(No Model.)

S. DAVIS.

WOOL WASHING MACHINE.

No. 376,866. Patented Jan. 24, 1888.

FIG. 1.

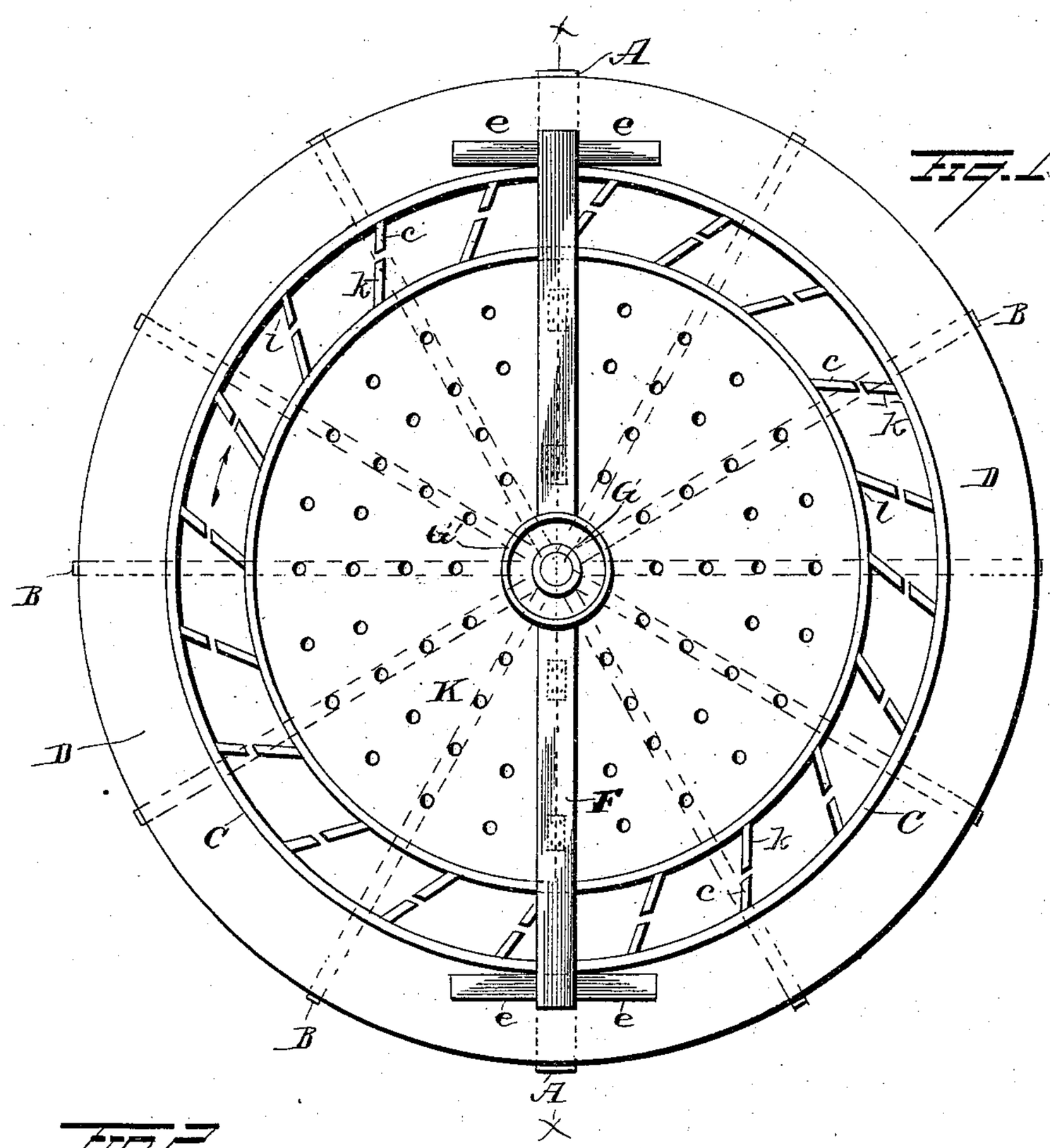
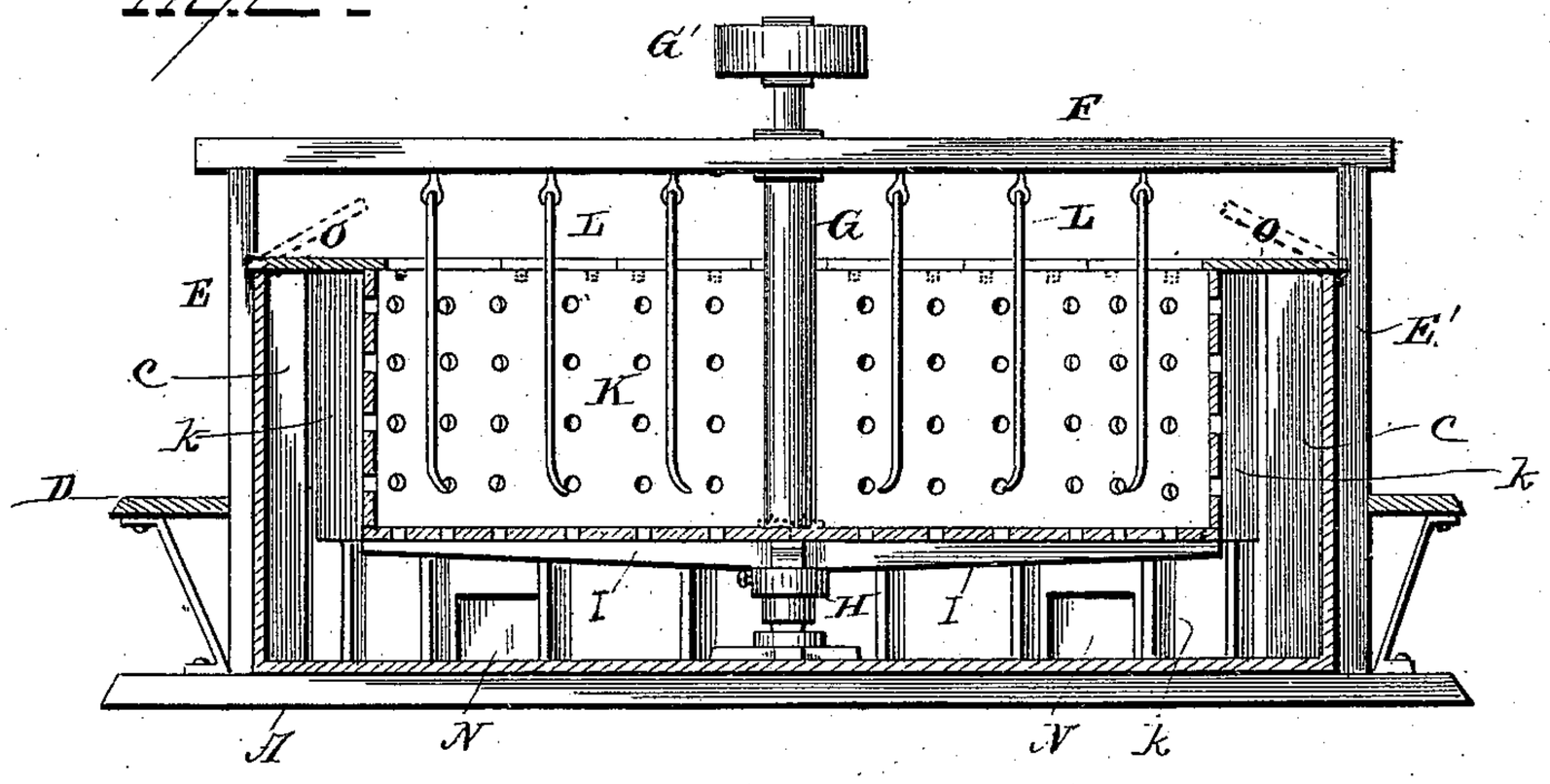


FIG. 2.



WITNESSES

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SAMUEL DAVIS, OF LAS VEGAS, TERRITORY OF NEW MEXICO.

WOOL-WASHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 376,866, dated January 24, 1888.

Application filed December 2, 1886. Serial No. 220,425. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL DAVIS, of Las Vegas, in the county of San Miguel and Territory of New Mexico, have invented certain new and useful Improvements in Wool-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 an improvement in washing-machines, and more particularly to an improvement in wool-washing machines.

The object is to provide a machine which shall effectually wash a large amount of wool in a comparatively short period of time.

A further object is to provide a machine of simple construction which a small amount of power will operate, and one in which the water and wool may be supplied or removed without necessitating a stoppage of the machine.

With these ends in view my invention consists in certain features of construction and combinations of parts, as will be hereinafter fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view with a portion of the bottom of the inner tank removed. Fig. 2 is a vertical section through line *x x* of Fig. 1.

A represents a sill extending beneath the middle portion of the machine, which, together with similar but smaller sills, B, radiating at suitable distances apart laterally from the longitudinal center of the sill A, forms a base which sustains the weight of the machine. An outer tank, C, preferably round in horizontal section, is seated on these sills, and the circular platform D is formed around the tank C on the ends of sills A and B.

Uprights E E′ extend upward from the ends of the sill A, the former being held rigidly in place by braces *e*. Across the tops of these uprights, and rigidly secured thereto, is a cross-beam, F, in the longitudinal center of which the upper end of the rotary shaft G is journaled. A pulley, G′, is secured to the shaft above the cross-beam F.

The shaft G is provided with a gudgeon at its lower end, which is stepped in the main base-sill A. A collar, H, is rigidly secured to or formed integral with the shaft G at a short distance from the lower end, and a series of arms, I, radiate therefrom perpendicular to the shaft G. This particular construction, however, is not absolutely necessary, as the radiating arms might be employed without the collar, or a widened collar without the arms might be used, the effect being materially the same in either construction. Upon these radiating arms I a smaller and similar-shaped tank, K, to the one already described is seated, with the shaft G as its axis. Both the walls and bottom of this tank K are perforated to admit of the free passage of water in and out, and the bottom formed in hinged sections, which may be opened upwardly for convenience in cleaning the outer tank.

Secured to the outside of the inner tank, K, with their outer edges extending forward in the direction of the tank's rotation at an angle of about forty-five degrees, are the wings *k*, which correspond in number to similar wings, *c*, on the inner wall of tank C, the latter extending approximately in opposite direction as the wings *k*, and each pair, one of which is on the outer tank and one on the inner, would have the general appearance of a single wing when the tanks assume the position shown in Fig. 1 were they not sufficiently separated to easily pass each other as the inner and smaller tank, K, revolves. The effect of these wings is to prevent the water in the larger tank, C, from following the smaller tank, K, in its swift revolution, and by this particular arrangement of the wings the water in the outer tank is forced through the perforations into the inner tank.

Hooks L extend into the wool-washing receptacle on tank K, their object being to stir and turn the wool so that it can be effectually washed throughout. These hooks L are preferably loosely suspended from the cross-beam F in a manner to admit of their being easily moved up and down or laterally by the force of the wool. Faucets or gates N at the bottom of the outer tank, C, allow the dirt and water to be drawn off.

The covers O, that are hinged to the edge of the tank C when open, hang in sections on the outside of the tank, and when closed they extend just over the edge of the washing-tank K, serving the double purpose of preventing the water between the tanks from splashing over the edge and also preventing any wool from dropping between the tanks.

To operate the machine, power is applied to the pulley G', driving the shaft G, which rotates the washing-tank K. A person standing on the circular platform D attends to the feeding to and removing of wool from the tank K, through which the water from the outer tank, G, dashes in and out, while the dirt tends to drop through the perforations in the bottom of the tank. The person in charge is supplied with a suitable fork, by means of which he feeds or removes the wool or stirs it while in the tank without varying the motion of the machine.

It is evident that slight changes might be resorted to in the form and arrangement of the several parts described without departing from the spirit and scope of my invention; hence I do not wish to limit myself to the particular construction herein set forth; but,

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

1. In a wool-washing machine, the combination, with a pair of tanks, one mounted on a revoluble shaft within the other, of a suitable frame and set of movable depending hooks loosely suspended therefrom and adapted to stir the contents of the revoluble tank, substantially as set forth.

2. In a wool-washing machine, the combination, with a tank and a platform surrounding this tank, of a smaller tank adapted to revolve within the larger tank and a set of doors hinged to the larger tank, adapted to cover the space between the two tanks, substantially as set forth.

3. The combination, with a pair of tanks, one mounted on a revoluble shaft within the other, the smaller tank having angular-shaped projections on its outer sides, and also having perforations in its side and bottom, of a set of depending hooks adapted to stir the contents of the smaller tank as the latter rotates, substantially as set forth.

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

SAMUEL DAVIS.

Witnesses:
A. B. SAGER,
J. C. GRUNER.