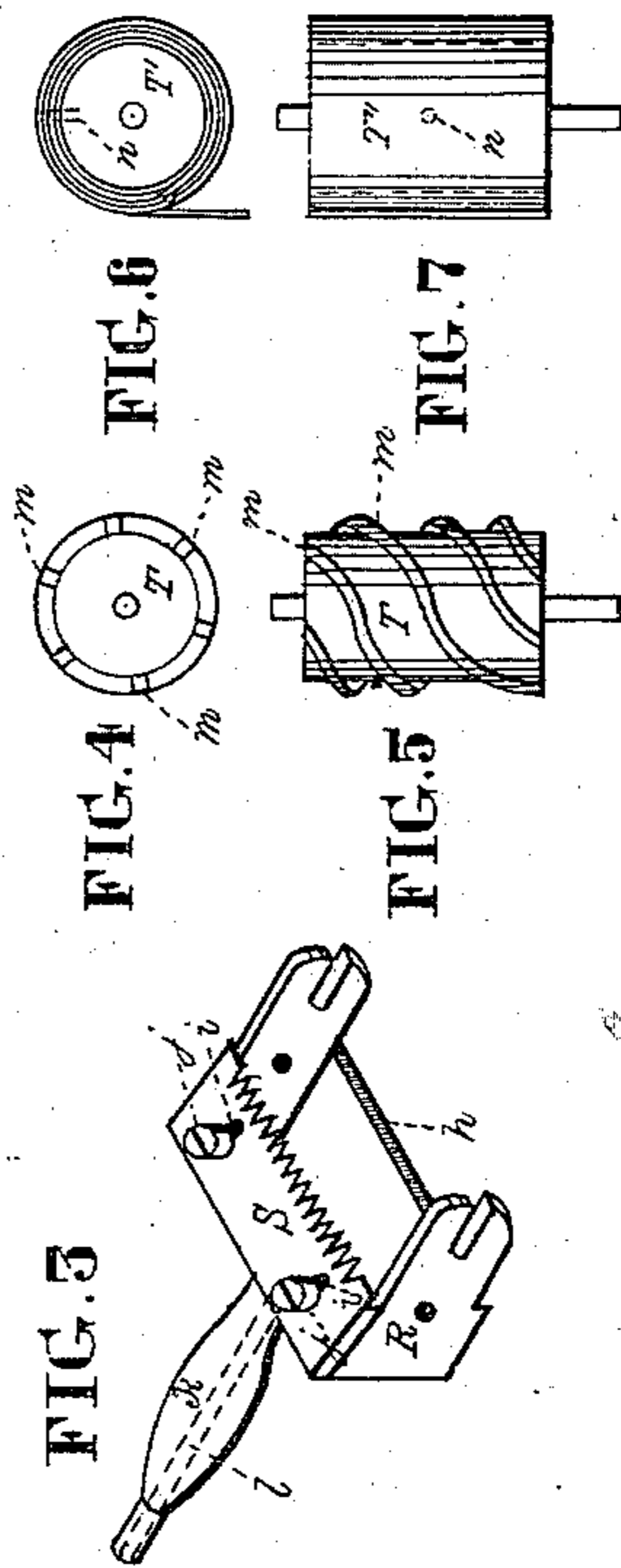
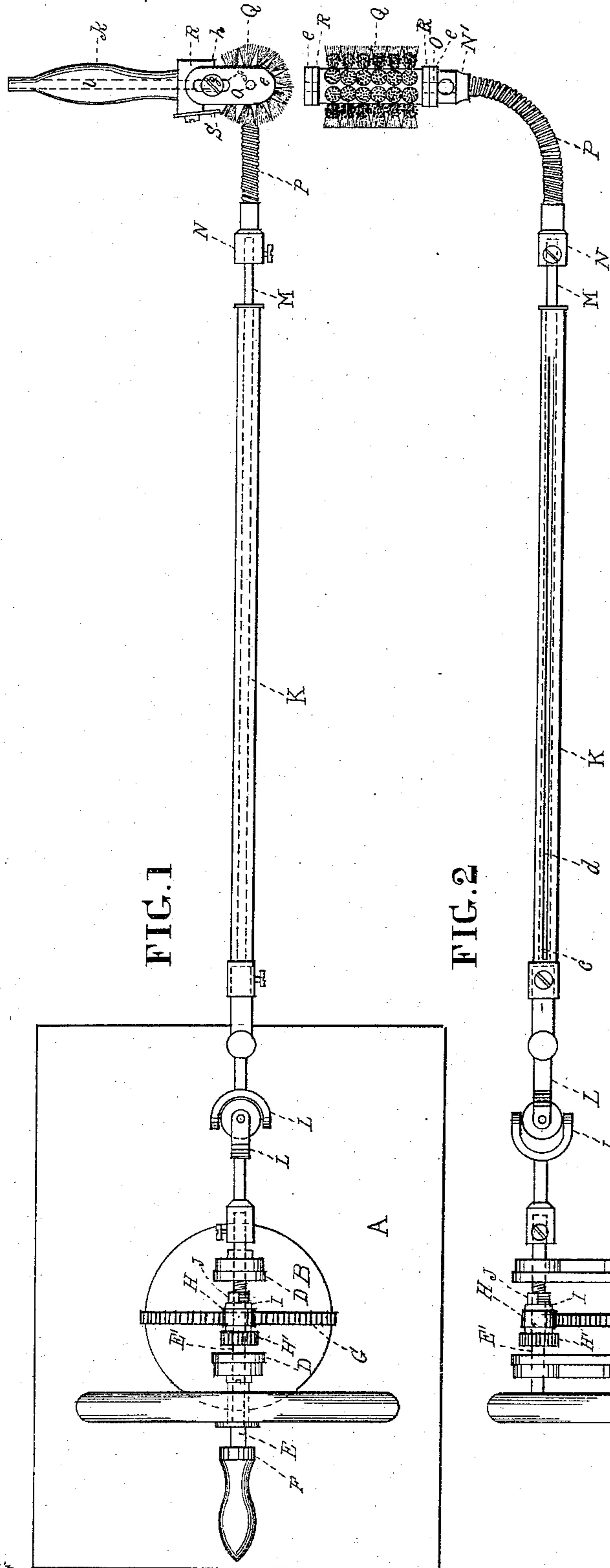


W. T. DAVIS.
Grooming Apparatus.

No. 157,798.

Patented Dec. 15, 1874.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM T. DAVIS, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN GROOMING APPARATUS.

Specification forming part of Letters Patent No. 157,798, dated December 15, 1874; application filed July 31, 1874.

To all whom it may concern:

Be it known that I, WILLIAM T. DAVIS, of the city and county of Philadelphia, in the State of Pennsylvania, have invented a Horse-Cleaning Machine, of which the following is a specification:

This invention has relation to an apparatus for grooming horses; and consists in the novel construction and application of devices, as hereinafter described, and as specifically set forth in the claim.

In the accompanying drawings, Figure 1 is a plan view of the machine. Fig. 2 is a side elevation of the same. Fig. 3 is an isometrical view of the case R, the brush Q and plates *e e* being removed therefrom. Figs. 4 and 5 are a side and end views of the cylinder T, provided with elastic strips *m*. Figs. 6 and 7 are like views of the cylinder T', provided with a drying-cloth.

Like letters of reference in all the figures indicate the same parts.

A is a board or bed-plate, which is confined to a portable stand. (Not shown in the drawings.) The stand is provided with rollers, so as to be readily removed to any part of the yard or stable for convenience in operating the machine. B is a stand, which is confined to the bed-plate A by means of the central screw-rod C, which rod is free to turn in any desired horizontal position. The head *a* of the rod confines the horizontal part *b* of the bifurcated standard D to the stand B. E is a driving-shaft, which has its bearing in the standard D. Motion is given to it by means of the crank F, or otherwise. G is a wheel on the driving-shaft E, and H a gum wheel on the sleeve I, which is confined on the revolving shaft E'. The teeth of the wheel G press into the periphery of the gum wheel H sufficiently to prevent slipping, so that the shaft may be revolved by the revolutions of the shaft E without the noise consequent on rigid gearing, and thus prevent the frightening of the horse. The sleeve I is also provided with a pinion, H', which may be brought into connection with the wheel G when desired, instead of the gum-wheel H, by shifting the position of the sleeve. J is a screw-nut for shifting the sleeve on the shaft. If desired, the wheel G may be shifted instead of the sleeve

I. K is a tube, connected at one end to the shaft E' by means of the universal couplings L L. The rod M passes into the tube at its other end, and is free to move backward and forward therein. It is prevented from turning by the pin *c*, which projects from the rod, sliding in the longitudinal slot *d* of the tube. N is a fitting connected with the outer end of the rod M, and N' a fitting connected with one end of the shaft O. To the inner ends of the fittings N and N' are connected the ends of the twisted wire P, so as to give a flexible movement to the shaft O, to admit of its assuming variable positions in accommodation to any desired position of the cylindrical brush Q on the shaft O. R is a case, in which is held the brush Q, the journals of the shaft O being held in the outer ends of the plates *e e*, which are adjustable by means of slots *f*, the plates being confined by means of screws *g*, which pass through the slots. The adjustment is for setting the brush, so that the ends of the bristles shall gently strike the edge of the scraper *h* as the brush revolves to free them from dandruff and dust. S is a comb for freeing the ends of the bristles of hairs which collect thereon as the brush revolves. The comb is adjustable to the brush by means of the slots *i i*, through which the set-screws *j j* pass into the case R. The handle *k* of the case R has a central passage, *l*, through which the dirt which is caught by the case is forced by a current of air set in motion by the revolution of the brush Q.

The operation is as follows: The operator takes hold of the handle *k* of the case R with one hand, and bears the brush against the horse, passing the brush along from one place to another until the whole surface of his body and limbs to be cleaned is gone over; the flexibility of the connection of the shaft O with the rod M, the sliding movement of said rod, and the universal-joint connection of the tube K with the shaft E' combined, admitting of any movement desired for the guiding of the brush. When a horse is in a high state of perspiration so as to require scraping, the brush Q is removed and the revolving scraper (shown in Figs. 4 and 5) put in its place. The scraper consists of the cylinder T, provided with india-rubber or other strips, *m*, spirally arranged in grooves in its periphery. The

shaft O' is placed in the position previously occupied by the shaft O. When the horse is scraped the cylinder T is removed, and the cylinder T' (shown in Figs. 6 and 7) is put in its place. This cylinder is provided with a pin, *n*, or other convenient device, for the attachment of a cloth, which is wound around the cylinder for drying the horse as the cylinder is rapidly revolved.

When a cloth becomes wet by taking up the water from the horse it is removed and another cloth put in its place.

The brush Q is expeditiously removed from the case R, for the insertion of the revolving scraper T, by merely unscrewing the screws *g*

g, which confine the plates *e e*. A change is effected in the same manner for the insertion of the cylinder T'.

I claim as my invention—

An apparatus for grooming horses, embracing the rotary brush Q, elastic ridged scraping-roller T, and cloth-holding cylinder T', applied interchangeably to the case R, all constructed substantially as and for the purpose specified.

WILLIAM T. DAVIS.

Witnesses:

THOMAS J. BEWLEY,
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