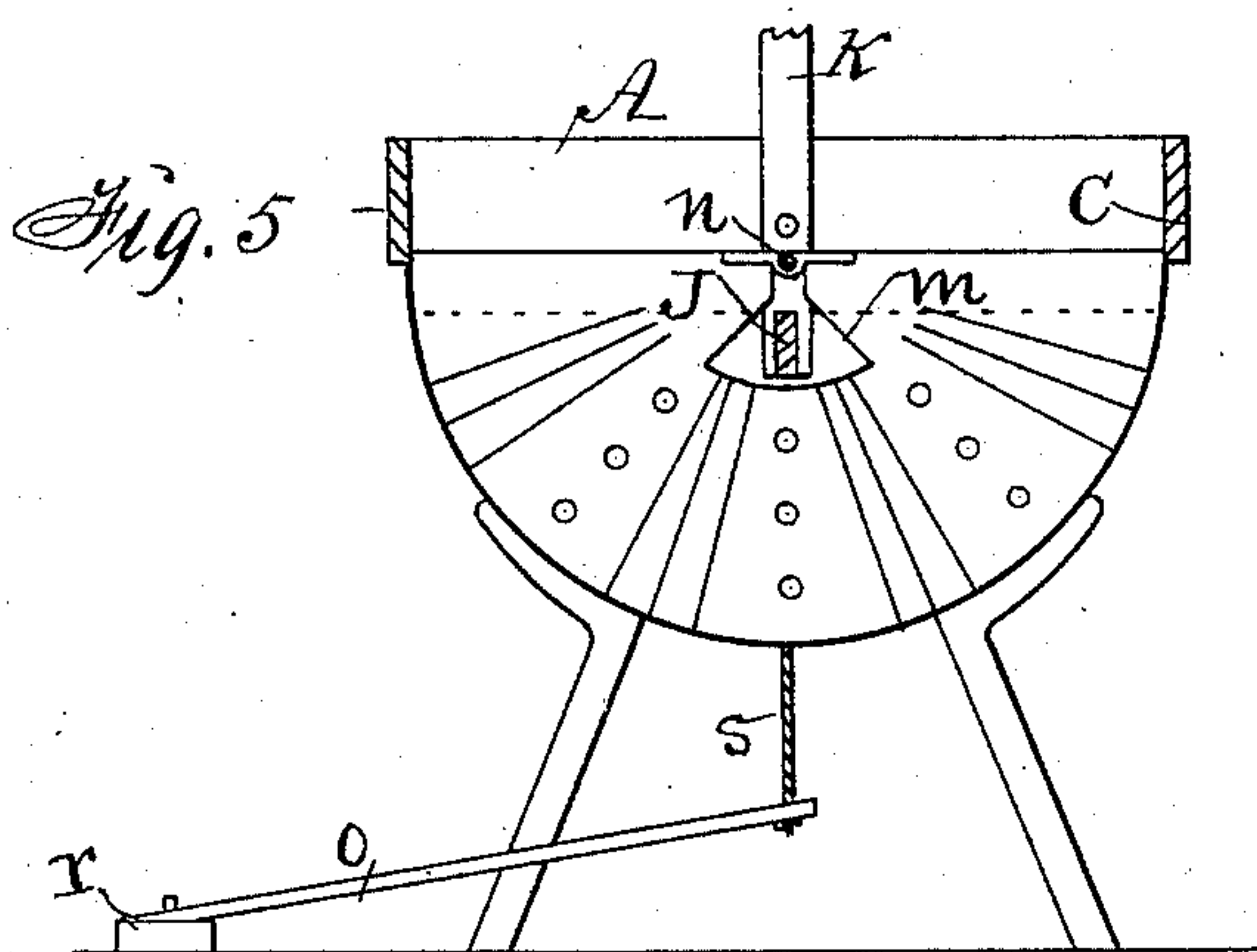
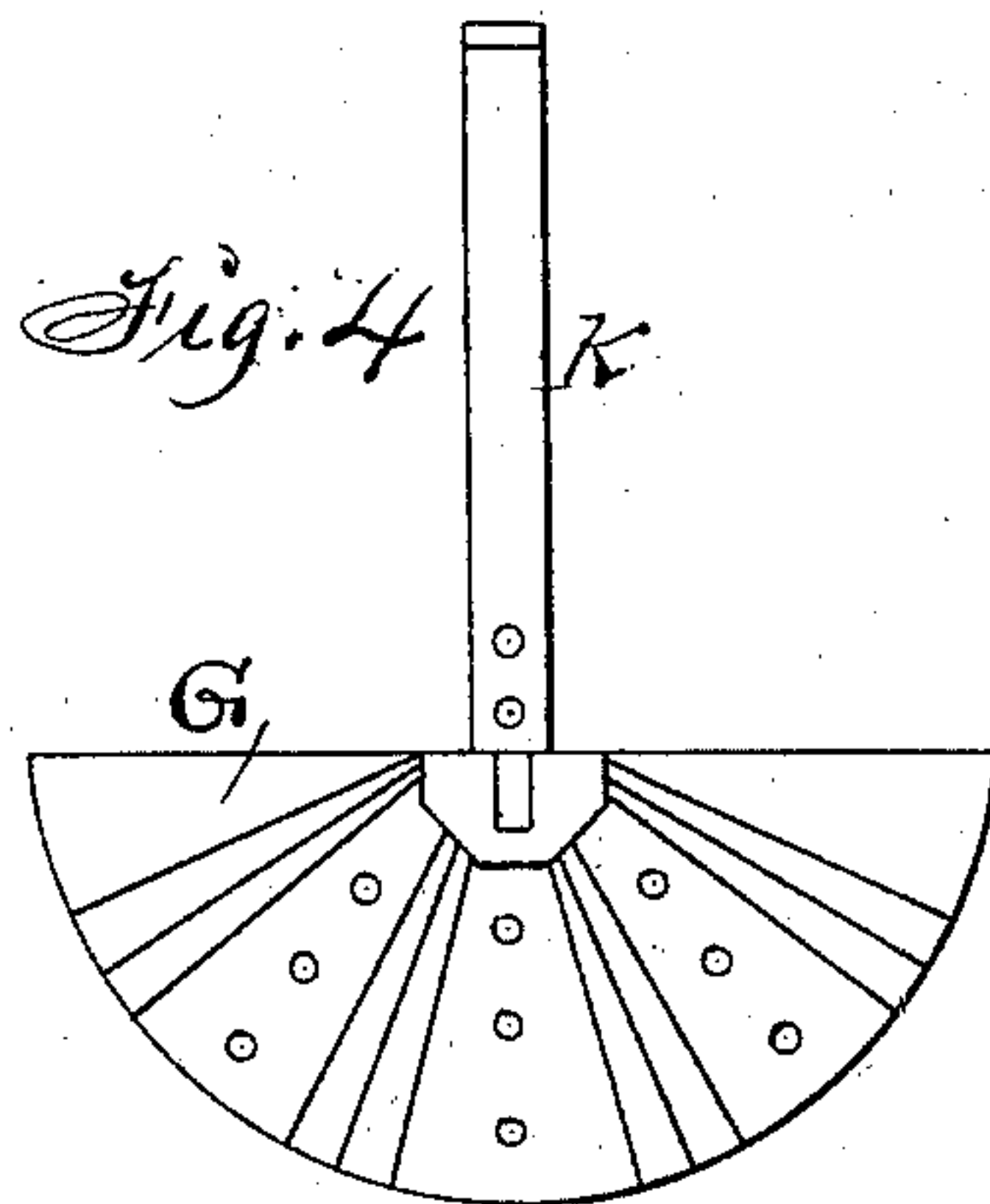
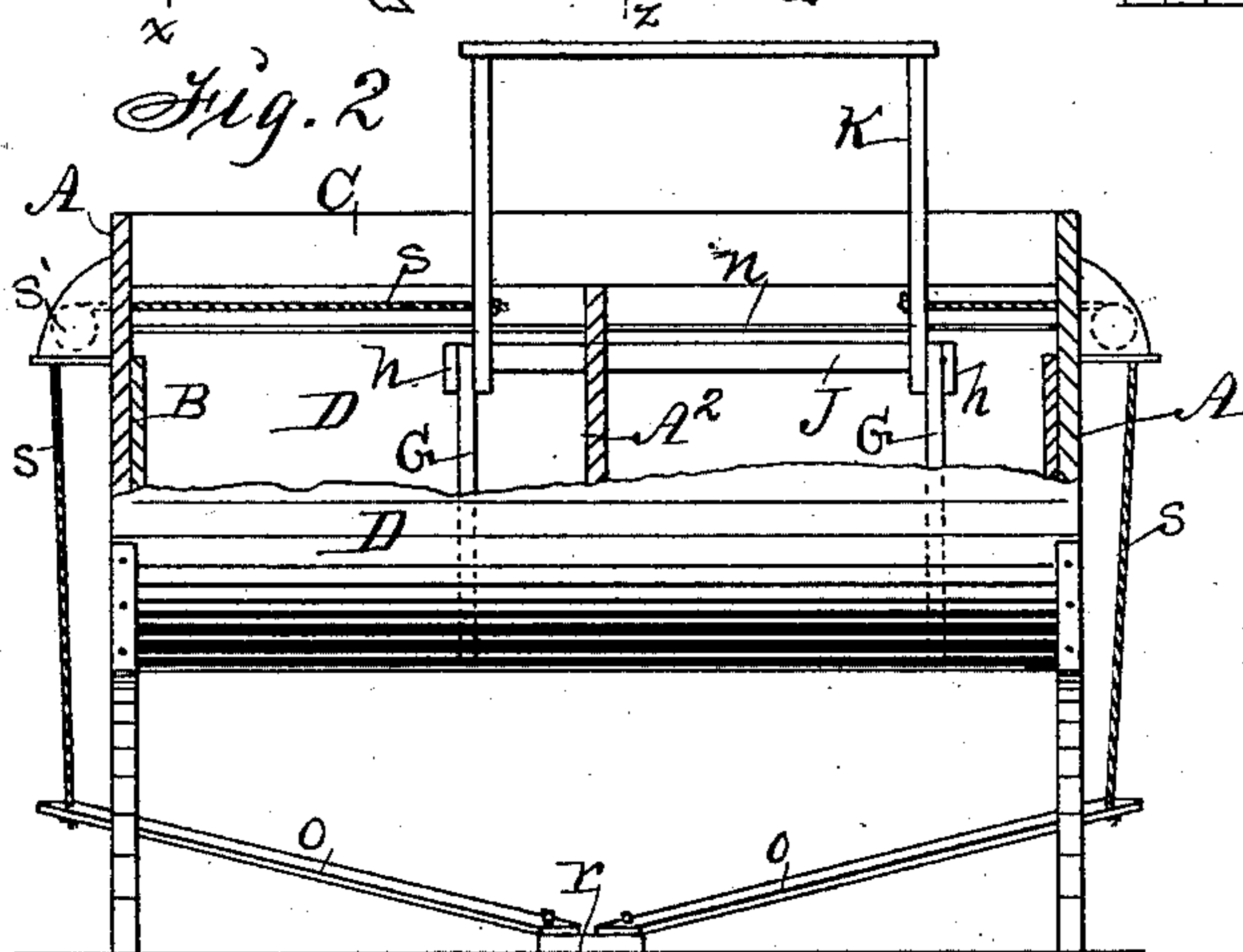
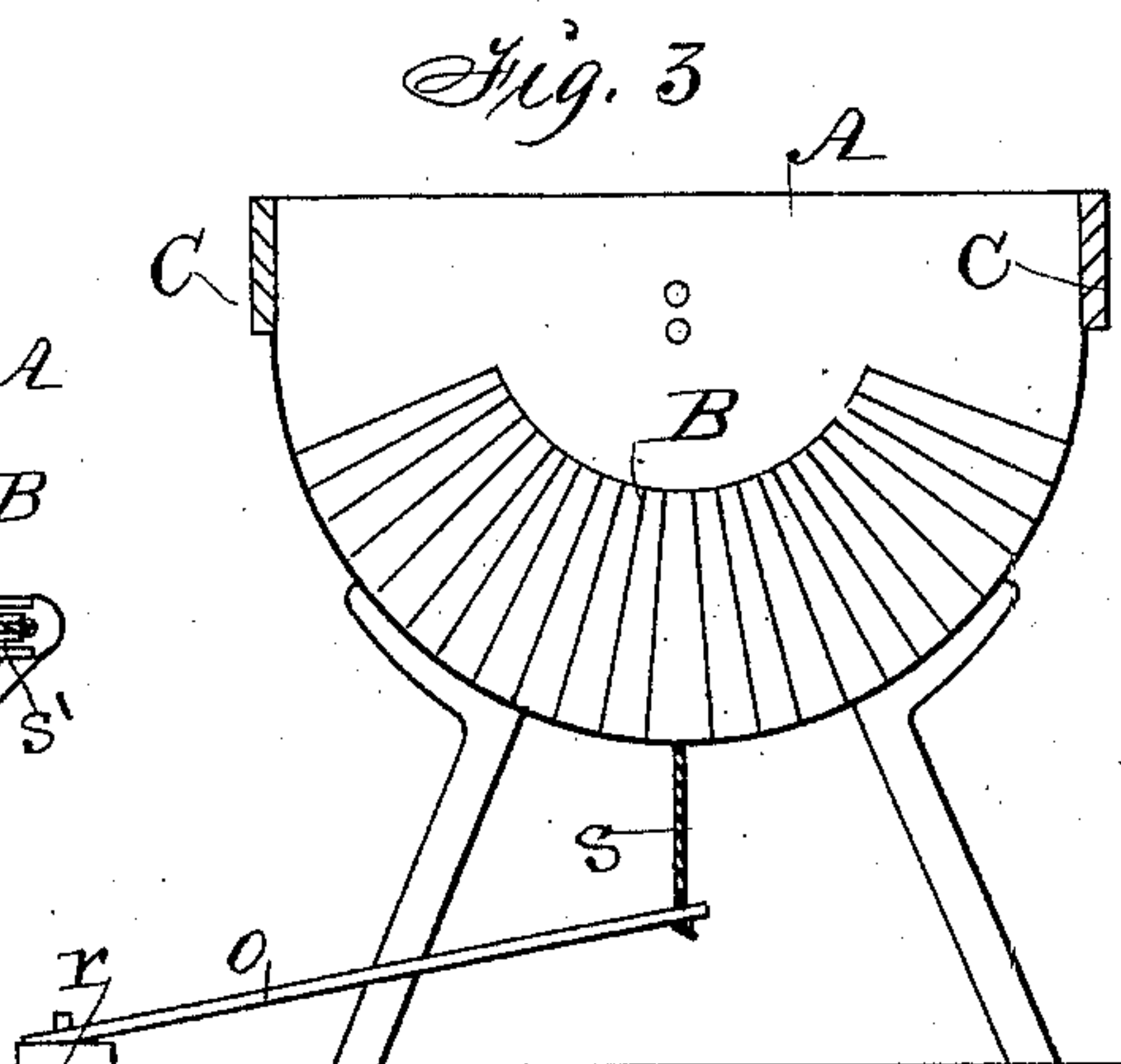
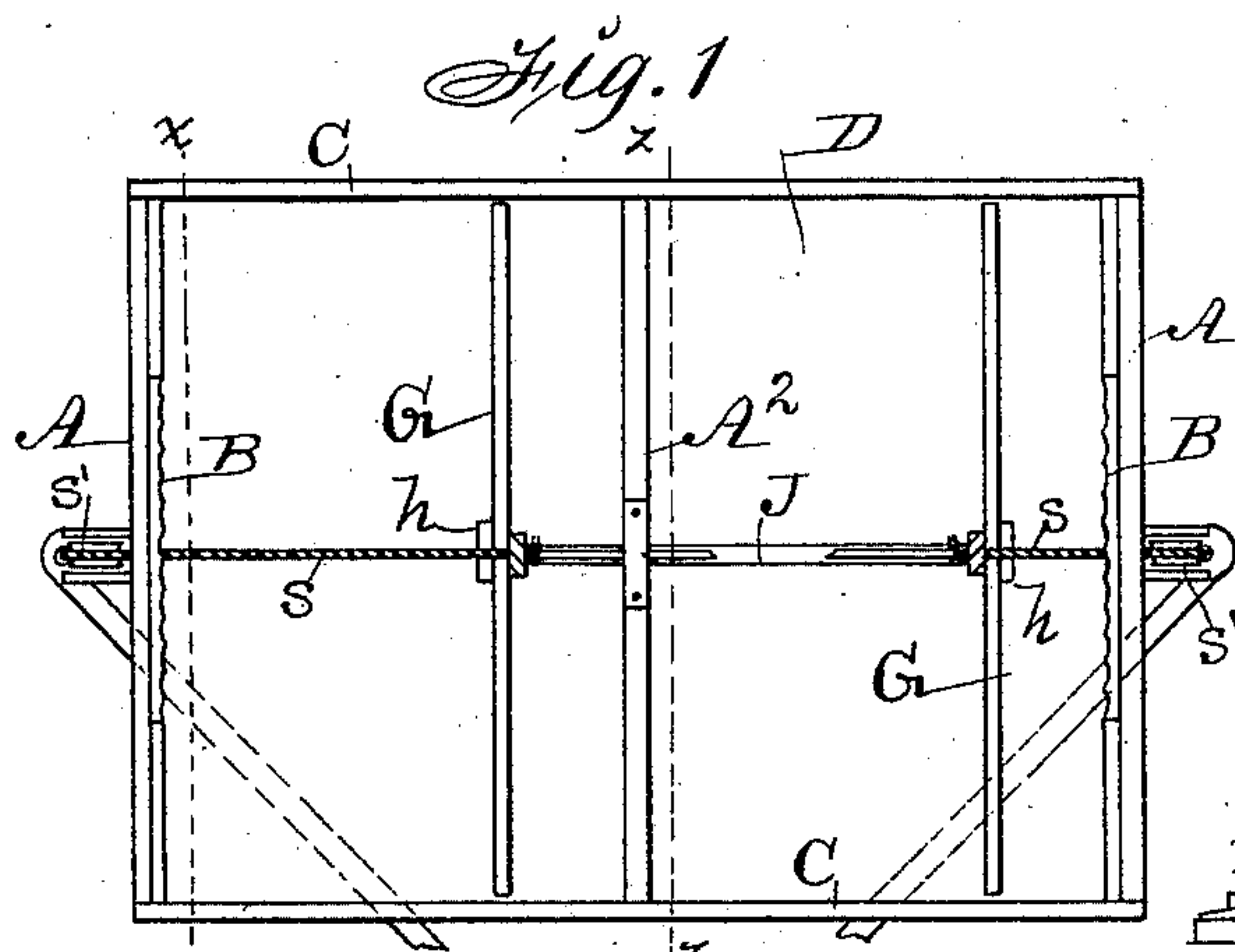


(No Model.)

S. HAKE.
WASHING MACHINE.

No. 366,216.

Patented July 12, 1887.



Witnesses:

R. H. Orwig,
C. W. Sales.

Inventor:
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UNITED STATES PATENT OFFICE.

SIMON HAKE, OF DES MOINES, IOWA.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 356,216, dated July 12, 1887.

Application filed January 7, 1887. Serial No. 223,697. (No model.)

To all whom it may concern:

Be it known that I, SIMON HAKE, a citizen of the United States of America, and a resident of Des Moines, in the county of Polk and State of Iowa, have invented an Improved Washing-Machine, of which the following is a specification.

My object is to facilitate washing clothing; and my invention consists in the construction and combination of a reciprocating duplex rubbing and pressing device and a duplex fixed wash-board with a tub and two treadles, as hereinafter set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a top view of my machine; Fig. 2, a side view having parts broken away; Fig. 3, an inside view of one of the ends of the tub taken through the line *xx* of Fig. 1; Fig. 4, a face view of the partition in the tub, taken through the line *zz* of Fig. 1; and Fig. 5, an end view of the pressing and rubbing device detached from the tub.

A A are the wooden ends of a tub. They are semicircular in shape and provided with a wash-board surface, B, on their inside faces, which surface may be fluted wood, corrugated sheet metal, or any other suitable material.

C C are side pieces, of wood, fixed to the edges of the ends at their top corners.

D is a sheet-metal bottom, fixed to the edges of the ends and sides. The tub thus constructed has legs attached in any suitable way to support it in an elevated and level position.

A² is a partition, corresponding in shape with the ends A, fixed in the center of the tub to brace the sides and bottom and to increase the rubbing and pressing surface of the machine. It has a wash-board surface on each side and perforations through which water can pass.

G G are the ends of the sliding and vibrating pressing and rubbing device. They conform in shape with the ends of the tub, are perforated, and have wash-board surfaces on their opposite sides.

h are cross-pieces fixed to their tops to reinforce them, and J is a bar rigidly fixed to their tops and centers to connect them.

K represents a handle fixed to the pressing and rubbing device thus constructed. A tri-

angular-shaped opening, *m*, in the partition and a slot extending down and intersecting the opening allow the connecting bar J to enter and slide and vibrate in the opening. A rod, *n*, passed through perforations in the vertical portions of the handle K, and fixed to the ends of the tub suspends the pressing and rubbing device in the tub in such a manner that it can slide horizontally to press and vibrate laterally to rub clothing,

O O are treadles pivoted to a block, *r*, and connected with the opposite ends of the pressing and rubbing device, by means of cords *s*, in such a manner that the device can be readily moved in opposite directions by alternately pressing down the treadles.

s' are directing-pulleys, fixed to the ends of the tub in line with perforations in the same ends, in such a manner that the ropes *s* will pass over the pulleys, as shown in Figs. 1 and 2, and then extend horizontally to the pressing and rubbing device handle K to which they are fastened.

In the practical use of my machine, that is divided into four compartments, by means of the partition and the ends of the pressing and rubbing device I place articles in one or more, or all of them, and soap-suds in the tub, and then tread on the treadles alternately to press the articles and at the same time vibrate the handle to rub them between and against the wash-board surfaces of the ends of the tub and the ends of the pressing and rubbing device.

I am aware that two oscillating rubbing-boards have been combined with a wash-tub and a treadle in such a manner that articles could be placed between the boards and the boards then pressed together by means of the treadle, and at the same time oscillated by means of their handles, so that the operator could simultaneously use his foot to press and his hands for rubbing; but my manner of constructing a rubbing device with four faces that come in contact with articles to be washed, and two of them at the same time, and combining it with a tub having a fixed partition and two treadles, so that the rubber can be moved in opposite directions by means of the treadles to press two different lots of articles, at the same time the said articles in two different

compartments are rubbed by means of an oscillating motion of the rubber produced by the operator's hands, is novel and greatly advantageous, in that many more articles can be
5 washed thereby in a given time and with less labor.

I claim as my invention—

1. In a washing-machine, the duplex rubbing and pressing device composed of two
:10 boards, G, the bar J, and a handle, K, in combination with a tub having a fixed duplex wash-board, A², and mechanism for moving the said duplex rubbing device in opposite directions relative to said fixed duplex wash-
15 board and the ends of the tub, for the purposes stated.

2. An improved washing-machine, comprising a tub having parallel sides and parallel ends, a duplex rubbing and pressing device
20 composed of two end pieces adapted to slide

horizontally within the tub and in opposite directions relative to the ends of the tub and rigidly connected with a frame or bar that retains them apart in a vertical and parallel position, and a handle fixed thereto to extend
25 vertically, a rod fixed to the ends of the tub to suspend and pivot said duplex rubbing and pressing device within the tub, a duplex wash-board fixed across the center of the tub, and two treadles for moving the duplex rubbing
30 and pressing device in opposite directions relative to the ends of the tub, and the duplex fixed wash-board to rub and press clothing simultaneously at the end and at the center of the tub, in the manner set forth.

SIMON HAKE.

Witnesses:

R. H. ORWIG,
THOMAS G. ORWIG.