## W. G. NUTSFORD & W. GLASGOW. Rotary Hair Brush.

No. 166,027.

Patented July 27, 1875.

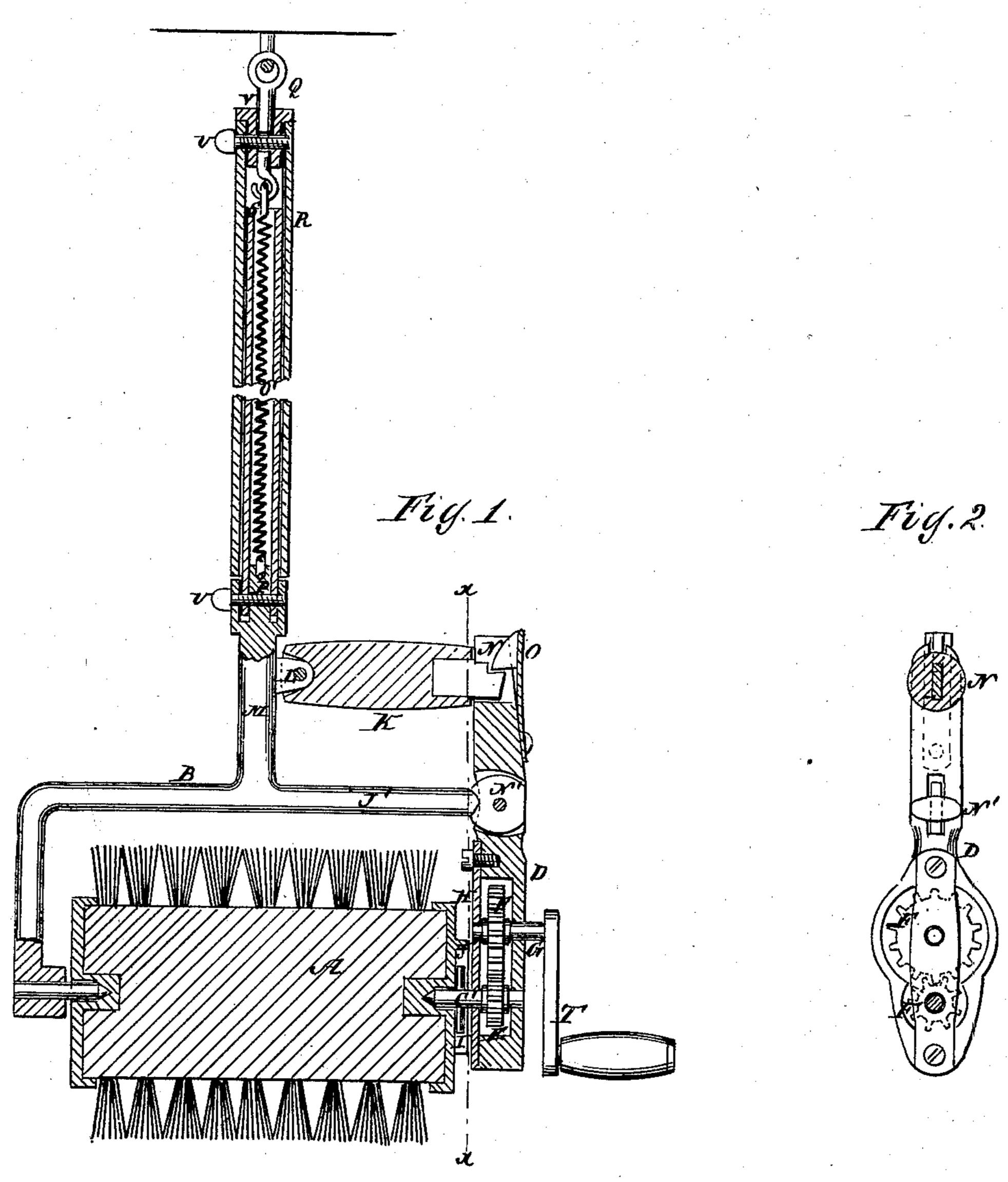
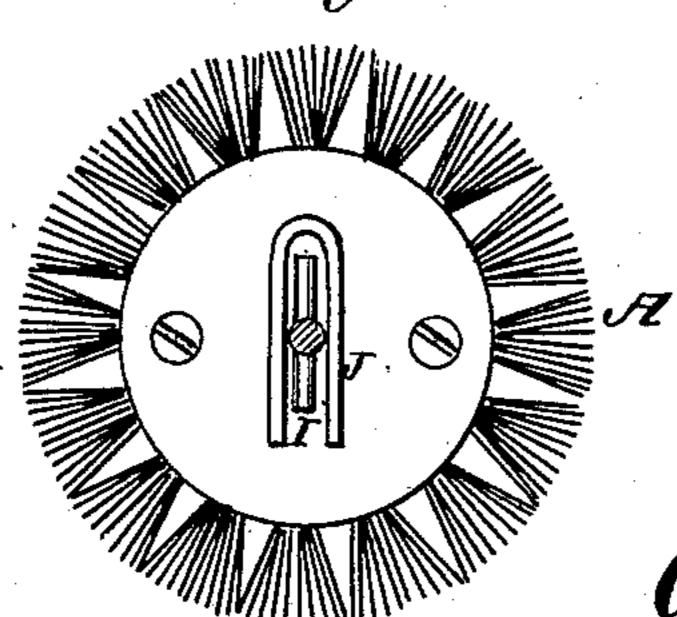


Fig. 3.



WITNESSES:

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ATTORNEYS.

## UNITED STATES PATENT OFFICE

WILLIAM G. NUTSFORD AND WILLIAM GLASGOW, OF CHICAGO, ILLINOIS:

## IMPROVEMENT IN ROTARY HAIR-BRUSHES.

Specification forming part of Letters Patent No. 166,027, dated July 27, 1875; application filed April 17, 1875.

To all whom it may concern:

Be it known that we, WILLIAM G. NUTS-FORD and WILLIAM GLASGOW, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Rotary Hand Hair-Brushes, of which the following is a specification:

The present invention relates to rotary hairbrushes which are operated by hand; and consists in the construction of the frame and

parts connected therewith.

Figure 1 represents a longitudinal section of the entire apparatus for operating the brush. Fig. 2 is a vertical section of Fig. 1, taken on the line x x. Fig. 3 is an end view of the brush, looking from the line x x.

Similar letters of reference indicate corre-

sponding parts.

A represents the rotating hair-brush, which is confined in the frame B by pivots C C'. D is an upright branch of the frame, which carries the gear-wheel E, which is on the pivot C', and the gear-wheel F, which is on the crankshaft G. These gear-wheels mesh together. The pivot-bearing C' is confined in the upright D by means of a collar on each side of the wheel, and both gears revolve in a recess in the upright, which is covered by the inside plate H. I is a pin through the pivot C'. J is a wire or rod, doubled, as seen in Fig. 3, to form a projecting flange on each side of the pivot-pin I, by means of which motion is imparted to the brush. The upright D is hinged by a joint-pin, N', to the end of the bar J' of the frame, and is kept in position by the handle K, which is hinged by a joint-pin to ears L of the staff M of the frame. The outer end of the handle is fastened to the upper end of the upright by a snap fastening, N. When the spring-hook O is pushed back the handle may be raised, and then the end of the upright may be pushed inward, and the pivotpin C' is withdrawn from the head of the brush. To the staff M are attached two tubes,

Rand S, which slip together as a telescopic joint. In the inner tube S is a spring, O', attached at one end to the base of the staff M, as seen at P, and at the other end to the hook Q, which latter is attached by a hook to the ceiling of the room. This spring O' may be of rubber, or be a spiral wire, as may be desired, and sufficiently strong to support the weight of the frame and brush. The telescopic joint gives the brush full play as to height, while the inner tube S turns within the outer tube as a swivel-joint, so that the brush may be turned and revolved in any position to be applied to all parts of the head. T is the crank, by means of which the brush is revolved. UU are screws, the lower one of which secures the inner tube S to the base M, and the upper one secures the outer tube R to the hook Q and head - piece V. This hook Q may be connected with a horizontal rod by means of a sliding ring, instead of to a hook in the ceiling, to allow the brush to be moved from chair to chair.

We do not confine ourselves to the precise form and arrangement of the parts shown, as variations may be made in many ways without departing from our invention.

Having thus described our invention, we claim as new and desire to secure by Letters

Patent—

1. The upright D, snap-fastening NO, and joint N', gear-wheels E and F, crank T, and pivot-pin C', in combination with a rotary hand hair-brush, the pivoted handle K, and frame B, for the purposes described.

2. The pin I and flanges J J, in combination with the brush A, having pivot C', for

the purposes described.

WILLIAM G: NUTSFORD. WILLIAM GLASGOW.

Witnesses:

C. N. SWORD, GEO. W. SILSBY.