(No Model.)

## J. G. DINKELBIHLER. WASHING MACHINE.

No. 255,947.

Patented Apr. 4, 1882.

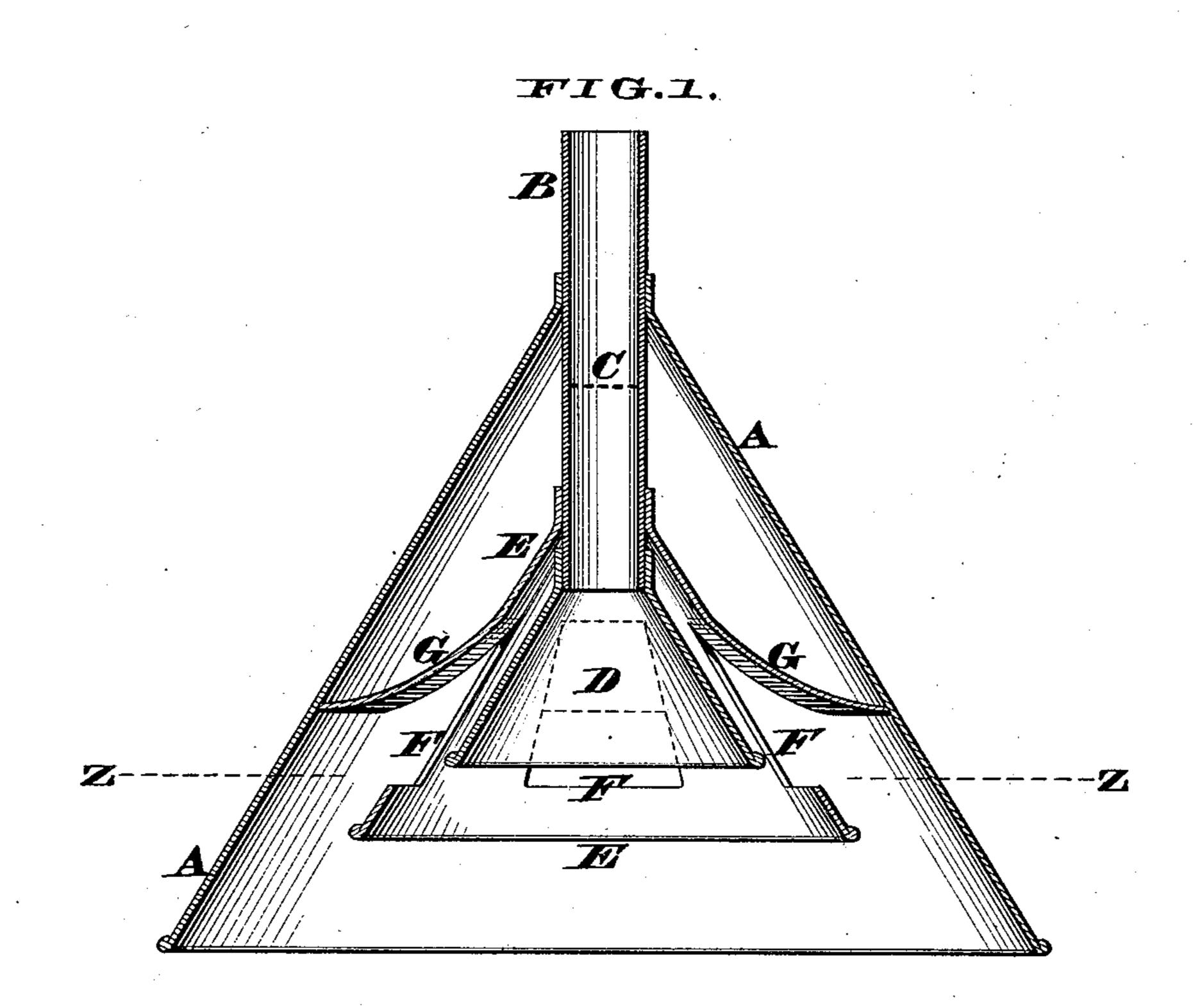
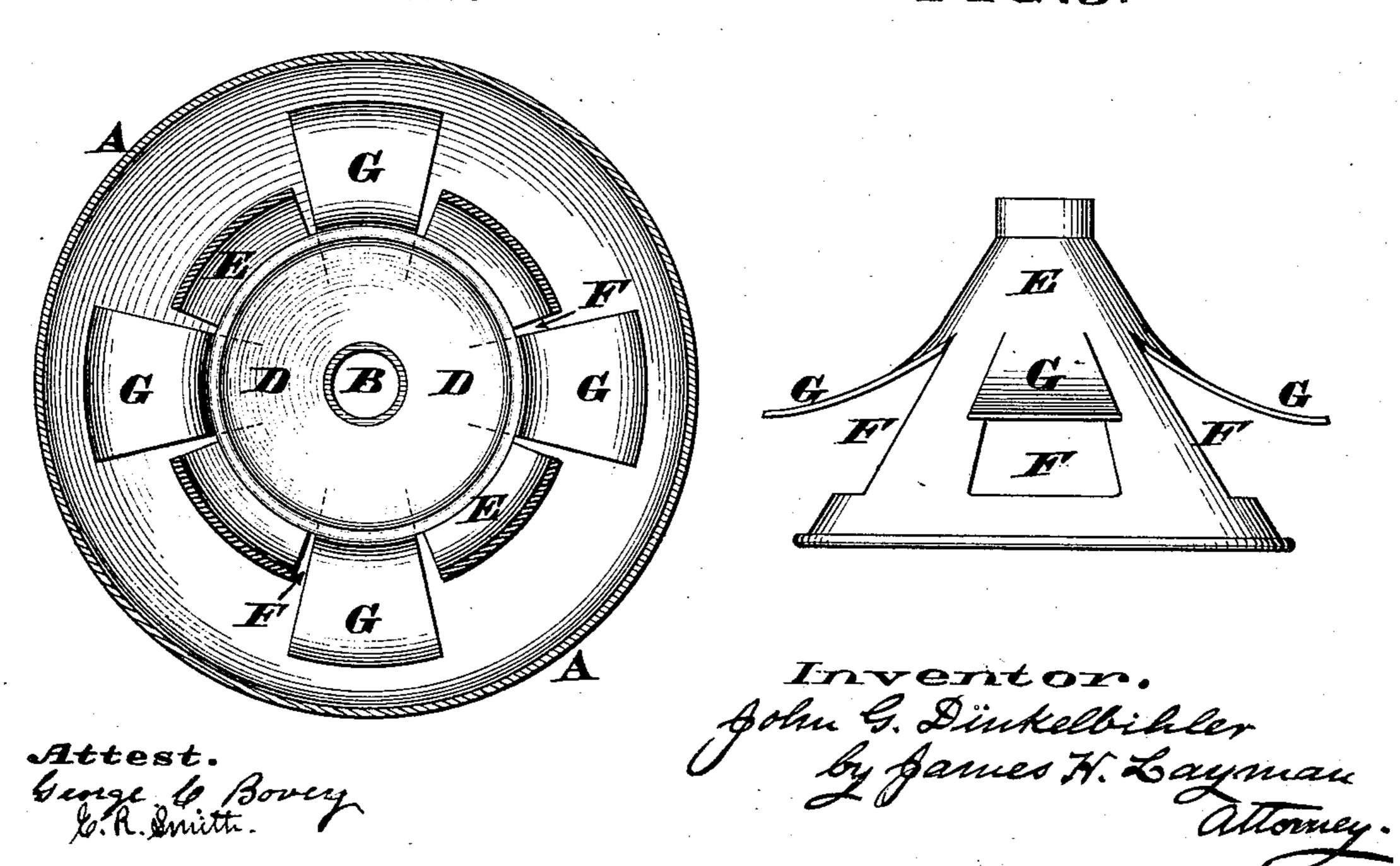


FIG.2.

FIG.3.



## United States Patent Office.

JOHN G. DINKELBIHLER, OF CINCINNATI, OHIO.

## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 255,947, dated April 4, 1882.

Application filed January 20, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN G. DINKELBIHLER, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State 5 of Ohio, have invented certain new and useful Improvements in Clothes Pounders or Washers, of which the following is a specification.

This invention relates to those clothes-washers which comprise a series of hollow cones 10 or shells arranged concentrically one within another; and my improvement consists in such a construction of shells as will insure a thorough agitation of the water and suds without causing them to splash or slop over the sides 15 of the tub or wash boiler. This result is accomplished by employing an outer, inner, and intermediate cone, and so slotting the latter and providing it with deflecting-plates as to practically concentrate the compressed air 20 within the inner cone, as hereinafter more fully described, and pointed out in the claim.

In the annexed drawings, Figure 1 is an axial section of my improved clothes pounder or washer, the handle of the implement being 25 omitted. Fig. 2 is a horizontal section of the same, taken at the line zz. Fig. 3 is an elevation of the intermediate cone detached from

the other shells. The outer member of the washer consists of 30 a sheet-metal cone or shell, A, of any suitable size—say about seven or eight inches high and eight or nine inches in diameter at its lower or larger end. This shell is imperforate, and is attached to a short tube or cylinder, B, 35 which tube serves also as a socket for the handle of the implement, said handle being driven in about as far as the dotted lines C, so as to prevent any escape of air through said cylinder and to secure the handle in position. 40 Furthermore, the lower end of this tube has soldered or otherwise applied to it the inner or

A, is impe Arranged concentrically between these two 45 cones A D is an intermediate one, E, secured at top to the socket B, and provided with a series of vertical slots F, which, following the general shape of the cone, are somewhat wider

smaller cone, D, which, like the outer shell,

at their lower than at their upper ends. These slots are preferably punched or cut out only 50 at both sides and at bottom, the tongues thus formed being spread or bent so as to form deflecting-plates G, the free ends of said plates being either soldered or riveted to the inner surface of the principal shell or cone A; or 55 these plates may be separate pieces of metal attached to the cones A and D in any suitable manner. Finally, the lower edges of all the cones are either doubled or rounded over wires, so as not to cut or otherwise injure the 60 the clothes in the "wash".

This implement may be operated on the clothes either in a tub or wash-boiler, as the result is the same in both cases, the descent of the pounder causing the water to ascend 65 within the cone A and be deflected upwardly by the plates G, through the slots' F, against the exterior of the smaller cone D. As a result of this upward deflection of the currents of water a large volume of air is forced into 70 the cone D, and, being imprisoned therein, is compressed to a greater or less degree. Furthermore, this descent of the washer forces the suds through the clothes, &c.; but the moment the implement is elevated the body 75 of compressed air remaining in the cone D causes the water to be ejected from the conical shells with considerable velocity. Consequently the implement produces a thorough agitation of the suds, which agitation cleanses 80 the clothes in a few minutes and without injuring the most delicate fabrics.

I claim as my invention—

A. clothes-washer consisting of the imperforate conical shells A D and an intermediate 85 slotted cone, E F, which latter has deflectingplates G, the free ends of which are secured to the inner surface of the cone A, said shells A D E being attached to a common axial support, B, substantially as herein described.

In testimony whereof I affix my signature

in presence of two witnesses.

JOHN G. DINKELBIHLER.

Witnesses:

JAMES H. LAYMAN, SAML. S. CARPENTER.