

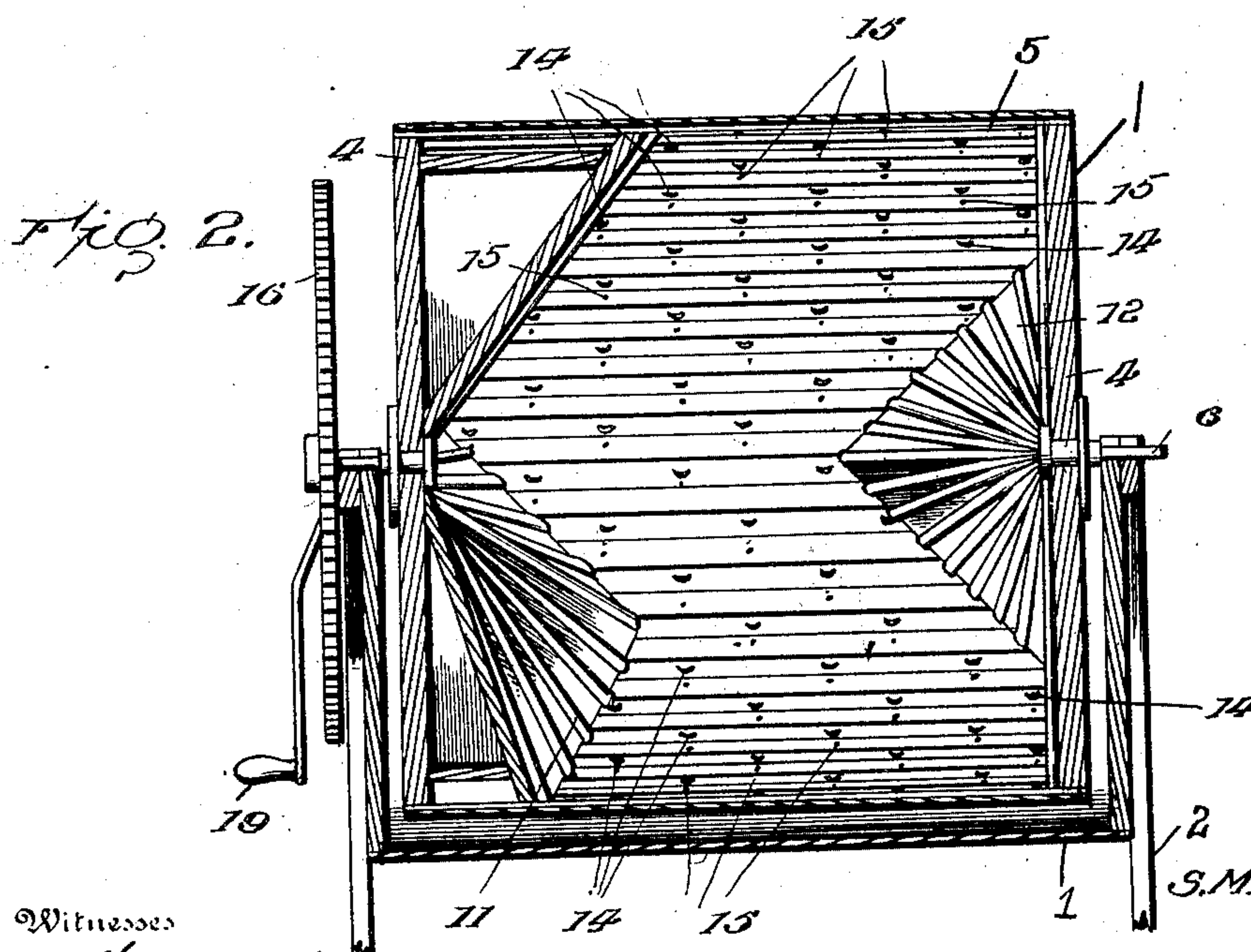
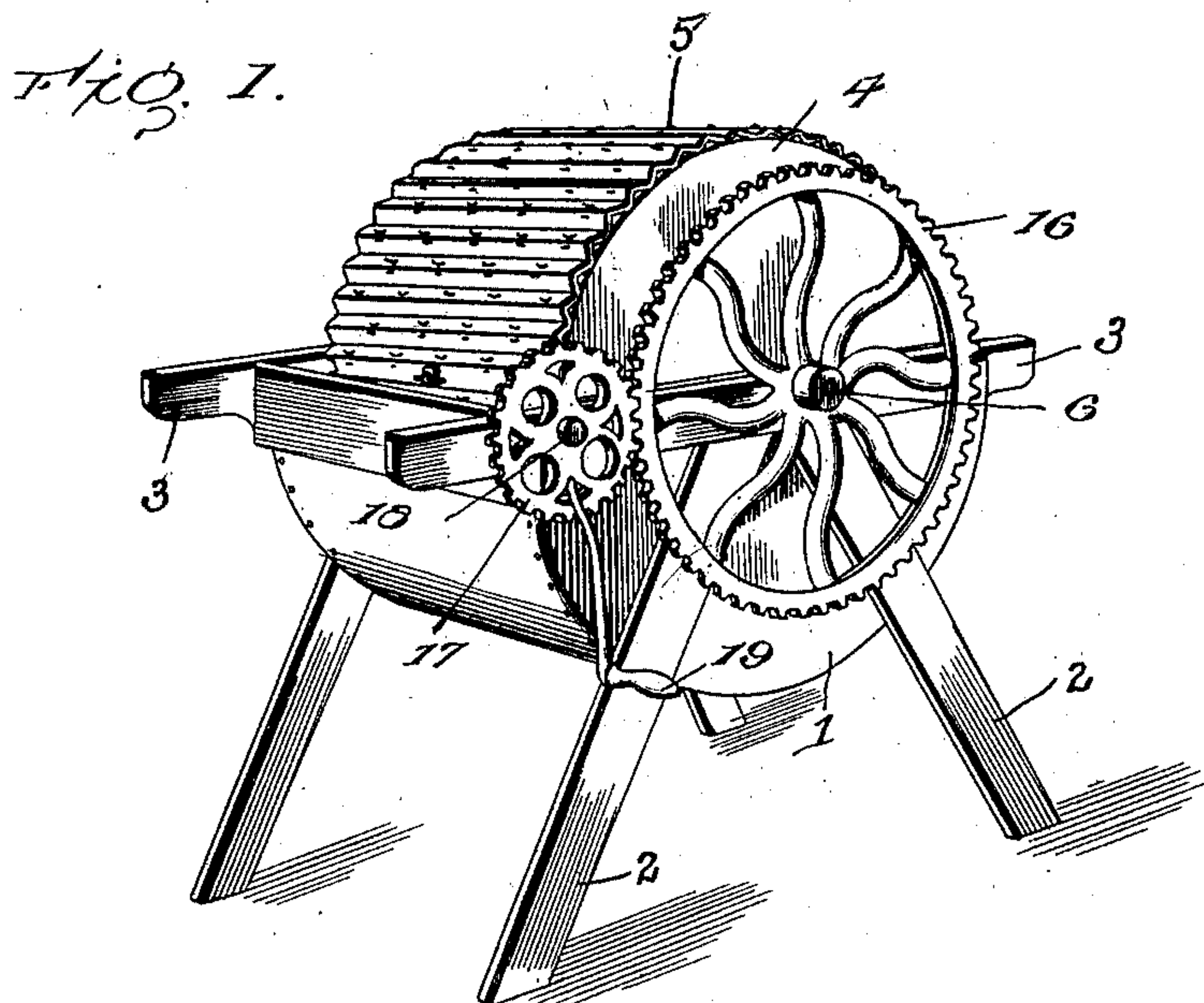
**No. 756,347.**

PATENTED APR. 5, 1904.

S. M. FARWELL.  
WASHING MACHINE.  
APPLICATION FILED FEB. 14, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



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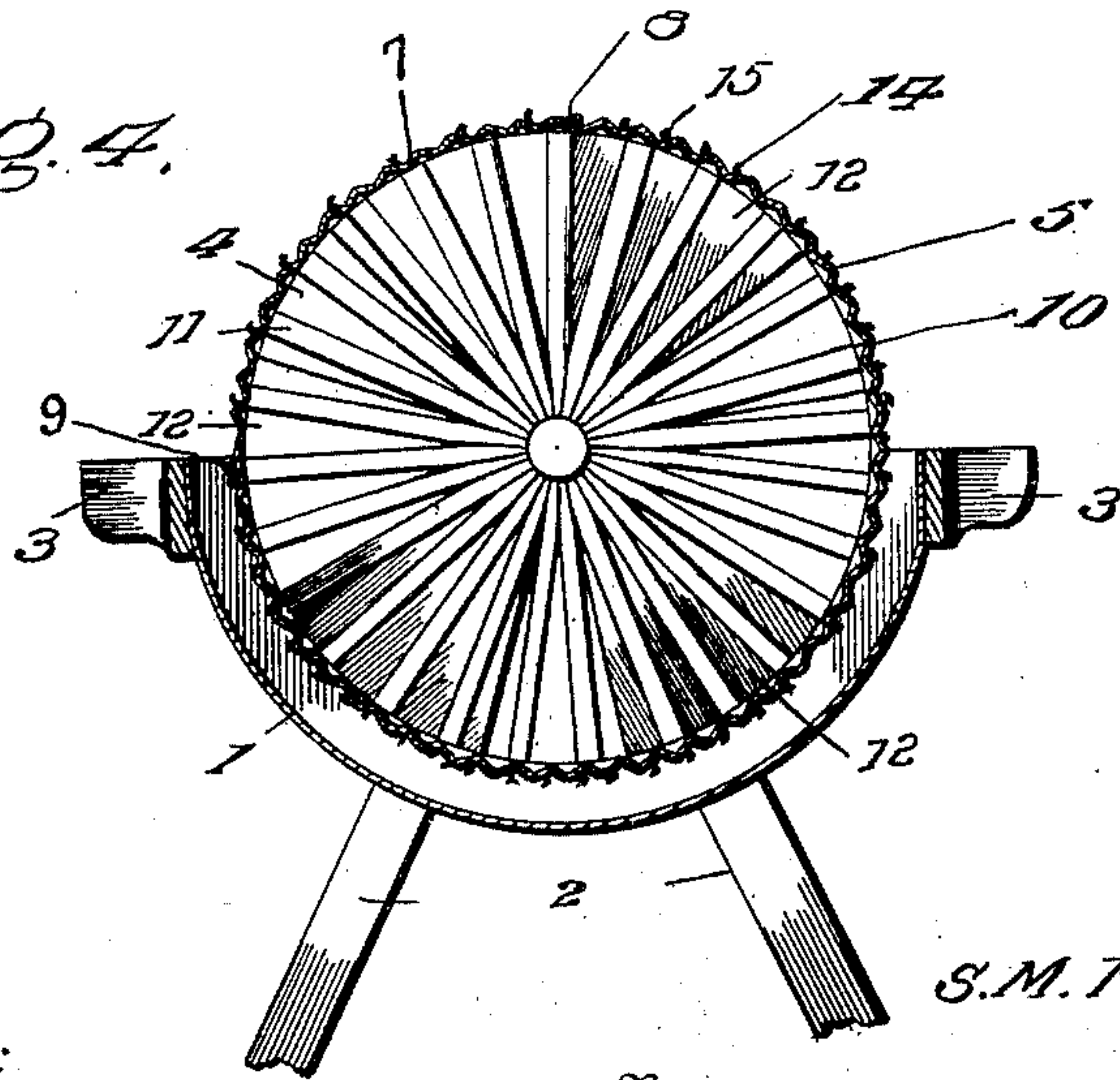
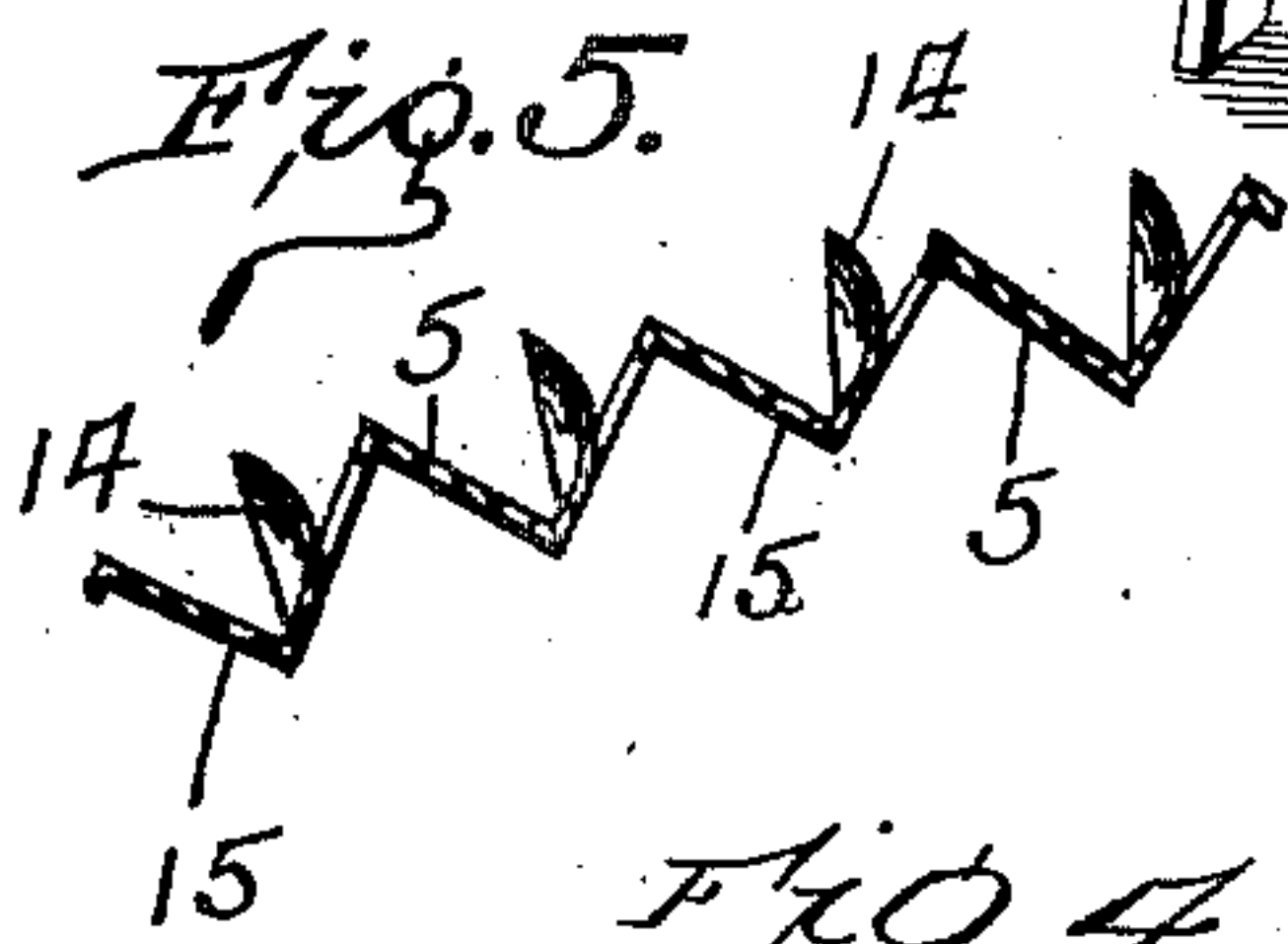
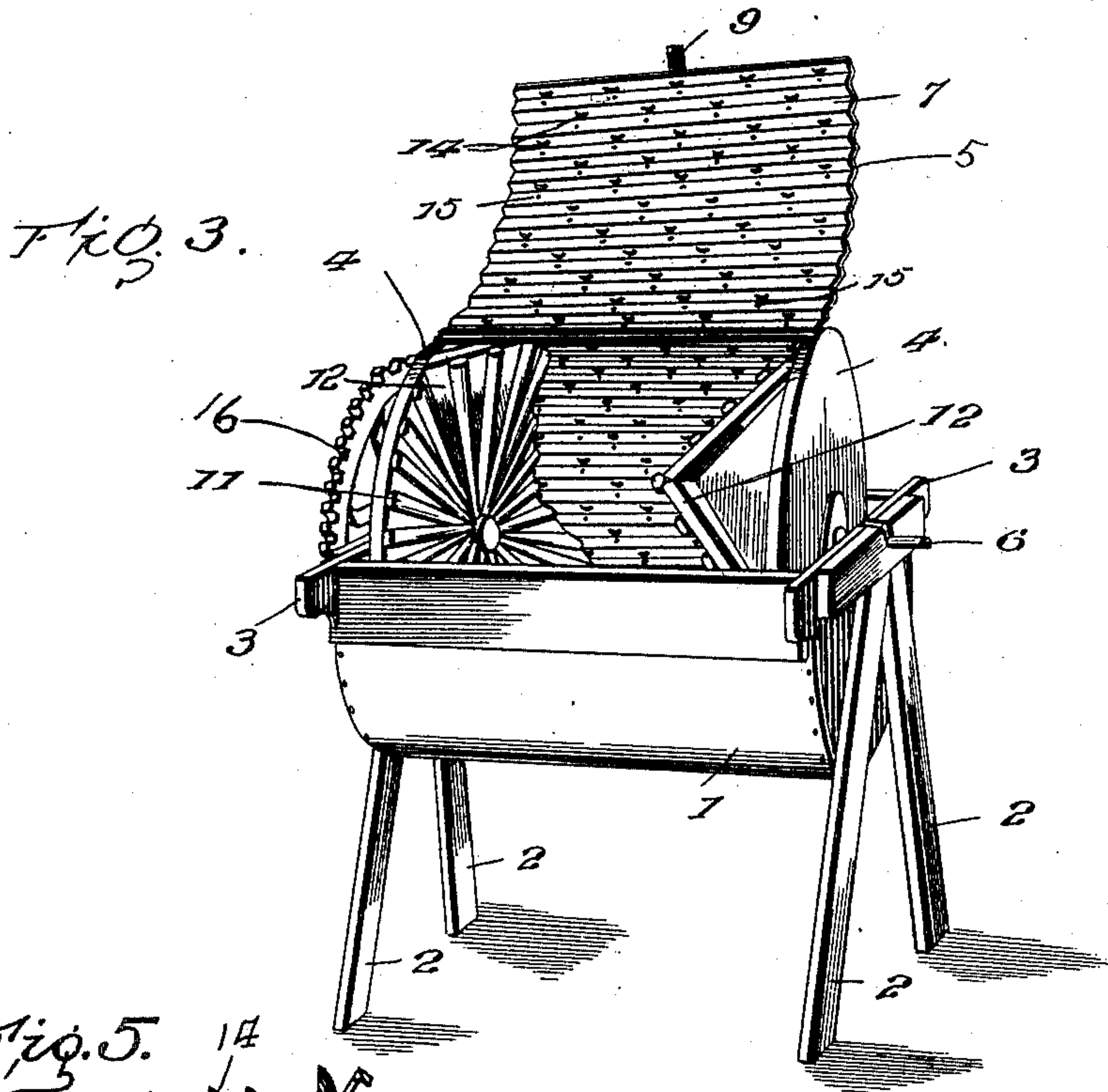
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# UNITED STATES PATENT OFFICE.

SCOTT MONROE FARWELL, OF HANOVER, ILLINOIS, ASSIGNOR OF ONE-HALF TO S. R. JEFFERS, OF LONE WOLF, OKLAHOMA TERRITORY.

## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 756,347, dated April 5, 1904.

Application filed February 14, 1903. Serial No. 143,433. (No model.)

*To all whom it may concern:*

Be it known that I, SCOTT MONROE FARWELL, a citizen of the United States, residing at Hanover, in the county of Jo Daviess and State of Illinois, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to washing-machines and comprehends certain novel features of construction and combination of parts, as will be hereinafter clearly set forth, and pointed out in the claims, my prime object being to provide a washing-machine which will possess a minimum number of elements consistent with reliable efficiency in the performance of its office.

A further object of my invention is to insure that a gentle though thorough and complete agitation of the clothing to be cleansed will be secured with the least possible exertion on the part of the operator and with the elimination of all possible damage to the clothing during the process of cleansing.

A further object, among others, is to insure a perfect aeration of the water, and thereby utilize the air as a medium in carrying on the cleansing operation or process.

Other objects and advantages will be hereinafter made clearly apparent, reference being had to the accompanying drawings, which are made a part of this application, and in which—

Figure 1 shows a perspective view of my invention complete ready for use. Fig. 2 is a vertical longitudinal section thereof. Fig. 3 is a perspective detail view showing the machine in an open position ready for the reception of the clothing to be cleansed, while Fig. 4 is a transverse section taken on the median line of the machine, and Fig. 5 is a detail sectional view of a portion of the corrugated cover.

The various coöperating elements and accessories will for convenience be referred to by numerals, the same numeral applying to a similar part throughout the several views.

In carrying out my invention I provide a body portion or reservoir proper, 1, having suitable supporting-legs 2, whereby the said reservoir or body portion may be held at the desired height. For convenience in handling the machine handles 3 may be provided for the upper side of the reservoir, whereby the machine may be readily lifted into the desired position, as will be obvious. Designed to rotate within the reservoir thus or otherwise provided is the washing-chamber, composed of the disks or end sections 4, properly secured by connecting to the peripheries thereof the corrugated, preferably metallic, covering 5, which thus extends from disk to disk, it being understood that said disks are disposed a sufficient distance apart to enable the same to turn freely within the reservoir, each disk being provided with a stub-shaft or journal 6, which finds a bearing in the central portion of the bars or handle-sections 3, thus enabling the entire washing-chamber to be freely rotated within the reservoir, preferably in the manner hereinafter more particularly set forth. I also provide the lid-section 7, hinged in place, as indicated by the numeral 8, to the edge of the corrugated covering 5 and provided with the latch or keeper 9, whereby the lid may be securely locked and held in a closed position.

The corrugated covering 5 is so connected to the peripheries of the disk-sections 4 as to leave a space or series of openings 10, through which the water may freely enter within the washing-chamber proper from the reservoir, inasmuch as the reservoir is designed to be filled with the desired quantity of preferably hot water to which is added a solution of soap or other detergent.

In addition to the corrugations upon the periphery 5 I also provide and locate interiorly in the washing-chambers a plurality of rib-sections or corrugations 11, which are secured and held in place by means of the inwardly-directed V-shaped extensions 12, the inner face of each of the disks being provided with a series of said extensions 12 so arranged as to alternate each other or occupy a staggered position, whereby the clothing will be alter-



nately moved from one end of the washing-chamber to the other when said chamber is rotated. I also provide in the covering 5 and the lid-section 7 a plurality of openings, also  
 5 designed to permit the water to more freely enter from the reservoir into the washing-chamber, insuring that the water within the washing-chamber will always rise to the level of the water in the reservoir, and to insure  
 10 that at each revolution of the washing-chamber the desired quantity of air may be introduced into the water I provide throughout the entire surface of the washing-chamber and secure exteriorly thereto a plurality of cup-  
 15 shaped devices 14, preferably struck up from the material of the covering 5 and the lid-section 7 and so formed that they will carry down with them a certain quantity of air, which will be released at the bottom of the  
 20 reservoir as the washing-chamber rotates during the performance of its office. By so forming the cup-shaped members 14, as indicated more clearly in Fig. 5, they will be filled with air as they enter the water on their  
 25 downward course, and by providing a small cooperating aperture 15 adjacent to the cup-shaped members, as indicated in Fig. 2, the air carried by the members 14, having said cooperating apertures 15, will be introduced  
 30 into the chamber, inasmuch as the air will rise up through said cooperating apertures, as will be readily understood.

In order that the washing-chamber may be freely rotated at the desired speed, I provide  
 35 upon one of the journals 6 a gear 16, designed to mesh with the driving-gear 17, which latter is mounted upon a suitable journal 18, carried by a contiguous part of the frame. The driving-gear 17 is manually controlled by  
 40 means of the handle 19, and it is obvious that considerable power may be readily applied for the purpose of rotating the washing-chamber and its accompanying load of clothing.

By the construction described in the foregoing specification it is obvious that by reference to Fig. 2 the clothing within the washing-chamber is forced to travel a zigzag or tortuous course and that said clothing is not only contacted and agitated by the plurality  
 50 of rib-sections 11, but also by the corrugations upon the covering 5, there always being assured a proper quantity of water within said chamber.

By the use of my invention I have therefore provided means for thoroughly agitating the clothing without liability of damaging the same and at the same time insure that the water will be kept in a desirable and aerated

condition by the means described for introducing air into the same, inasmuch as it is  
 60 well known that the water thus aerated and supplied with a proper quantity of soap or its equivalent will tend to keep the clothing loose and held from more closely matting together. The aeration of the water also insures more  
 65 perfect suds and foam. As the water becomes soiled the heavier particles of dirt will tend to settle to the bottom of the reservoir, dropping freely out through the apertures provided in the covering 5 and the lid-section 7, as will  
 70 be clearly obvious, and thus making it possible to utilize only the upper or cleaner stratum of water in the reservoir.

My improved washing-machine will be found to thoroughly cleanse soiled clothing  
 75 in a very short space of time, inasmuch as it has been found by practice that a few revolutions of the washing-chamber will be sufficient to complete the washing process.

Believing that the construction, operation,  
 80 and manner of using my invention have thus been made clearly apparent, further description is deemed unnecessary.

Having thus fully described my invention, what I claim as new, and desire to secure by  
 85 Letters Patent, is—

1. In a washing-machine, a reservoir and support therefor; a cylindrical washing-chamber proper, rotatably mounted in said reservoir, said chamber having a corrugated periphery, each corrugation having a plurality  
 90 of air-carrying cup-like members 14 and also having an air-releasing aperture to cooperate with each cup-shaped member as and for the purpose set forth. 95

2. In a washing-machine a reservoir and support therefor; a rotatable hollow cylindrical washing-chamber mounted in said reservoir and having a corrugated peripheral face; air-carrying cup-like members formed by being struck from the metal forming said face,  
 100 each air-carrying cup being provided adjacent thereto with the air-releasing aperture, said air-carrying cups being so located that they will carry down into the water in the reservoir a quantity of air and release the same through said aperture when said cup members are at their lowest point, substantially as specified and for the purpose set forth. 105

In testimony whereof I affix my signature in  
 110 presence of two witnesses.

SCOTT MONROE FARWELL.

Witnesses:

FRANK REFFELT,  
 JOHN ED. SMITH.