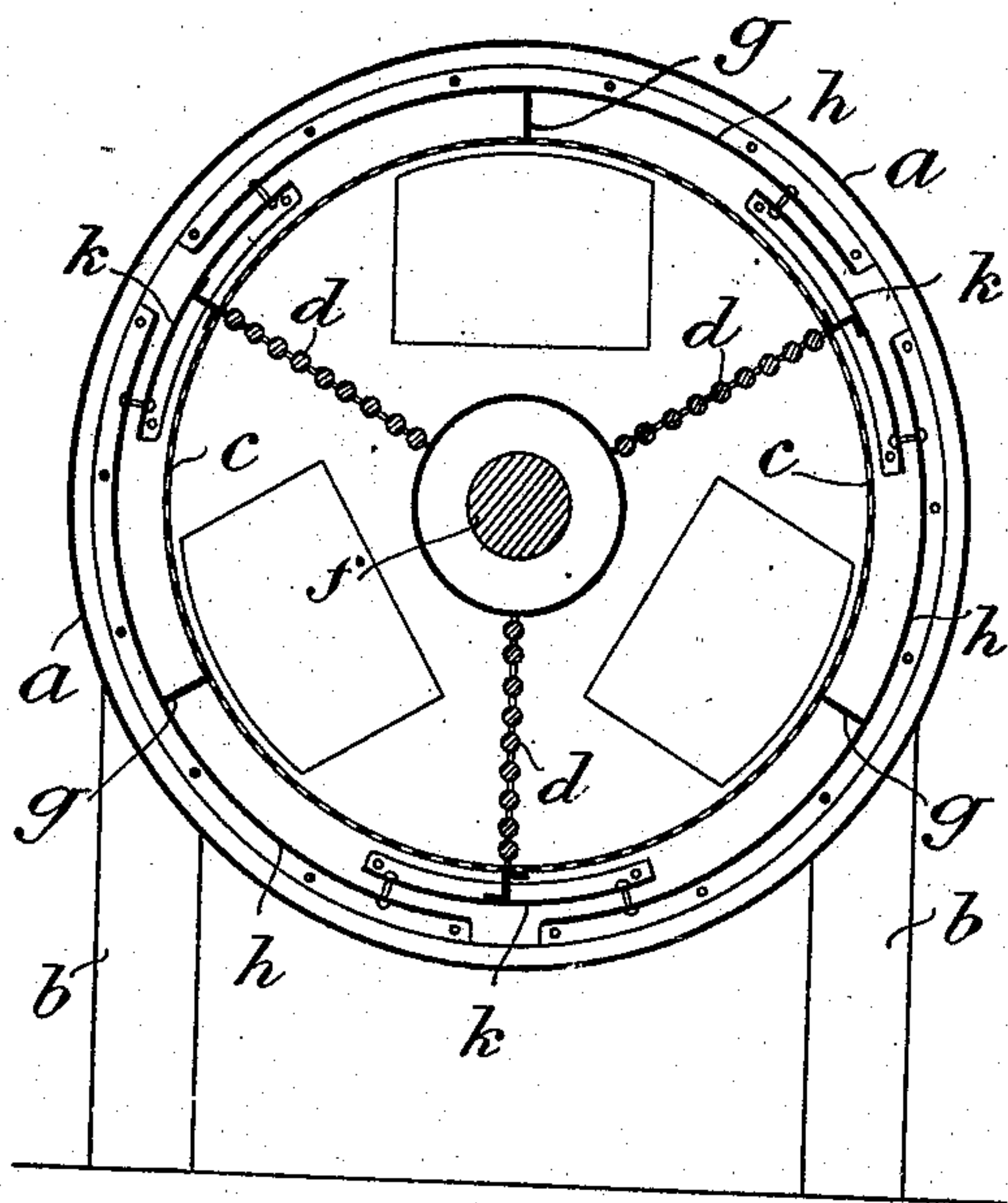


T. C. SÖRENSEN.  
 WASHING MACHINE.  
 APPLICATION FILED AUG. 9, 1907.

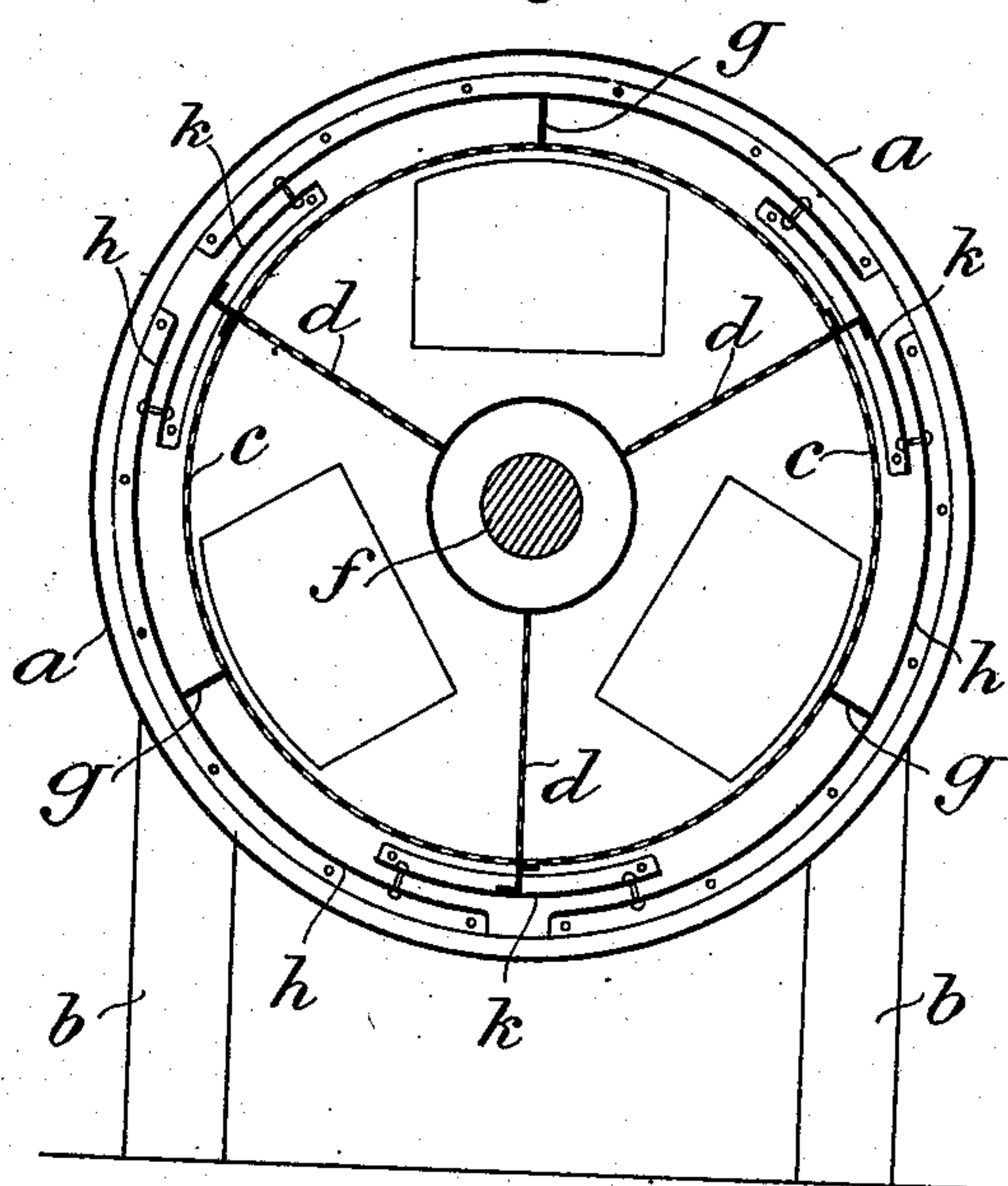
899,918.

Patented Sept. 29, 1908.

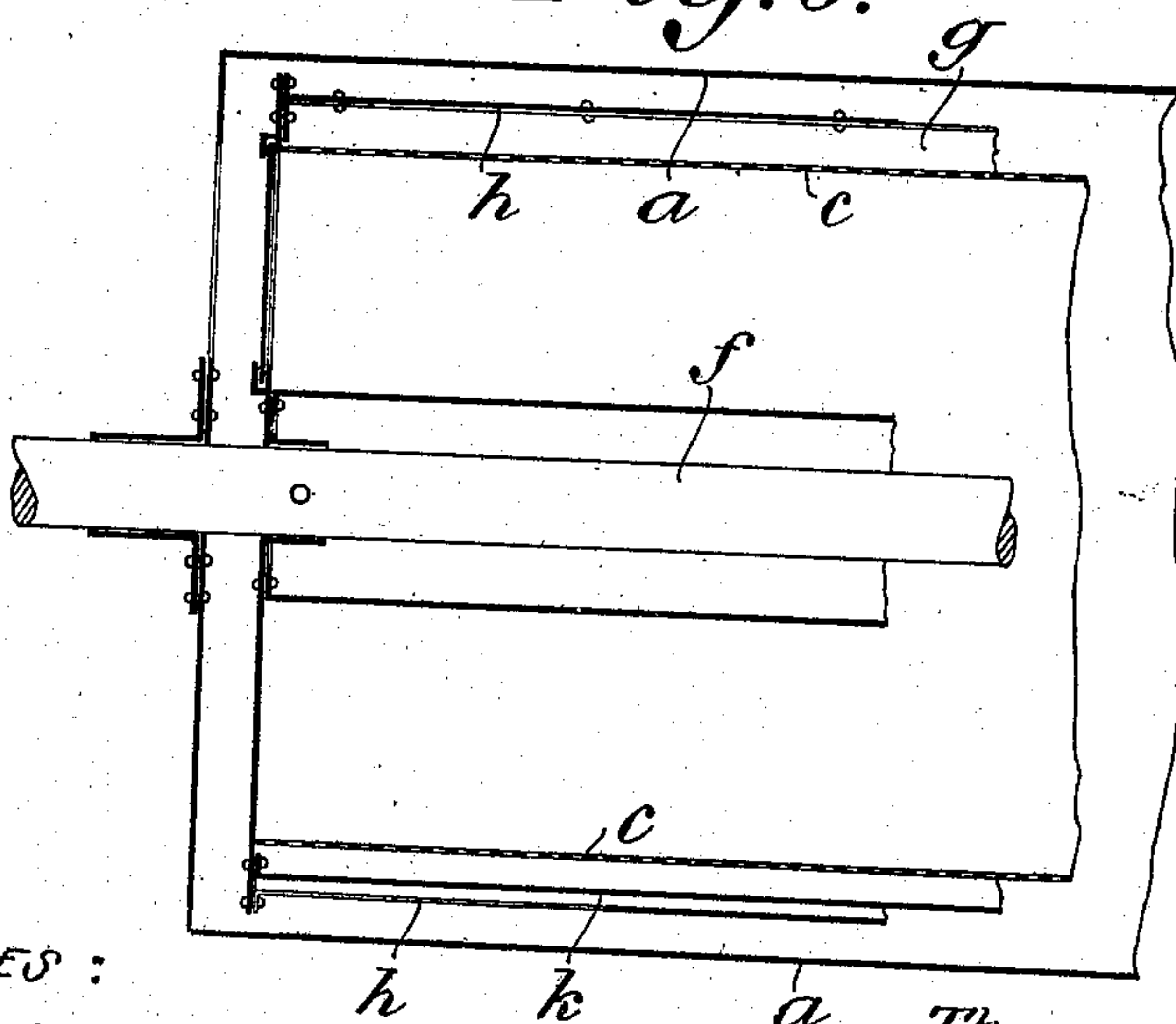
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



WITNESSES:  
*W. M. Avery*  
*J. P. Davis*

INVENTOR  
 Thomas C. Sørensen  
 BY *Mum & Co*

ATTORNEYS



# UNITED STATES PATENT OFFICE.

THOMAS CHRISTIAN SÖRENSEN, OF COPENHAGEN, DENMARK.

## WASHING-MACHINE.

No. 899,918.

Specification of Letters Patent.

Patented Sept. 29, 1908.

Application filed August 9, 1907. Serial No. 387,793.

*To all whom it may concern:*

Be it known that I, THOMAS CHRISTIAN SÖRENSEN, laundry proprietor, subject of Denmark, residing at No. 12 Thorasvej, Copenhagen, Denmark, have invented new and useful Improvements in Washing-Machines, of which the following is a specification.

The object of the present invention is an arrangement in connection with washing machines of the kind that consist of a firm casing containing the washing solution, inside which casing revolves a perforated drum provided with buckets on its outer surface, into which drum are placed the clothes to be washed.

The invention consists therein that the buckets are formed by means of curved plates arranged in the whole length of the drum and at a certain distance from same, the connection between the said plates and the drum being established by means of radial plates.

In the accompanying drawings Figure 1 is a transverse section of the improvement, Fig. 2 is a similar view showing a modified form of partition wall, and Fig. 3 is a partial longitudinal section.

*a* is the stationary outer casing containing the washing solution and resting on legs *b* or the like.

*c* is the revolving perforated drum which by means of partition walls *d* may be divided into a suitable number of spaces. The walls *d* either consist of perforated plates or they may consist of radially arranged rods provided with balls or the like. The latter construction will prevent the clothes from being damaged by the edges of the perforations. The drum *c* is turned by means of the spindle *f*. To the outer surface of the drum *c* are attached radial plates *g* carrying curved plates *h*. The plates *g* and *h* are arranged in the whole length of the drum *c* and are attached with their ends to the end plates of the drum, which end plates are of a somewhat larger diameter than that of the drum itself.

Between the curved plates *h* and the wall of the drum *c* will be formed bucket-shaped spaces which, when the drum *c* revolves, dip

down into the washing solution contained in the casing *a* and get filled with the liquid. Through the rotation of the drum the liquid will be lifted, and when the drum has turned sufficiently, the clothes lying against its inner surface will fall down, and the liquid contained in the bucket which at the time is at the top of the drum, will stream through the perforations and down upon the clothes.

In order to effect the washing by giving to the drum *c* alternately some turns to the one and some turns to the other side, the plates *h* are made to project on both sides of the plates *g* so as to form two buckets which will empty themselves alternately according to the direction in which the drum is turned.

In order to prevent the washing solution from getting out too quickly from the buckets, the free spaces between the plates *h* are partly filled up by plates *k* attached to the end plates of the drum and to the plates *h*, yet so as to leave sufficient space for the liquid to move freely.

Having now particularly described and ascertained the nature of this invention and in what manner the same is to be performed, I declare that what I claim is:

1. A washing machine comprising a casing and a rotatable drum within the casing for containing the material to be washed, spaced radial ribs arranged longitudinally of the drum on the periphery thereof, plates curved concentrically with the drum and connected by their centers to the ribs, radial partitions within the drum, said partitions being arranged between adjacent ends of the curved plates, plates curved concentrically with the drum the ends of said last named plates overlapping the ends of the first named plates and secured in spaced relation to the drum, and means connecting the ends of said plates with the ends of the first-named plates in spaced relation.

2. A washing machine comprising a casing and a rotatable drum within the casing for containing the materials to be washed, spaced radial ribs arranged longitudinally of the drum on the periphery thereof, plates curved concentrically with the drum and connected by their centers to the ribs, the edges of said



plates being spaced apart from each other,  
and plates curved concentrically with the  
drum and having their edges secured in  
spaced relation to the edges of the first-  
5 named plates the ends of the last named  
plates overlapping the ends of the first  
named plates.

In testimony whereof I have signed my  
name to this specification in the presence of  
two subscribing witnesses.

THOMAS CHRISTIAN SÖRENSEN.

Witnesses:

ERNEST BOUTARD,  
EMIL MOURITZEN.