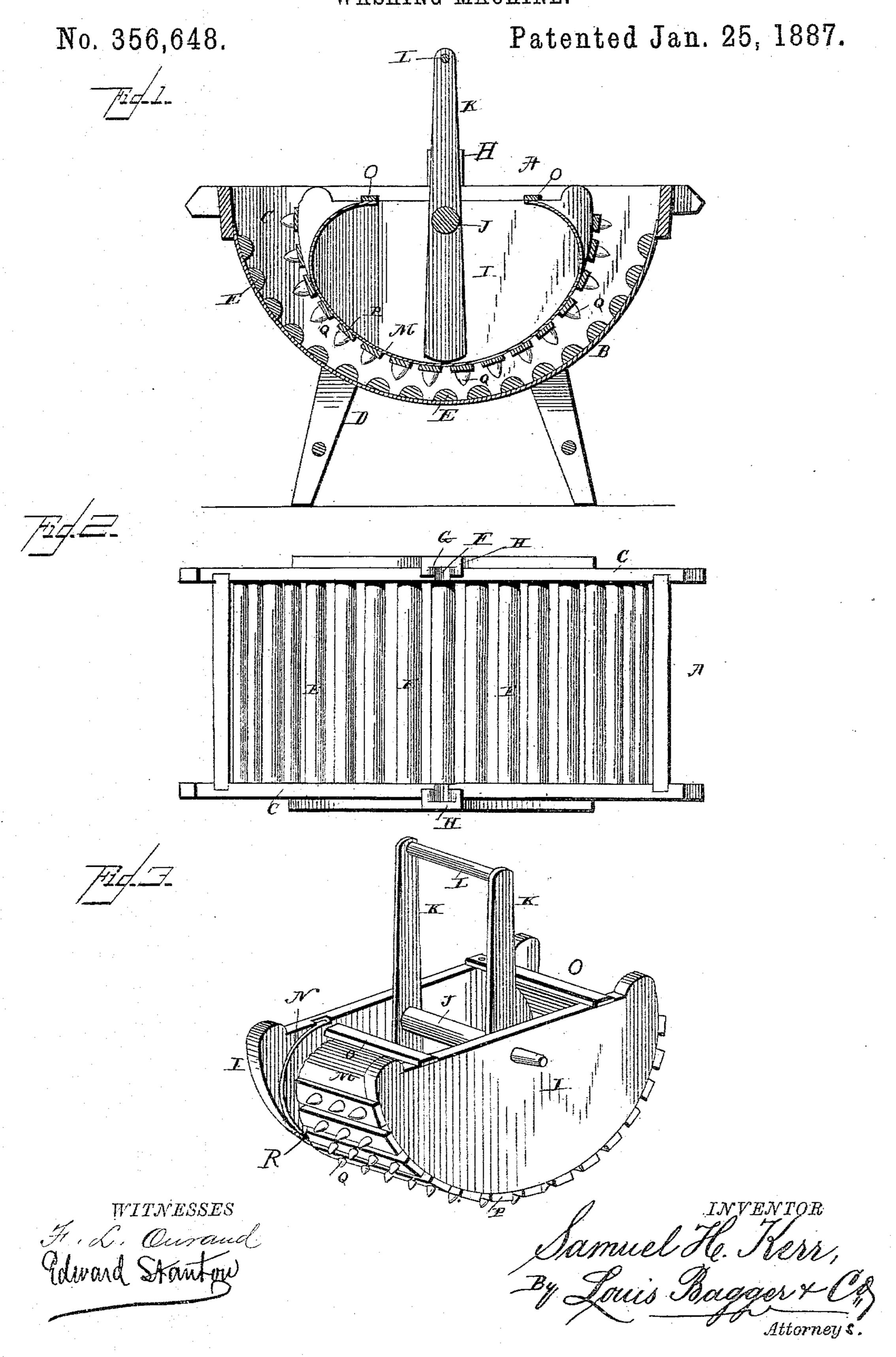
S. H. KERR.
WASHING MACHINE.



United States Patent Office.

SAMUEL H. KERR, OF PINEY, PENNSYLVANIA.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 356,648, dated January 25, 1887.

Application filed February 26, 1886. Serial No. 193,298. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL H. KERR, a citizen of the United States, and a resident of Piney, in the county of Clarion and State of 5 Pennsylvania, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the 10 art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a longitudinal vertical sectional 15 view of my improved washing-machine. Fig. 2 is a top view of the same with the rubber removed; and Fig. 3 is a perspective view of the rubber, showing parts broken away.

Similar letters of reference indicate corre-

20 sponding parts in all the figures.

My invention has relation to that class of reciprocating-rubber washing-machines in bottom reciprocates in a suds-box having a 25 round bottom provided with cross-slats; and it consists in the improved construction and combination of parts of the same, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A 30 indicates the suds-box, which is formed with a round metallic bottom, B, secured with its edges to the round edges of the side pieces, C C, and the entire box is supported upon legs D, secured to the sides of the suds-box.

Transverse slats E, having their upper sides rounded, are secured in the bottom of the box, with spaces between them, and the upper edges of the sides of the suds-box are formed with vertical slots F, having their lower ends 40 rounded to form bearings for the trunnions of the rubber, and the outer sides of these slots are covered by two short uprights, the inner sides of which are formed with vertical grooves G, forming continuations of the slots, the said 45 uprights H, with their grooves and the slots, forming ways for the trunnions of the rubber to the bearings, the upper ends of the grooves: being rounded at the sides for the easier insertion of the trunnions.

The sides II of the rubber are connected by means of a central shaft, J, the ends of which

I project beyond the sides and form trunnions, and handles KK are secured to the inner sides of the sides of the rubber, and are connected by means of a cross-piece, L. The side pieces 55 of the rubber have a curved groove, N, formed in their faces across the corners. These grooves break out on the bottom edge of said pieces, and are continued along the same in the form of rabbets R. Fig. 3.

Cross-pieces O are secured to the upper edges of the rubber, with their ends over the upper ends of the grooves N. A sheet of zinc, M, is secured by its side edges in the rabbets and grooves, and by its ends to the under sides of 65 the cross-pieces O. It may also be secured to

the inner surfaces of the slats P.

Cross-slats P are secured with their ends to the edges of the side pieces of the rubber, and are provided with a number of conical studs, 70 Q, the inner reduced ends of which fit into perforations in the cross-slats, and these studs serve, together with the cross-slats, to carry which a rubber provided with a round slat | the clothes with the rubber when the latter is reciprocated over the cross-slats of the bottom, 75 rubbing them against the same, and thus cleaning them.

The sheet-metal covering of the bottom of the rubber will render the said rubber buoyant, so that it will not rest too heavily upon 80 the clothes, but be supported by the suds in the box, preventing the possibility of tearing the clothes, and at the same time rendering it easy to reciprocate, and the suds-box need not contain as much water when the bottom of 85 the rubber is covered as it would need if the rubber were open, as the space within the rubber, which, with an open rubber, would be filled with water, which is useless, is in this machine closed and will not contain any water. 90 The sheet-metal covering will also serve to brace the rounded edges of the side pieces of the rubber, and on account of the edges of the ends of the sheet-metal covering being inserted into the inner sides of the side pieces of the 95 rubber the said covering will not easily be torn off from the rounded edges of the said side pieces.

Having thus described my invention, I claim and desire to secure by Letters Patent of the 100 United States—

In a reciprocating-rubber washing-machine,

a rubber consisting of semicircular side pieces having grooves across the corners upon their inner faces, and rabbets on the lower edges forming continuations of said grooves, crosspieces secured to the upper edges of said side pieces, with their ends over the upper ends of said grooves, slats secured to the bottom edges of said side pieces, conical studs projecting from said slats, and a sheet of zinc secured in said rabbets and grooves and to said cross-

pieces and slats, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

SAMUEL H. KERR.

Witnesses:

E. L. Fox, Saml. K. Clarke.