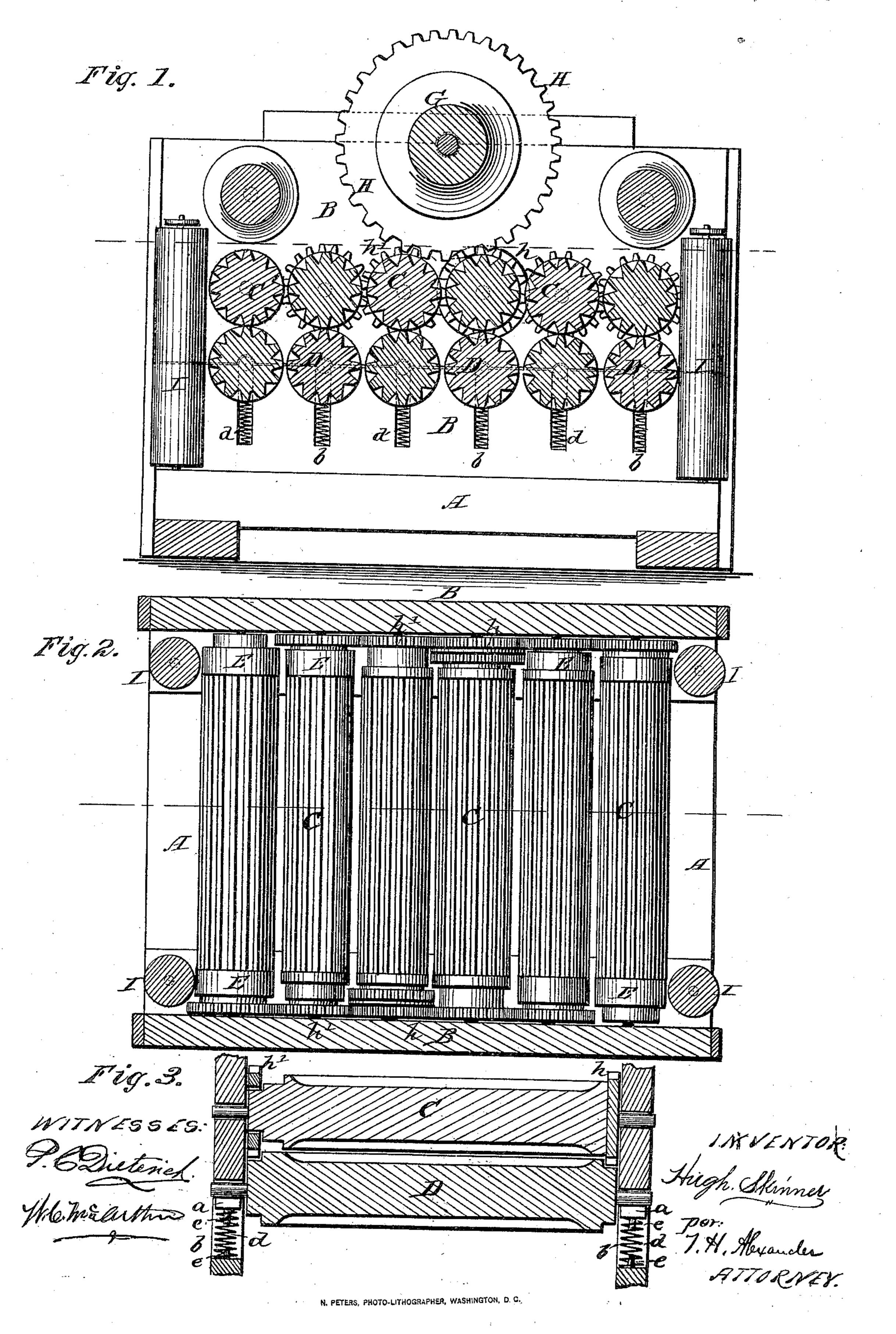
## H. SKINNER.

## WASHING-MACHINE.

No. 172,512.

Patented Jan. 18, 1876.



## UNITED STATES PATENT OFFICE

HUGH SKINNER, OF DECATUR, MICHIGAN.

## IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 172,512, dated January 18, 1876; application filed December 10, 1875.

To all whom it may concern:

Be it known that I, HUGH SKINNER, of Decatur, in the county of Van Buren and State of Michigan, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

The nature of my invention consists in the construction and arrangement of a washingmachine, as will be hereinafter more fully set

forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side elevation of my washingmachine, with the front side removed to show the interior thereof. Fig. 2 is a plan view of the same. Fig. 3 is a detailed cross-section.

A represents the bottom or bed of the machine, on which are secured two parallel upright side pieces, B B, connected at the top by rounds or cross-bars to be kept firm and steady. In these sides are two series of rollers, C and D, the upper series of rollers C having stationary journal-bearings, while the lower series have their journals supported in boxes a, which are placed in vertical slots bin the side pieces, and held up by means of springs d, said springs being held in place by pins e e, as shown in Fig. 3. The rollers C and D are all fluted longitudinally for a suitable distance, leaving a smooth-surfaced head, E, at each end of each roller, so as to make friction also.

Above the rollers is located a large roller,

G, having a cog-wheel, H, on each end. This roller forms the driving or operating roller, and operates on the washing-roller in the following manner: The two middle rollers of the top series have each a pinion, h, secured to it, but at opposite ends, and the two cogwheels H H mesh with said pinions, as well as with loose pinious, h', on the opposite ends of said two rollers. The remaining rollers of the upper series are connected along each side of the machine by alternate loose and fast pinions, so that all the rollers of said series. will revolve in the same direction rollers D revolve by friction. At each end of the machine, on each side, is an upright roller, I, which prevents the clothes from getting into the gearing.

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is—

1. The combination, in a washing-machine, of a lower series of yielding rollers, D, and an upper series of rollers, C, provided on opposite ends with alternate loose and fast pinions, and operated by the cog-wheels H H, on the roller G, substantially as and for the purposes herein set forth.

2. The combination of the box or frame A B, the two series of rollers C D, driving-roller G, and vertical side rollers I, all constructed substantially as and for the purposes herein

set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

HUGH SKINNER.

Witnesses:

H. W. McCabe,