J. G. DINKELBIHLER.

Rotary-Brush.

No. 223,842. Patented Jan. 27, 1880.

FIG. 1.

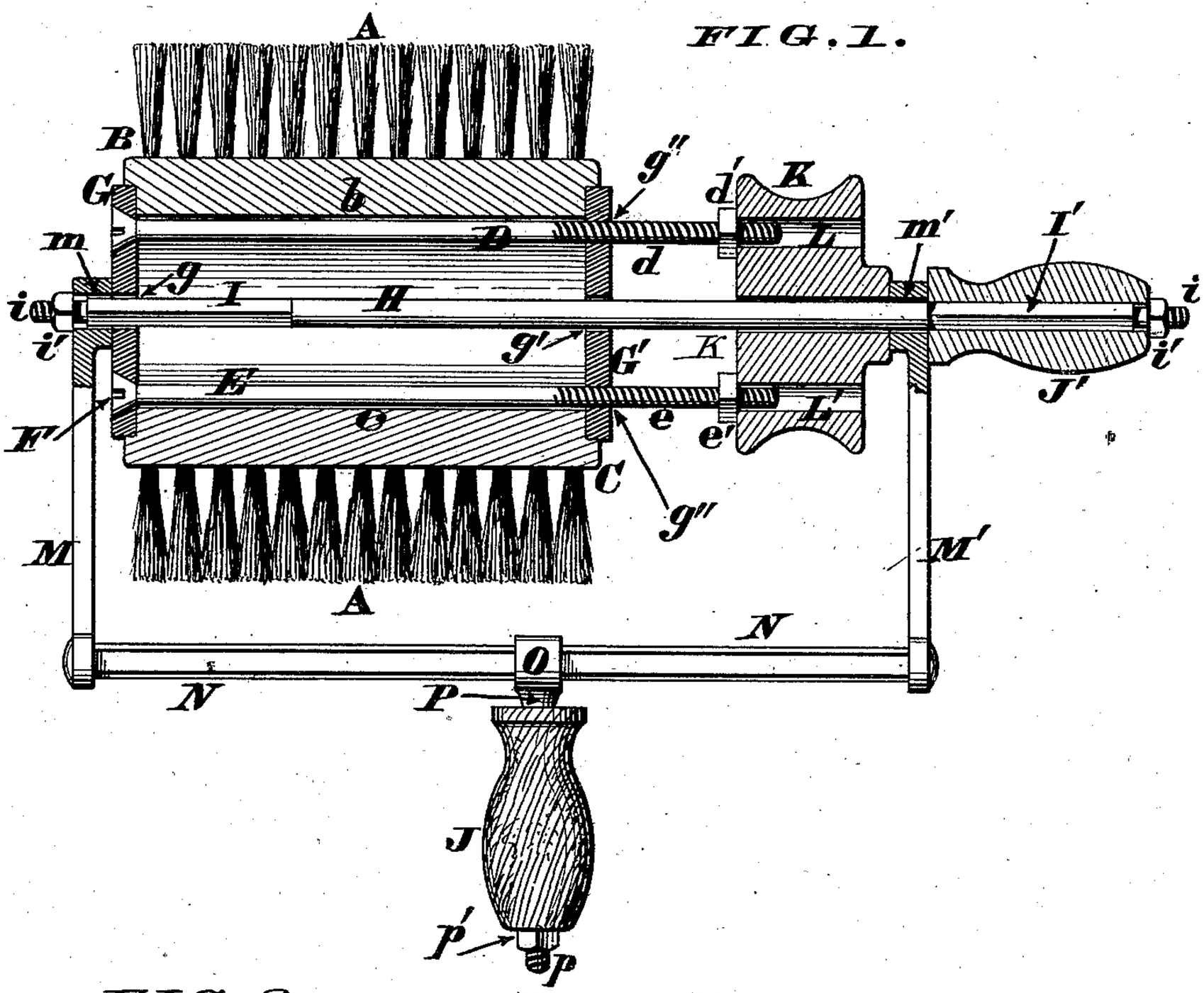
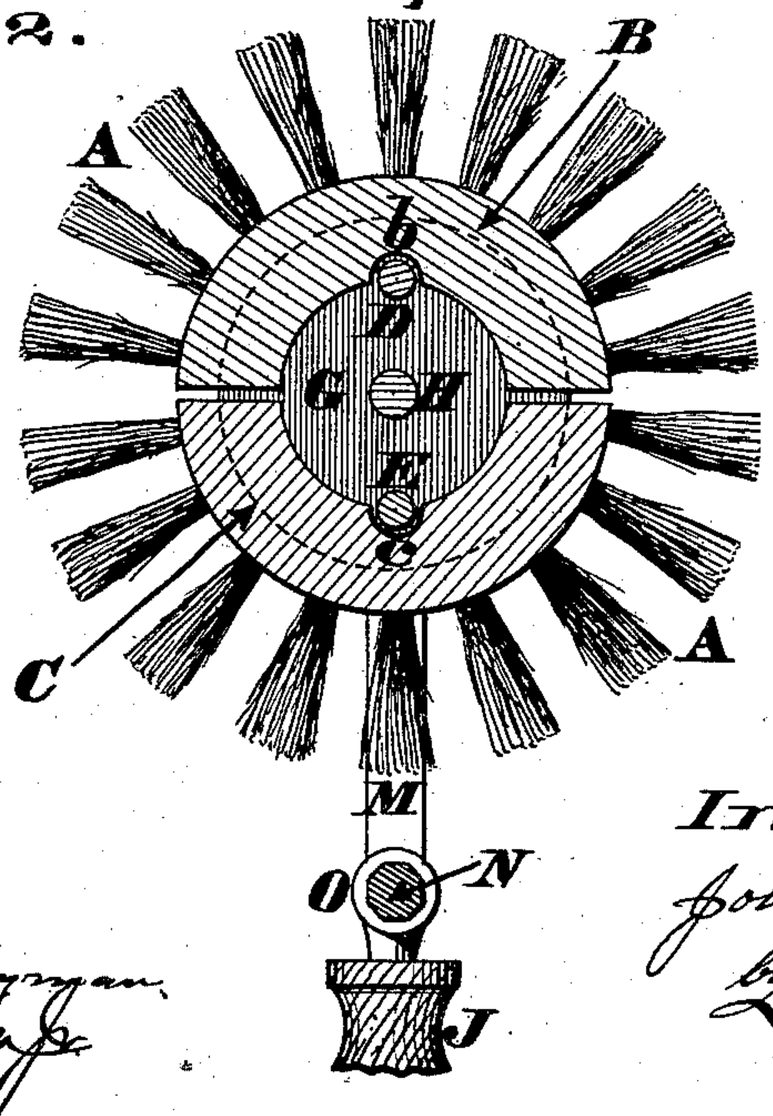


FIG. 2.



Attest.

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UNITED STATES PATENT OFFICE.

JOHN G. DINKELBIHLER, OF CINCINNATI, OHIO.

ROTARY BRUSH.

SPECIFICATION forming part of Letters Patent No. 223,842, dated January 27, 1880.

Application filed May 19, 1879.

To all whom it may concern:

Be it known that I, JOHN G. DINKELBIHLER, of Cincinnati, Hamilton county, Ohio, have invented certain new and useful Improvements in Rotary Brushes, of which the following is a specification.

My invention consists in journaling a rotary brush on an axial shaft, which shaft is applied to a light frame having a pair of handles so disposed as to enable the apparatus to be used with the greatest facility for cleaning horses and other animals, the details of said brush and its supporting-frame being hereinafter fully described, and pointed out in the claims.

In the annexed drawings, Figure 1 is an axial section of my brush, taken in the plane of the shaft; and Fig. 2 is a vertical section of the same, taken transversely of said shaft.

The bristles A, which may be composed of any suitable materials, are preferably secured in two semi-tubular brush-blocks, B C, which blocks are grooved internally at *b c*, respectively, to permit the passage of tie-rods D E, of which rods two or more may be employed. These rods are furnished with heads F, and are threaded at *d e*, to engage with nuts *d' e'*, the object of said rods being to clamp securely to blocks B C the disks or brush-heads G G', which heads are pierced centrally at *g g'*, respectively, to revolve freely on the axial shaft or spindle H. Of these heads, the one G' is provided with two female screws, *g''*, wherewith are engaged the threaded portions *d e* of tie-rods D E.

Shaft H has two non-circular arbors, I I', and screw-threaded terminations *i*, which latter receive nuts *i'*. Adapted to fit tightly on either one of these arbors are handles J J', of such shape as to be easily grasped by the operator.

K represents the driving-pulley, capable of being run with an elastic belt from any suitable motor, said pulley being pierced with an axial aperture, *k*, through which passes freely the spindle H. L L' are two other apertures in said pulley, into which apertures are inserted the threaded ends of tie-rods D E. M M' are two parallel arms of a light but rigid frame, said arms being perforated at *m m'*, respectively, to admit the shaft H. N is a square or other non-circular stretcher of frame M M', and O is a runner adapted to slide along said stretcher, but incapable of rotating around the same. This runner has a shank, P, threaded at *p* to receive a nut, *p'*, wherewith either one of the handles J or J' may be applied to the runner O.

My brush is ready for use as soon as an elastic band is passed around pulley K and the motor started, the rotation of said pulley imparting a positive motion to the blocks B C, on account of the tie-rods D E being inserted in said pulley; but no rotation of handle J' occurs, because this handle is applied to the square arbor I' of shaft H. Consequently the blocks B C revolve freely on shaft H, and, as a result of this arrangement, the brush can be manipulated much more readily than could be done if the handle J' rotated, as this latter construction would be very inconvenient for the operator. As the handles J J' are disposed at right angles with reference to each other, it is evident the frame M M' N serves as a lever wherewith the brush can be controlled with such power as to insure a perfect cleaning of the animal, the driving-pulley K being situated so far from the blocks B C as to enable the brush to work around the animal's neck and legs, and without bringing any part of the apparatus in contact with his body.

It will thus be seen that the provision of said frame enables the brush to be used for a great variety of purposes, and without adding materially to the cost of the apparatus.

I claim as my invention—

1. In a rotary brush, the combination of blocks A B C, heads G *g* G' *g'*, axial shaft H, driving-pulley K *k*, and tie-rods D *d* E *e*, which rods traverse the threaded perforations *g''* of head G' and are inserted in apertures L L' of pulley K *k*, nuts *d' e'* being employed for maintaining said pulley out of contact with head G', as described.

2. For combination with a rotary brush, the within-described detachable frame M *m* M' *m'*,

united by a non-circular stretcher, N, whose runner O has a shank, P *p p'*, to receive either one of the handles J or J', as herein specified.

3. An improved rotary brush consisting of the blocks A B C, tie-rods D *d d'* E *e e'*, heads G *g* G' *g' g''*, shaft H I I' *i i'*, handles J J', driving-pulley K *k* L L', and the detachable frame M *m* M' *m'* N, whose runner O has a shank, P *p p'*, wherewith either one of said handles J J' may be secured to said frame, for the purpose herein specified.

In testimony of which invention I hereunto set my hand.

JOHN G. DINKELBIHLER.

Witnesses:
JAMES H. LAYMAN,
RANKIN D. JONES.