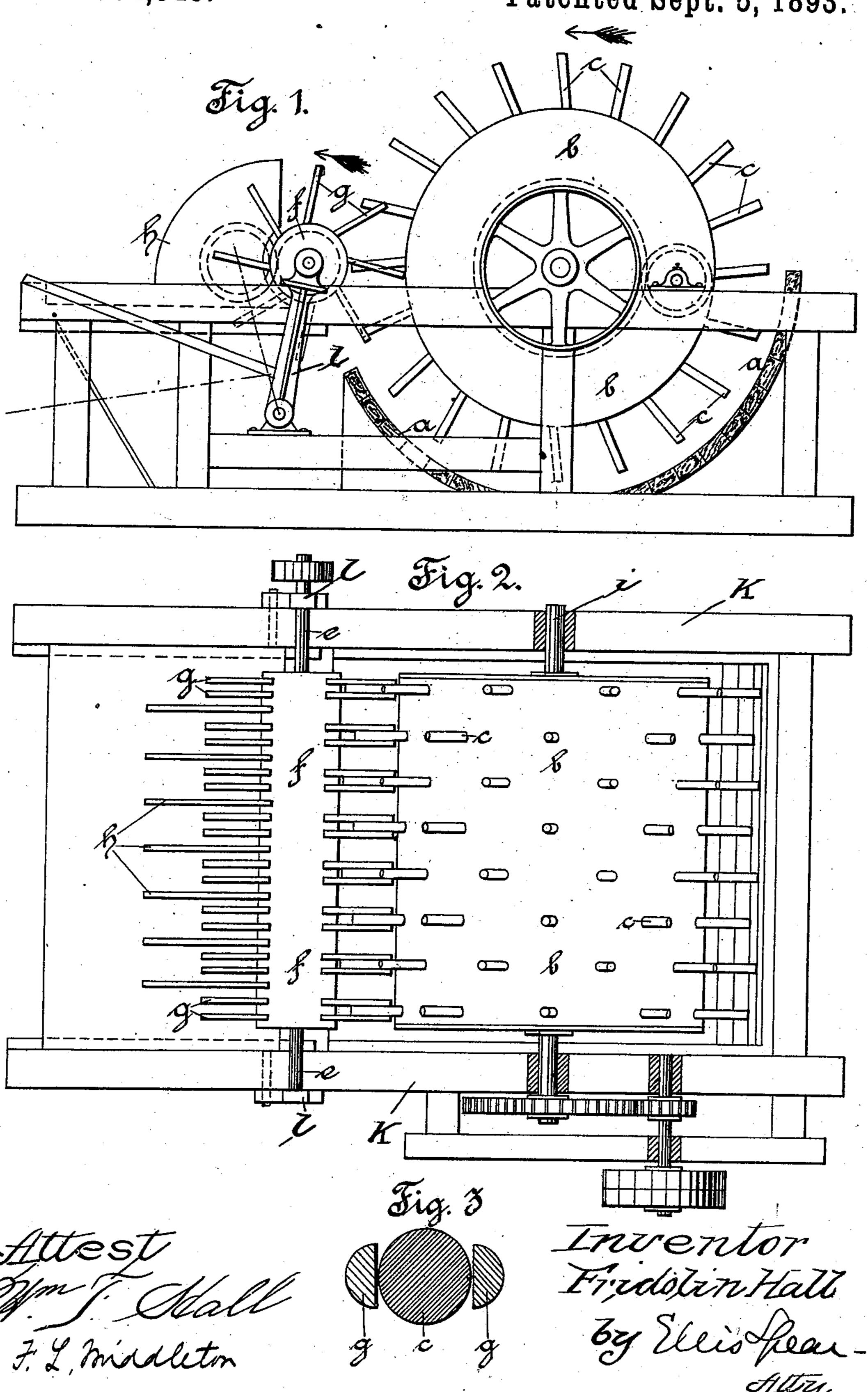
F. HALL.
HAIR CLEANING MACHINE.

No. 504,348.

Patented Sept. 5, 1893.



## United States Patent Office.

FRIDOLIN HALL, OF DONAUESCHINGEN, GERMANY.

## HAIR-CLEANING MACHINE.

SPECIFICATION forming part of Letters Patent No. 504,348, dated September 5, 1893.

Application filed October 20, 1892. Serial No. 449,483. (No model.)

To all whom it may concern:

Be it known that I, FRIDOLIN HALL, a subject of the Grand Duke of Baden, residing at Donaueschingen, in the Grand Duchy of Baden, in the German Empire, have invented certain new and useful Improvements in Hair-Cleaning Machines, of which the following is a specification.

Hair and bristles have, until the present time, been cleaned in a dry manner, and when performed in this manner the operation has proved very disagreeable from the dust arising therefrom, so that workmen could be obtained only at a high price. These disadvantages are obviated by the present invention, hereinafter described and illustrated in the

accompanying drawings in which—
Figure 1, is a side elevation of the machine, partly in section. Fig. 2, is a top view of the same. Fig. 3, is a section through the arms

c and g.

a represents a round wooden tub in which the hair to be sorted and cleaned is placed, after it has been filled with fresh water which 25 is renewed constantly by a pump or other suitable means. In this tub revolves a drum on which are a number of radially arranged arms or rounds c, by means of which the hair in the water is properly stirred. This drum 30 is mounted on a shaft i, journaled in the frame k, connected by gear wheels to any source of power. The hair hangs itself onto the arms and by this means is drawn through the clear water, until it hangs clean on the arms in loose 35 bundles, as the continued movement of the arms causes them to act as lifting levers. On the second shaft e, journaled in the arms l, by which it can be moved backward and forward, is secured a smaller drum f, on which also are

a number of arms or projections which are 40 however thinner than the arms on the main drum. The arms of the small drum are so arranged in parts that each arm of the main drum will pass between two arms or projections of the small drum, see Fig. 3. As both 45 drums move toward the outside in the direction of the arrows, the hair which hangs upon the arms of the larger drum is taken off upon the arms of the smaller drum and is deposited into the reservoir which is divided into a series of compartments h, from which the requisite quantity may be taken as desired.

What I claim-

1. A hair cleaning machine comprising a tub or receptacle, a drum provided with a series of arms rotating in said receptacle, a supplemental drum mounted upon pivoted supporting arms and provided with a series of pairs of arms for removing the hair from the main drum, and a receiving reservoir, substantially as described.

2. In combination with the tub or receptacle, the drum rotating therein provided with a series of rounds or arms, the supplemental drum carrying a series of pairs of arms semicircular in cross section with their flat faces facing and adapted to pass in close proximity to the arms of the main drum, to remove the hair therefrom, and a compartment adapted to receive the hair from the supplemental 70 drum, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

FRIDOLIN HALL.

Witnesses:
GEORGE GIFFORD,
LEONHARD KOST.