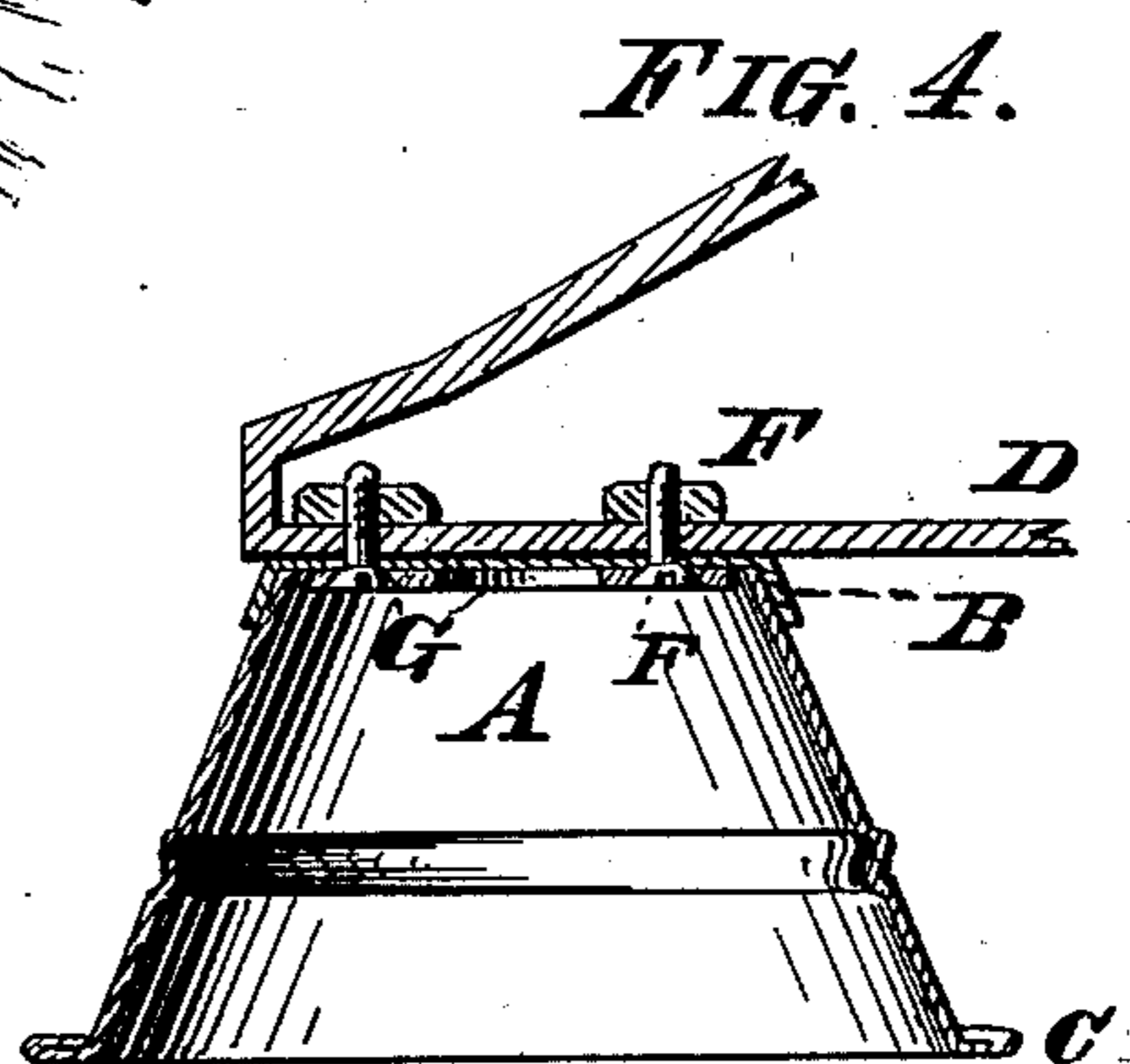
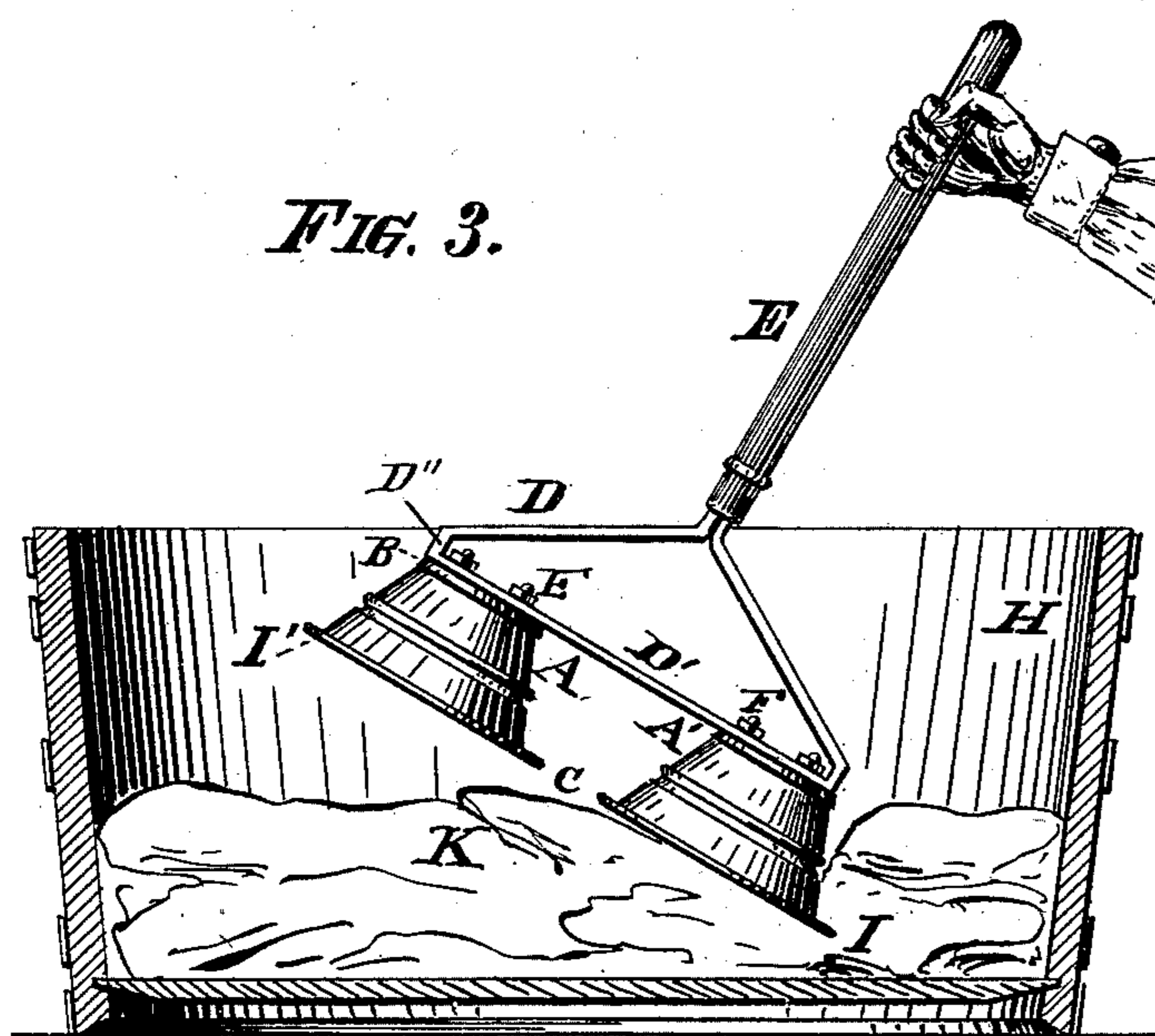
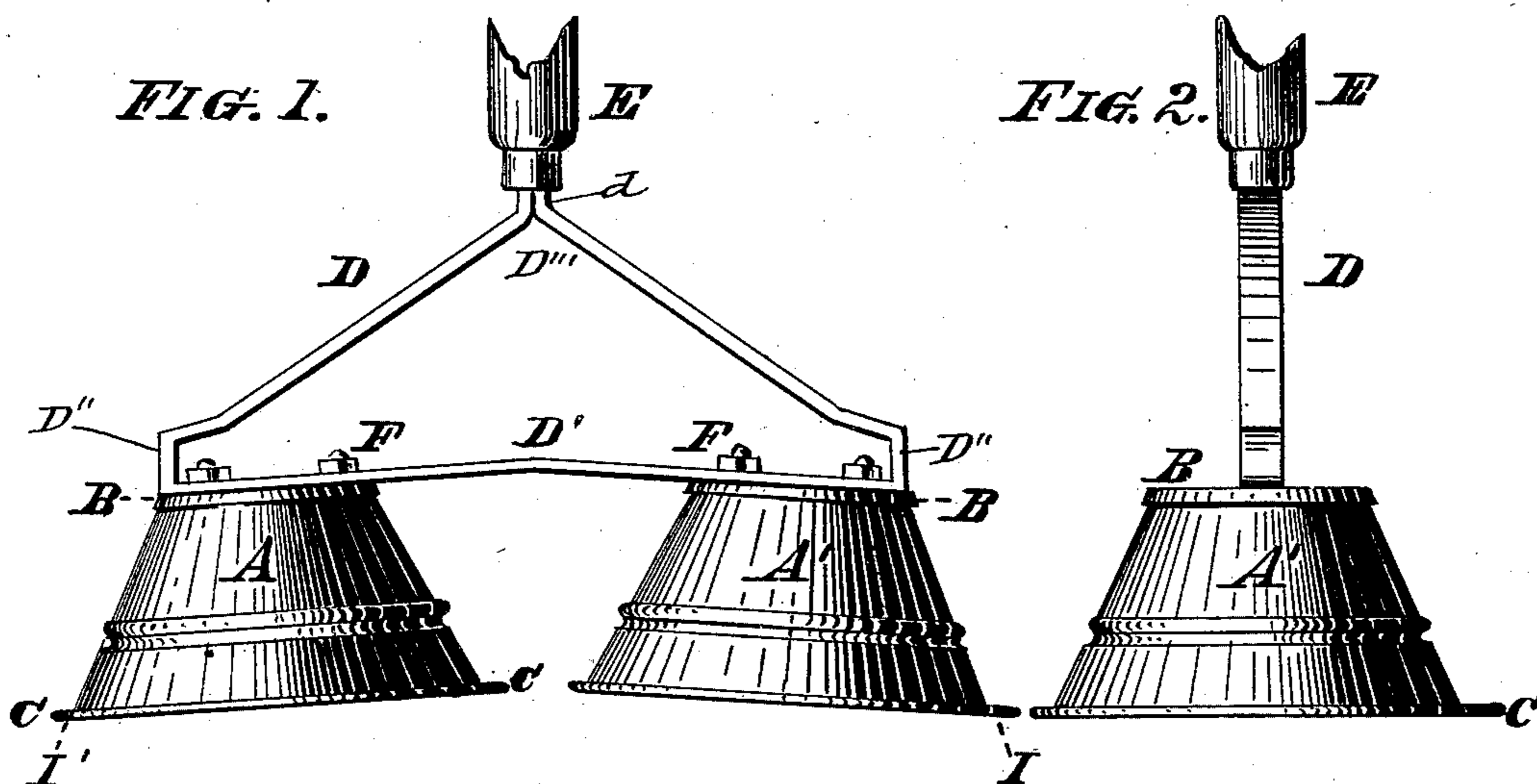


(No Model.)

S. A. NIVER.  
CLOTHES WASHER.

No. 273,134.

Patented Feb. 27, 1883.



**Witnesses:**

Willie C. Stark.  
Joseph P. Wunsch.

**Inventor :**

Seneca A. River  
by Michael J. Stark,  
Attorney.

# UNITED STATES PATENT OFFICE.

SENECA A. NIVER, OF BUFFALO, NEW YORK.

## CLOTHES-WASHER.

SPECIFICATION forming part of Letters Patent No. 273,134, dated February 27, 1883.

Application filed February 7, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, SENECA A. NIVER, of Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in a Clothes-Washer; and I do hereby declare that the following description of my said invention, taken in connection with the accompanying sheet of drawings, forms a full, clear, and exact specification, which will enable others skilled in the art to which it appertains to make and use the same.

This invention has general reference to washing-machines; and it consists essentially in the novel combination of parts and details of construction, as hereinafter first fully set forth and described, and then pointed out in the claim.

In the drawings already referred to, which serve to illustrate my said invention more fully, Figure 1 is a front elevation of my improved washing-machine. Fig. 2 is an end elevation of the same. Fig. 3 is a front elevation of a wash-tub and accessories, illustrating the manner of operating my improved machine. Fig. 4 is a sectional elevation of one of the cups.

Like parts are designated by corresponding letters of reference in all the figures.

This washing-machine consists essentially of two metallic cups, A A', of the contour of an inverted truncated cone, having caps B, as clearly shown in the drawings. These cups are attached to the end of a triangular frame, D D', consisting of a metallic bar bent or cast into the form described, and provided with a handle, E, by means of which the machine is operated. The cups A A' are attached to this bar by means of bolts F, passed through an annular strengthening-plate, G, placed into the inside of the cups, and through said bar D' in any convenient manner.

In operation the clothes in the wash-tub H are pounded by placing my machine into said tub, and by alternately pushing and pulling the handle E to and fro. This will cause the frame, with its cups, to rock back and forth, and thereby to force the wash-suds through the clothes in the well-known manner of clothes-pounders.

To strengthen the rim of the cups A A', which form the fulcrum for the apparatus, by alternately resting at the points I and I', I form a

bead or similar strengthening device, C, around the lower edge of said cups.

I prefer to construct the cups of tin or galvanized sheet-iron, and the frame D D' of either wrought or malleable iron properly coated with tin, zinc, or analogous non-corrosive metal, so as to prevent the clothes being stained with iron-rust or other similar metallic spots.

The annular internal plates, G, relieve the caps of the cups from the strain and wear that would otherwise come directly upon them. Whenever one of these rings becomes worn on its under face, around the head of the bolt, it may be removed and reversed, or another may be put in its place. The bolts F hold the cups firmly to bar D', yet afford an easy means of detachment. When one of the caps B is injured in any way the entire cup to which it belongs is first removed from the triangular frame, and the cap may then be knocked off from it. The cap and the body of the cup may in like manner be separated in order to facilitate the mending of the cup-body or substitute a new one for an old one. The connection between the cups being a solid bar insures a degree of strength that could not be found in a sheet-metal shell. The attachment of each cup to said bar at two points guards in a measure against the twisting strain to which a single bolt would be liable. The construction of the implement, as a whole, unites the greatest possible amount of strength with simplicity, lightness, sufficient leverage, and easy detachability of parts.

I am aware that it is not new to attach two cups to a triangular frame, each by a single bolt, no annular or other internal plates being employed, and the cap of each cup being integral therewith; also, that it is not new to cast several cups together round a common center and attach the latter directly to a stock; also, that it is not new to attach two cups to a connecting-tube having tubular arms which receive two rods formed with a common transverse handle; also, that it is not new to connect two conical cups to a common tube for a single stock.

I do not claim any of the foregoing constructions. Nor do I claim, broadly, a pair of cups bolted to a triangular frame for the purpose stated; but

What I do claim is—

The handle E and triangular frame D, in combination with the cups A A', the annular plates G within said cups, the removable caps 5 B upon said cups, and the fastening-bolts F, two of which pass through each of said plates G, the cap B above it, and the lower bar, D', of the triangular frame D, all substantially as and for the purpose set forth.

In testimony that I claim the foregoing as 10 my invention I have hereto set my hand in the presence of two subscribing witnesses.

S. A. NIVER.

Attest:

MICHAEL J. STARK,  
JOHN C. DUERR.