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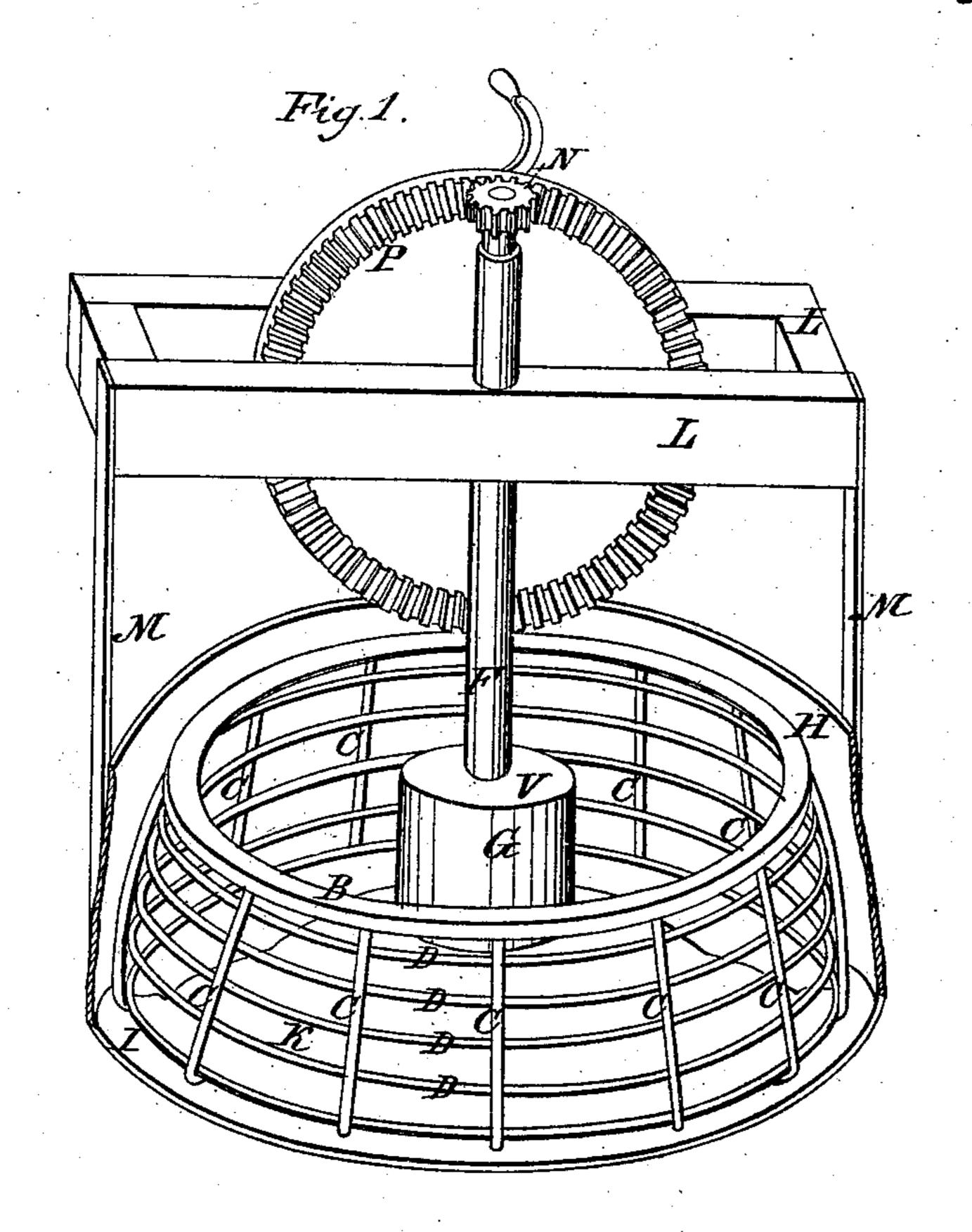
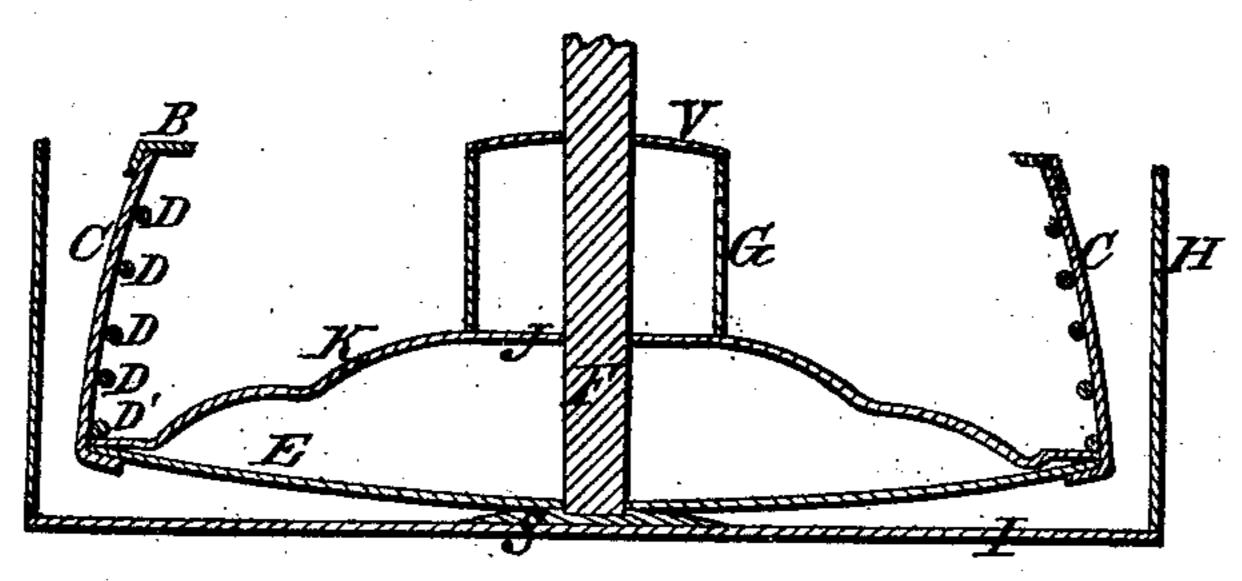


Fig. 2.



Witnesses E.D. Cramus. E.B. Granens. Inventors. N.S. Grams. Ad. bafuon. By their attorney Glehapin

## Anited States Patent Office.

## W. S. GRAVES, OF KANSAS CITY, MISSOURI, AND A. S. CAPRON, OF GRASS LAKE, MICHIGAN.

Letters Patent No. 93,708, dated August 17, 1869.

## IMPROVEMENT IN CLOTHES-DRIER.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, W. S. Graves, of Kansas City, in the county of Jackson, and State of Missouri, and A. S. Capron, of Grass Lake, in the county of Jackson, and State of Michigan, have invented an Improved Clothes-Drier; and we do bereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, and letters marked thereon, making a part of this description, in which—

Figure 1 is a perspective representation of our im-

proved clothes-drier.

Figure 2, a vertical section of the lower part.

The present invention relates to an improvement in that class of clothes-driers which expel water by centrifugal force; and

Its nature consists in the novel construction of the rotating receptacle in which the clothes are put, in combination with an outer receptacle for catching the water, as it is thrown out from them.

H represents an outer cylinder, which has a bottom, I, and supports two standards, M, which sustain a frame, L L. The object of this cylinder is to catch water as it is thrown out from the receptacle B.

This receptacle consists of a double bottom, E K. The part E being convex on the lower side, raises the wire-work B C so high above the bottom I of the cylinder H as to leave sufficient space between the two to receive what water comes from the clothes, and the part K being curved downward, to meet the part E, to which it is attached, forms a strong bottom, and readily allows water, settling down through the clothes, to pass out between the wires D C.

The periphery of the receptacle B has a truncated form, and it consists of a series of metal standards, C, fastened to the edge of the bottom K E, and to a flange, B, projecting inward; and, also, a series of metal hoops, D, soldered fast, or otherwise secured to said standards, to keep the clothes far enough from the centre of the receptacle, to have the water expelled by a rotary motion.

A cylinder, G, provided with a cap, V, is placed

around the shaft F.

This shaft is securely fastened to the bottom K E, and has a bearing in a step, S, fig. 2, and its upper end has a bearing in a frame, L, fig. 1, and supports a bevel-pinion, 5, which is driven by a wheel, P, haying a bearing in said frame.

By means of this construction and arrangement, the clothes have a tendency to press into the corner D', while, at the same time, the flange B prevents them

from rising out of the receptacle.

The principle of drying or drainage by centrifugal force is well understood; therefore, we do not claim anything in this respect; but

What we do claim, and desire to secure by Letters

Patent of the United States, is—

A clothes-drier, consisting of a double bottom, E K, eylinder G, standards C, hoops D, flange B, and cylinder H, operated by shaft F and gearing N P, as set forth.

W. S. GRAVES. A. S. CAPRON.

Witnesses:

I. C. FARGO, JNO. ANDERSON.