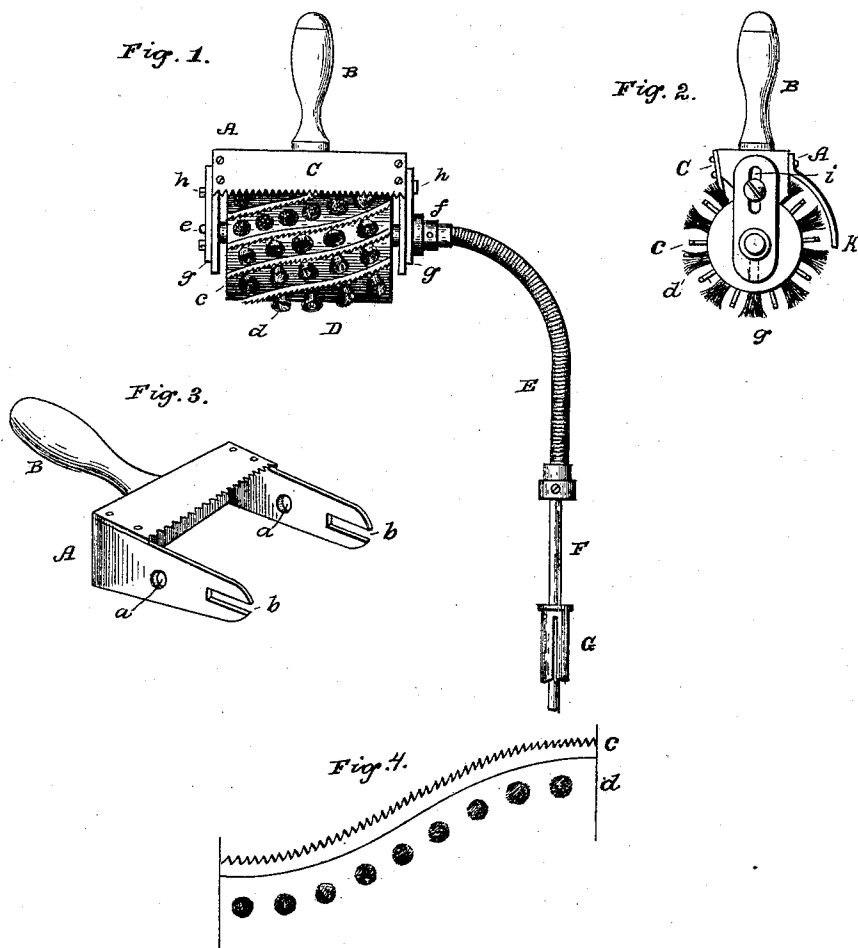


(No Model.)

J. S. WALKER.
GROOMING DEVICE.

No. 431,497.

Patented July 1, 1890.



Attest.

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UNITED STATES PATENT OFFICE.

JOHN S. WALKER, OF CLAREMONT, NEW HAMPSHIRE.

GROOMING DEVICE.

SPECIFICATION forming part of Letters Patent No. 431,497, dated July 1, 1890.

Application filed December 17, 1889. Serial No. 334,033. (No model.)

To all whom it may concern:

Be it known that I, JOHN S. WALKER, a citizen of the United States, residing at Claremont, in the county of Sullivan and State of New Hampshire, have invented certain new and useful Improvements in Grooming Devices; and I do hereby 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.

My invention relates especially to certain novel improvements in grooming devices, and especially to the brushes employed in such devices for brushing and cleaning animals—such as horses and cattle—which improvements will be fully understood from the following description and claims, taken in connection with the annexed drawings, in which—
Figure 1 is an elevation of my improved grooming device, showing part of the flexible means connected therewith for transmitting rapid rotary motion to the brush from a treadle mechanism or other convenient motion. Fig. 2 is an end view of Fig. 1, the flexible connection being detached. Fig. 3 is a perspective view of the brush-frame and the serrated comb or brush cleaner. Fig. 4 is a detail view of one of the serrated brush-combs and a row of brushes.

Similar letters of reference indicate corresponding parts in the several views.

Referring to the annexed drawings by letter, A designates a rectangular frame, which is provided with a handle to be held by the operator in manipulating the device. The two parallel jaws of this frame are slotted at *b b* to receive the shaft of a brush-cylinder D, which shaft is held in place by means of two longitudinally-adjustable cheek-plates *g g* and screws *h h*, which pass through slots *i* in said plates. The brush-cylinder can thus be readily removed from the frame A and readily applied thereto when desired.

C designates a serrated comb, which is suitably secured to the frame A for the purpose of removing hair from brushes of the cylinder D, and thus keeping the cylinder clear, the latter being adjustable toward and from the teeth of the comb by the means above described.

The cylinder D may be made of any suit-

able diameter and length and of any desired material. It is preferably made hollow, although it may be made solid with the axial shaft *e* extending through it and protruding from its ends. The cleansing surface of this cylinder is composed of brushes *d* and then serrated toothed blades or combs *c*, which are arranged in spiral or oblique lines extending from one end to the other of the cylinder, as shown in Fig. 1 and indicated in detail in Fig. 4. In practice I may arrange the rows of brushes and the comb-blades alternately, or I may have two or more rows of brushes between the comb-blades. I also prefer to extend the ends of the brushes beyond the teeth of the combs, as shown in Fig. 2.

It will be observed that the comb C, which is secured to the frame A, extends somewhat over part of the brush-cylinder, so that in the operation of the device the teeth of the comb C not only clean the brush of hair, &c., but the blade of the comb serves as a covering or guard for the brush-cylinder and keeps the flying dust from the face of the operator.

In Fig. 1 of the annexed drawings I have represented a flexible tube E, attached to a hub *f*, fixed to one end of the brush-cylinder shaft *e*, which tube is attached to an endwise-movable rod F, that works in a slotted tube G, to which tube the rod F is attached, so that it will rotate with said tube. This tube being connected by a gimbal or universal joint to a rotative driving-shaft actuated by suitable gearing and a treadle or other running power, rapid rotary motion can be communicated to the brush-cylinder.

I do not confine myself to any specific means or motive power for giving rapid rotation to the brush-cylinder D, as I may employ a simple treadle motion controlled by the person who manipulates the grooming device; or I may employ as the motive power water-engines, shafting, or electro-motive power.

After cleansing an animal with the brush-cylinder above described I contemplate removing this cylinder from its frame A and substituting a cylinder covered with a jacket of frieze, hair-cloth, or other suitable material for the purpose of finishing the grooming.

It is obvious that by having the comb or card teeth set shorter in the cylinder than the brushes the said teeth are made avail-

able by slightly increasing the pressure on the handle.

I am aware that it is not new to employ in a grooming device a rotative cylinder having a helically-arranged rubbing-strip inserted in a groove. I am also aware that it is not new to employ radial scraping devices extending straight from one end to the other of a cylinder, in combination with bristles which protrude from the perimeter of the cylinder beyond the edges of the scraping-blades. Such a device is found in cotton machinery; but I am not aware that in a grooming device organized as such a rotative cylinder having both helically-arranged brushes and helically-arranged blades has ever been made before my invention.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a device for grooming animals, a rotative cylindrical cleaner provided with spi-

rally-arranged brushes, in combination with spirally-arranged currying-blades of less length than the brushes, as and for the purposes specified.

2. A grooming device provided with spirally-arranged brushes, spirally-arranged currying-blades between the brushes, and means for transmitting rotary motion to said device and at the same time allowing it to receive from the hand of the attendant free universal movements, as specified.

3. A rotative grooming-drum provided with brushes and currying-blades extending spirally from one end to the other of said drum, for the purpose specified.

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

JOHN S. WALKER.

Witnesses:

J. S. WALKER, Jr.,
WM. BATCHELDER.