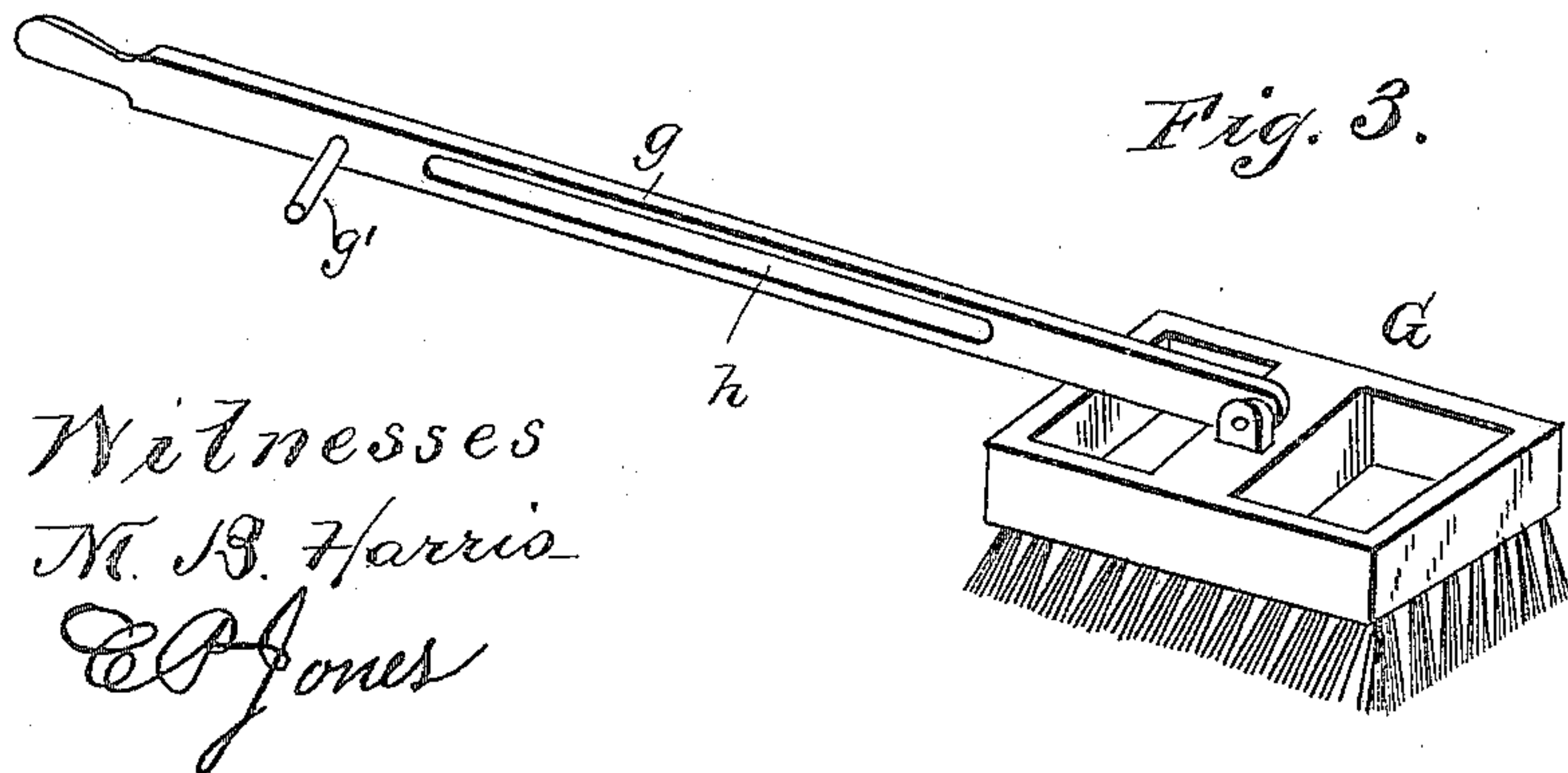
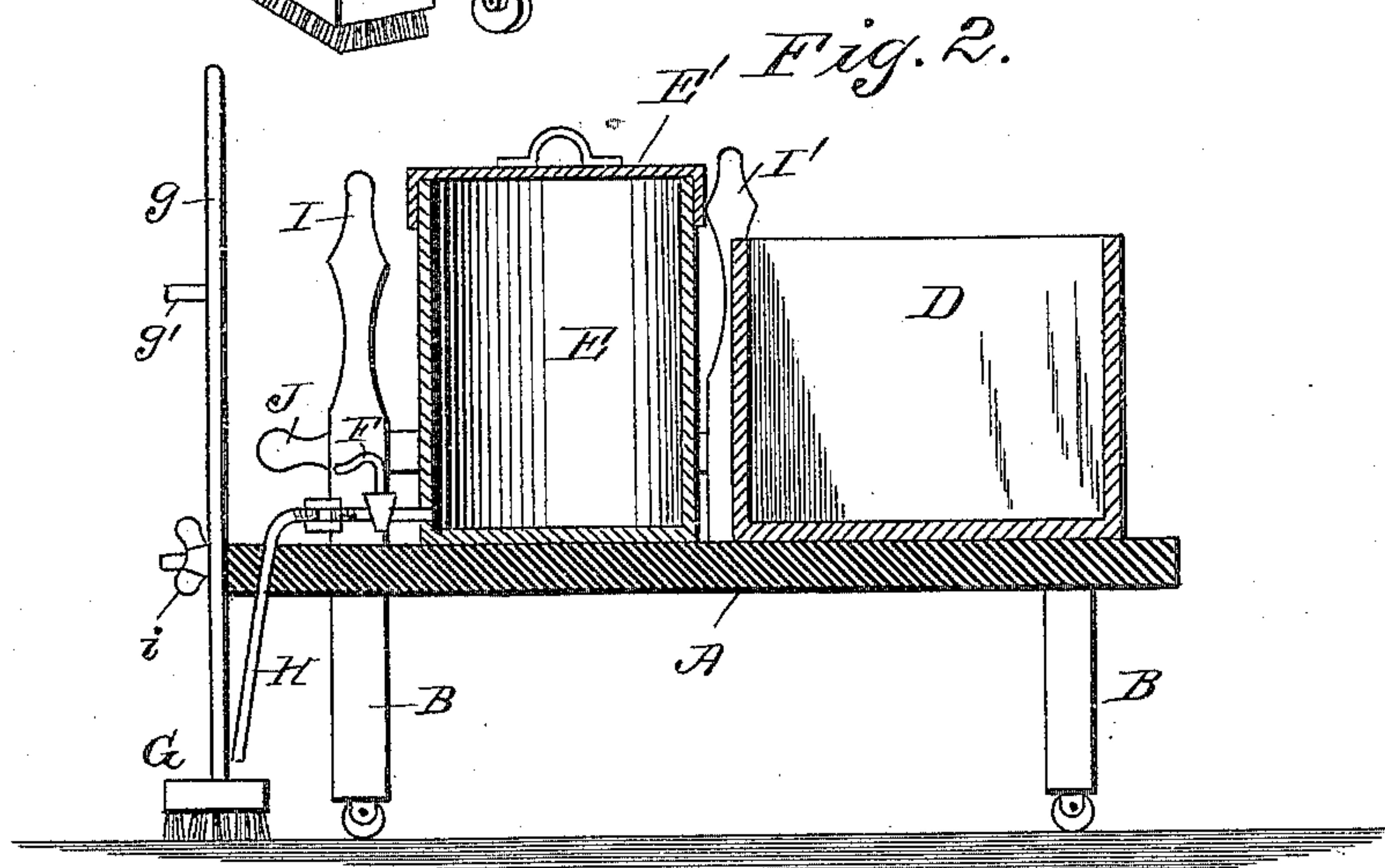
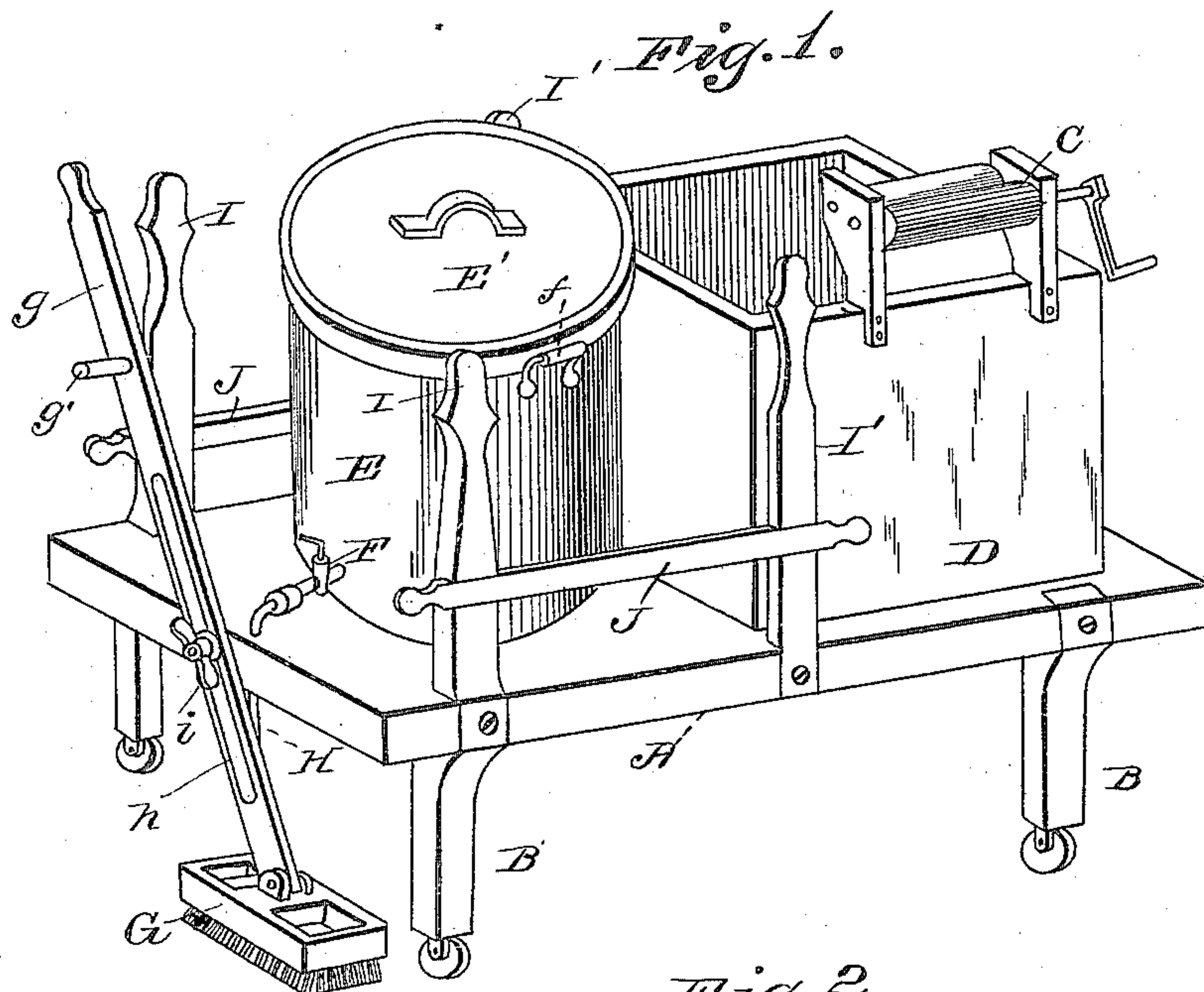


(No Model.)

L. GRAHAM.
FLOOR WASHING MACHINE.

No. 446,445.

Patented Feb. 17, 1891.



Witnesses
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UNITED STATES PATENT OFFICE.

LIZZIE GRAHAM, OF PORTLAND, OREGON.

FLOOR-WASHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 446,445, dated February 17, 1891.

Application filed May 24, 1890. Serial No. 353,055. (No model.)

To all whom it may concern:

Be it known that I, LIZZIE GRAHAM, a citizen of the United States, residing at Portland, in the county of Multnomah and State of Oregon, have invented certain new and useful Improvements in Floor - Washing Machines; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention has relation to certain new and useful improvements in floor-scrubbing machines; and it consists of the parts and details of construction, as will hereinafter be more fully pointed out in the drawings, and described and claimed in the specification; and the object of my invention consists in providing a new and improved machine which will permit of floors being easily, conveniently, and rapidly scrubbed or washed with the least amount of trouble and labor being expended in the accomplishment thereof.

Referring to the drawings forming a part of this application, Figure 1 is a perspective view of my improved machine; Fig. 2, a longitudinal section; and Fig. 3 is a detail view of the scrubbing-brush and lever for working the same.

Similar letters of reference are used to designate corresponding parts through the entire specification and drawings.

The letter A represents the ordinary platform or floor of my improved scrubbing-machine, which platform rests or is supported above the floor or from the ground at any suitable height by means of the legs B. These legs have apertures formed in the bottoms thereof to permit of the reception of casters, by means of which the machine may be moved or rolled from place to place. These casters are secured in position in any desirable manner, so as to prevent their falling out when the machine is lifted from the floor.

To the rear of the platform A, I secure the rectangular tank D, and to the upper edge of said tank is secured the mop-wringer C. The object of said tank is to receive the dirty water from the mop after the same is passed

through the mop-wringer, used in drying the floor after scrubbing. By the use of this wringer and tank I also obviate the necessity of the hand being used for the purpose of wringing out the dirty water from the mop, and by having the same attached to the platform of my scrubbing-machine avoid the use of a separate bucket being used for this purpose. This tank may be either permanently or removably secured to the platform A; but when permanently attached thereto an outlet or cock (not shown) is provided to permit of the outflow of the dirty water.

E indicates the hot-water reservoir removably secured to the forward end of the platform A, and which, by preference, I make of a cylindrical form. The top of said reservoir is provided with the usual cover E'. At or near the lower end thereof is provided the faucet F, which permits of the flow of the retained liquid from the reservoir. The outer end of said faucet is made screw-threaded, for the purpose hereinafter more fully shown. I have shown no particular means for fastening or securing said reservoir to the platform A; but this may be accomplished in any well-known manner. At or near the top of the cylindrical reservoir I secure the handles f, to permit of the ready removal of the same from the platform or the placing on of the same.

G represents the scrubbing-brush, to which is attached the operating-lever g, which lever is provided near its upper end with the handle g'. A vertical slot h is formed near the bottom or lower end of said lever. The operating-lever is pivotally secured to the front end of the platform A by means of the thumb-screw i, which passes through the vertical opening formed in the operating-lever. By means of the vertical opening h and the thumb-screw i adjustability may be given to the scrubbing-brush. The top or back of the scrubbing-brush G is made hollow or open, thereby forming a receptacle for the soap to be used in scrubbing.

The letter H indicates the metallic pipe, which passes through the platform A near the front end thereof and extends above and below the same. The lower end of said pipe rests over the soap-receptacles formed in the back of the scrubbing-brush, and the upper

end, as aforesaid, extends through the platform A. The outer or protruding end of the pipe H has a movable screw-threaded collar secured thereon, which permits of the same
 5 being connected to the screw-threaded portion of the faucet F, extending from the reservoir E.

The letters I I' represent the standards, the forward two of which are extensions of the
 10 forward legs of the machine.

J J are horizontal cross-bars secured to the standards I I', and which extend beyond the standards I, forming handles by which the machine is moved from one part of the floor
 15 to another.

The operation is as follows: Water having first been introduced into the reservoir E and the pipe H connected to the faucet F by means of the screw-threaded collar mounted
 20 thereon, the faucet is then turned so as to allow the flow of water from the reservoir, through the connecting-pipe H, onto the back of the scrubbing-brush, whence it will flow into the soap-receptacles, and from thence to
 25 the floor. Motion is then imparted to the scrubbing-brush by means of the operating-lever g, which works upon the thumb-screw i. The hot water (with which the cylindrical reservoir is filled) running over the soap, and
 30 the motion imparted to the scrubbing-brush, will cause the formation of suds without bringing the soap in direct contact with either the floor or the brush, thereby saving considerable soap, which heretofore has been wasted;
 35 also avoiding the use of soap or suddy-water

in the reservoir, hence allowing the latter, when the device is not in use, to be removed and utilized for other purposes, as the water used therein is always clean.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination, with the hot-water reservoir of the herein-described scrubbing-machine, of the scrubbing-brush provided with
 45 the open top forming soap-receptacles, the operating-handles, and the connecting water-pipe, substantially as herein set forth.

2. In a floor-scrubbing machine, the combination, with the movable platform, of the
 50 vertically-adjustable operating-lever and the scrubbing-brush, substantially as set forth.

3. In a floor-scrubbing machine, the combination of a movable frame, a vertically-operating lever provided with a longitudinal slot,
 55 a thumb-screw passing through said slot into the end of the frame, a hot-water reservoir placed upon the movable frame, a scrubbing-brush pivotally secured to the lower end of the operating-lever, said brush provided with
 60 top soap-receptacles, and a water-pipe leading from the hot-water reservoir, so as to discharge the water into the soap-receptacles of the brush, substantially as set forth.

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

LIZZIE GRAHAM.

Witnesses:

EVA E. GRAVES,

JOHN RICHARDSON.