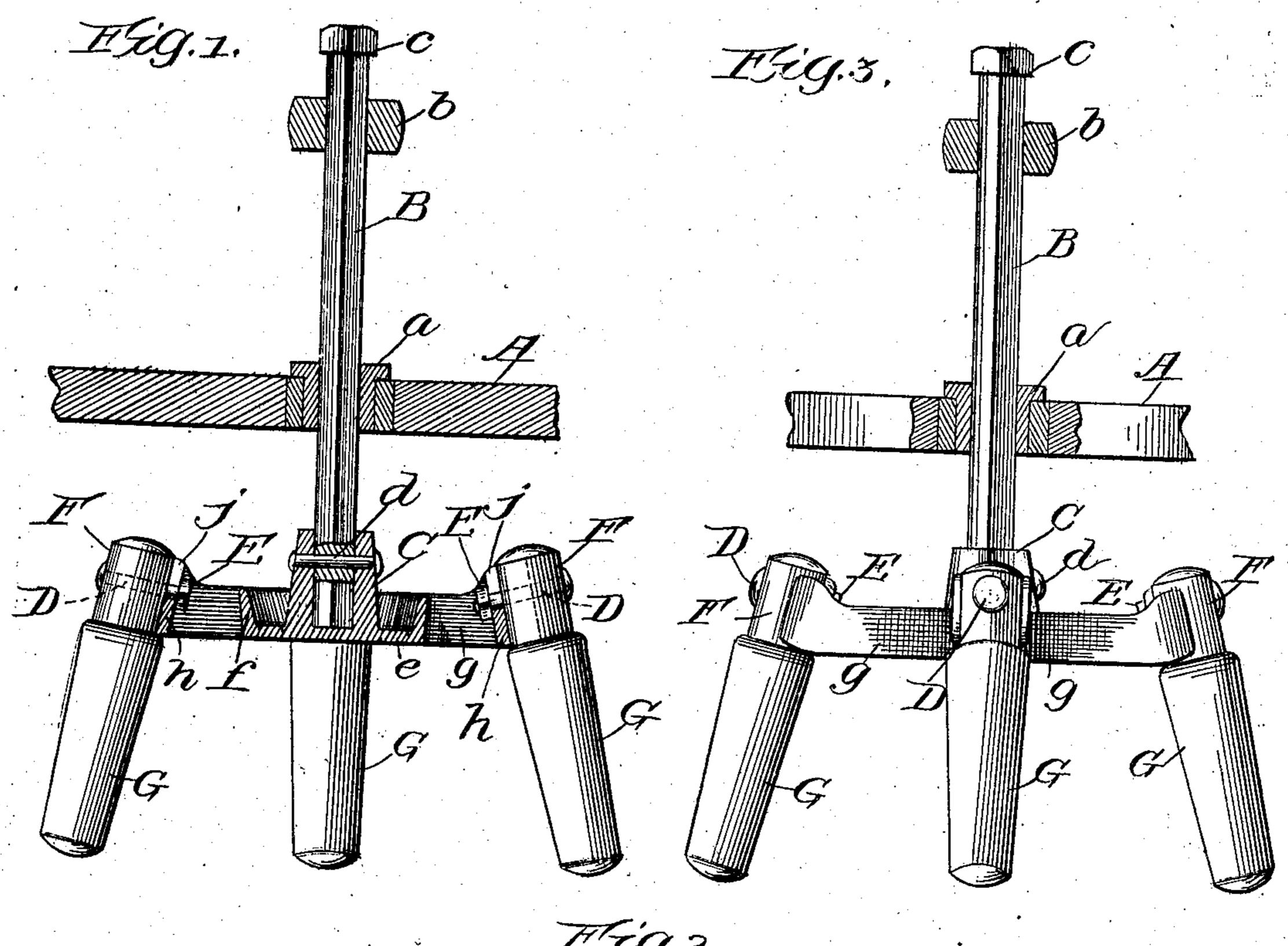
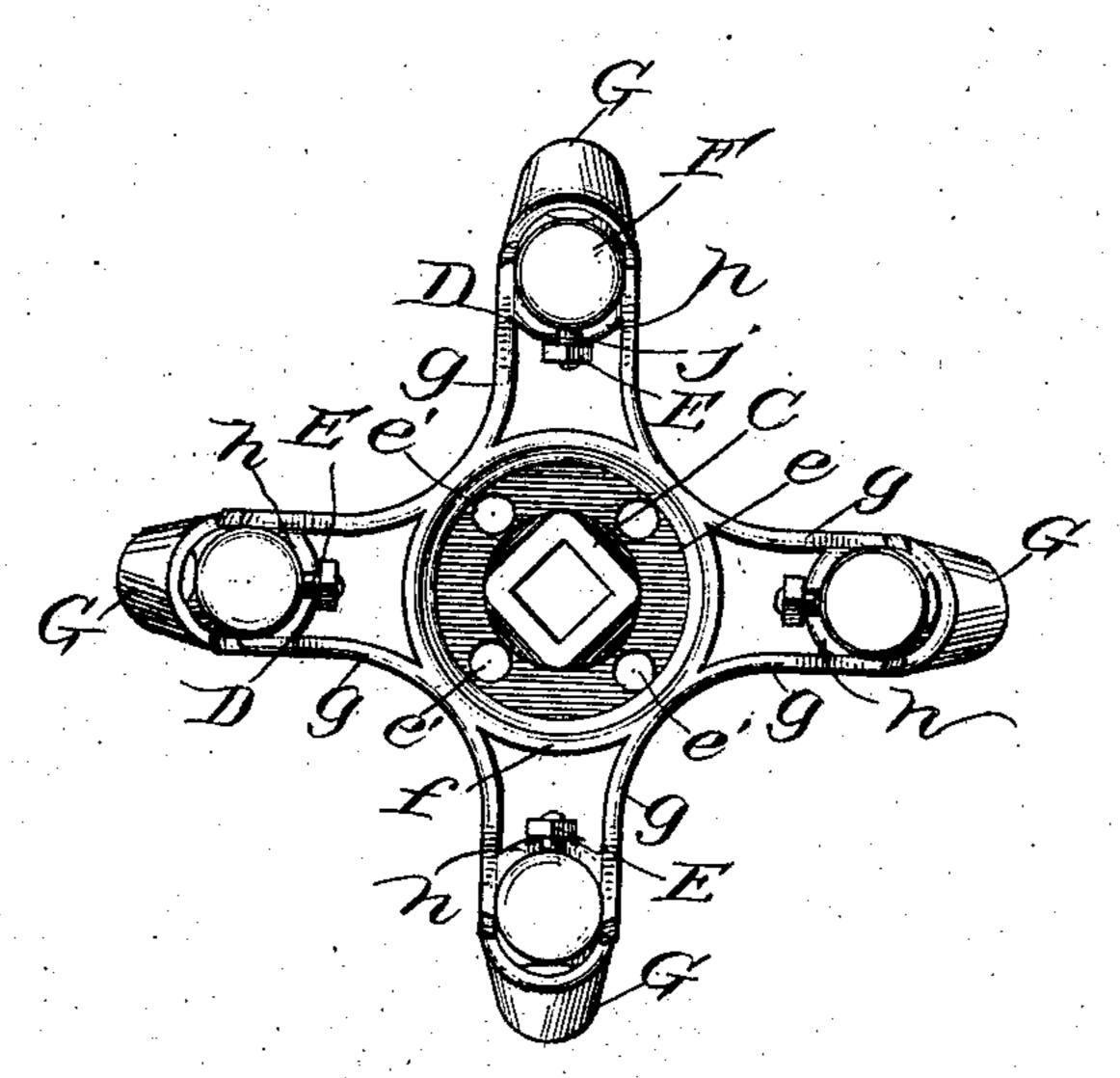
No. 827,336.

PATENTED JULY 31, 1906.

W. H. VOSS. DASHER OR STIRRER HEAD FOR WASHING MACHINES.

APPLICATION FILED NOV. 13, 1905.





Witnesses: Our. Mennics

## UNITED STATES PATENT OFFICE.

## WILLIAM H. VOSS, OF DAVENPORT, IOWA.

## DASHER OR STIRRER-HEAD FOR WASHING-MACHINES.

No. 827,336.

Specification of Letters Patent.

Patented July 31, 1906.

Application filed November 13, 1905. Serial No. 287,139.

To all whom it may concern:

Be it known that I, WILLIAM H. Voss, a citizen of the United States, and a resident of Davenport, in the county of Scott and State of Iowa, have invented certain new and useful Improvements in Dashers or Stirrer-Heads for Washing-Machines, of which the following is a full, clear, and exact description.

stirrer-heads of washing-machines; and its object is to make a light, durable, open metal dasher through which the water and suds can easily percolate, which will not swell or be affected by the swelling of the stirrer-pins or dowels when kept wet for any considerable length of time, and to which said dowels can be readily and securely fastened in proper position, regardless of defects in their manu20 facture, without alteration or removed as desired. This I accomplish by the means hereinafter fully described and as particularly pointed out in the claims.

In the drawings, Figure 1 is a vertical central view of the central portion of the top or cover of a washing-machine and the stirrer-shaft thereof, to which latter my improvements are applied. Fig. 2 is a plan view of my improved dasher. Fig. 3 is a side eleva-

30 tion thereof.

Reference being had to the drawings, A represents the top or cover of the tub of a washing-machine, and B the square stirrershaft thereof, journaled in suitable bearings a in said cover and in an overhead frame b, substantially as shown. Shaft B has a vertical movement independent of its rotation, and its upper end above frame b is provided with a suitable nut or head c to limit its downward movement.

My improved metallic dasher or stirrerhead is secured to the lower end of said stirrer-shaft B and comprises a central boss C, which has a square opening or socket extend-45 ing centrally down into it for the reception of the end of the shaft B, to which latter it is secured by a transverse pin or rivet d. The lower closed end of this boss has a concentric disk e, which has a suitable number of perfo-5c rations e' therein, and has its upper edges fflanged upward. Projecting radially from said edges f are four equidistant corresponding arms, each consisting of parallel side members g, of the same height as the flanged 55 edges f, the outer ends of which are preferably increased in height and connected by a

vertically - disposed transverse web h, the outer surfaces of which are concaved to form seats for the shanks F of the wooden dowel or pin G, secured to the outer end of each of 60 said arms. These webs h midway between the members g are provided with vertical slots j, that extend down from the upper edges thereof a suitable distance, and when the pins are to be secured in place a bolt D is 65 passed diametrically through a suitable opening in their shanks, each of which has a nut E on its inner end. The threaded barrels of these bolts are passed into said slits and when said nuts are tightened securely hold 70 the pins G in position. The openings in the shanks of the pins through which the bolts are passed are located in the same relative position in each of said pins, and the slits in the end of each arm are of the same depth, so 75 that when the parts of the stirrer-head are assembled the said pins will all be securely fastened in place and extend below the stirrerhead the same distance.

My improved stirrer-head is preferably cast 8c in one piece of metal and enables the water and suds to percolate therethrough without interference, and it is not affected by the moisture or liable to split when the pins are driven into it, which latter occupy the same 85 relative position to the stirrer-head and can be readily tightened in place should they become loose or easily replaced should they be-

come broken.

What I claim as new is—

1. A stirrer-head for washing-machines comprising a metal boss, equidistant open arms cast in one piece therewith and projecting therefrom, wooden pins and transverse bolts and nuts by means of which said pins 95 are removably secured to the ends of said arms.

2. A stirrer-head for washing-machines comprising a metal boss having an integral concentric perforate disk the edges of which are flanged upward, equidistant open arms cast in one piece therewith and projecting from the upwardly-flanged edges, and wooden pins removably secured to the ends of said arms.

3. A stirrer-head for washing-machines comprising a metal boss having an integral concentric perforate disk the edges of which are flanged upward, equidistant open arms cast in one piece therewith and projecting room the upwardly-flanged edges, and having concave seats in their outer ends, and wooden

pins sécured in the seats in the ends of said arms.

4. A stirrer-head for washing-machines comprising a metal boss having an integral concentric perforate disk the edges of which are flanged upward, equidistant arms each consisting of parallel side members cast in one piece and projecting from said upwardly-flanged edges and having their outer ends connected by a transverse web, the outer surface of which is concaved, and wooden pegs seated and removably secured in the concave ends of said arms.

5. A stirrer-head for washing-machines comprising a metal boss having an integral concentric perforate disk the edges of which are flanged upward, equidistant arms each consisting of parallel side members cast in one piece and projecting from said upwardly-flanged edges, and having their outer ends

connected by transverse webs which latter have a vertical slit therein, and have their outer surfaces concave, wooden pegs, and bolts and nuts for removably securing said pegs in the concave ends of said arms.

6. A stirrer-head for washing-machines comprising a metal boss having an integral concentric perforate disk the edges of which are flanged upward, equidistant open arms cast in one piece therewith and projecting 30 from the upwardly-flanged edges, wooden pins and transverse bolts and nuts by means of which said pins are removably secured to the ends of said arms.

In testimony whereof I have hereunto set 35 my hand this 6th day of November, 1905. WILLIAM H. VOSS.

Witnesses:

WILLIAM E. PULS, ARTHUR CLIFFORD.