

J. J. SLEVIN.
VACUUM CLEANING DEVICE.
APPLICATION FILED AUG. 7, 1911.

1,044,275.

Patented Nov. 12, 1912.

2 SHEETS—SHEET 1.

Fig. 1

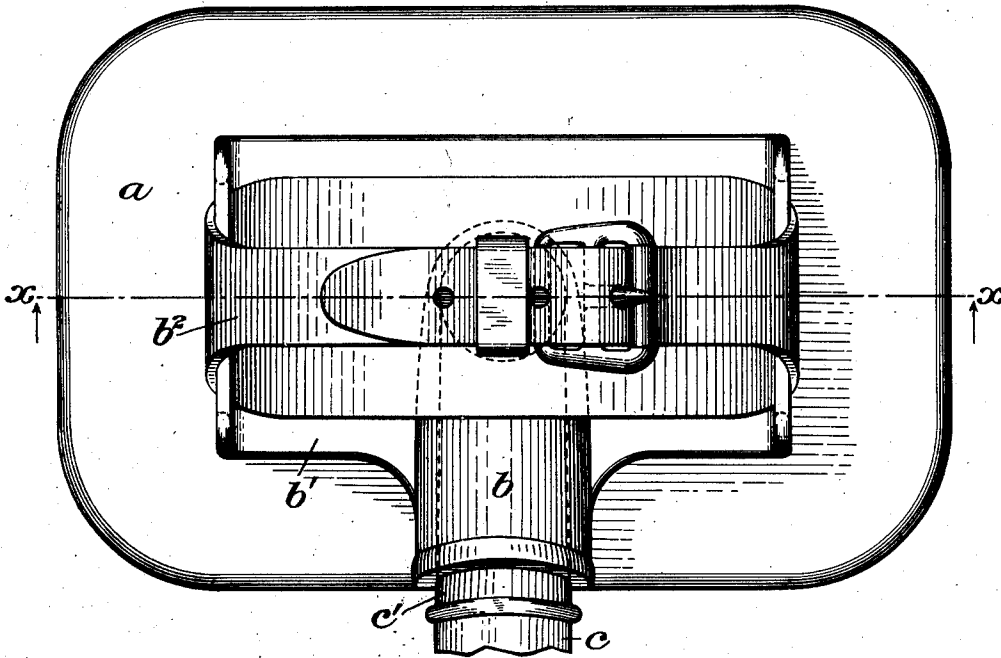
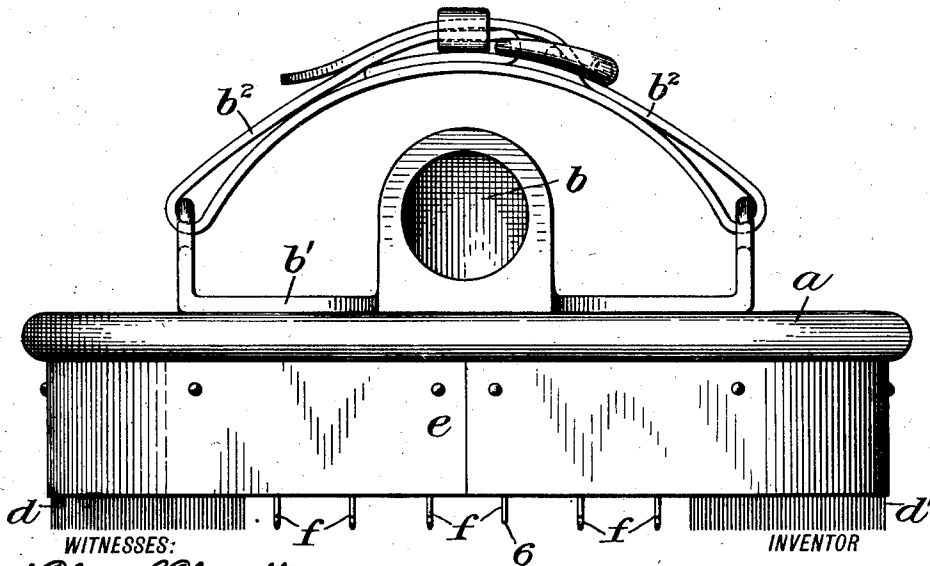


Fig. 2



WITNESSES:

Chas. J. Claggett
Chas. H. Smith

by

James J. Slevin
Harold Terrell

his ATTORNEY

J. J. SLEVIN.
 VACUUM CLEANING DEVICE.
 APPLICATION FILED AUG. 7, 1911.

1,044,275.

Patented Nov. 12, 1912.

2 SHEETS—SHEET 2.

Fig. 3

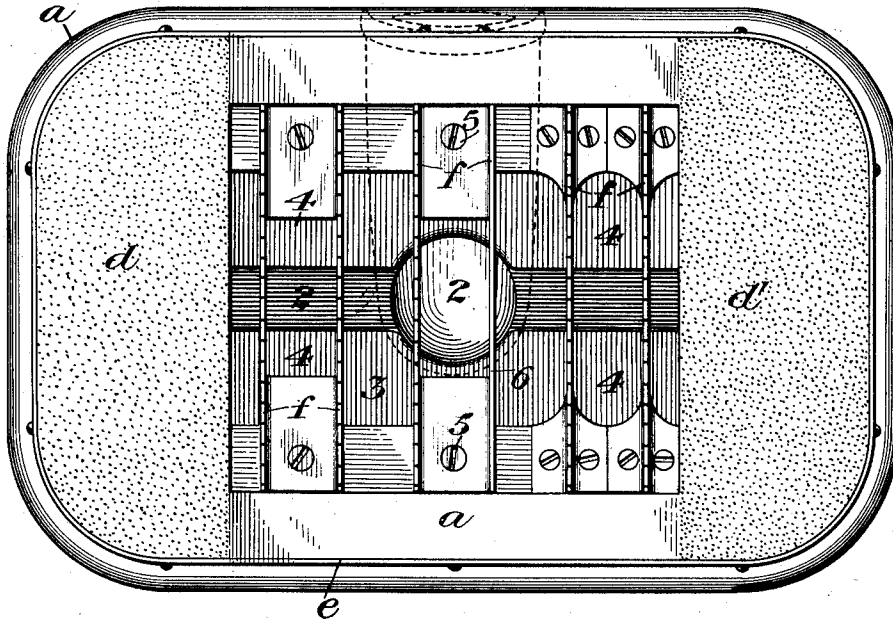
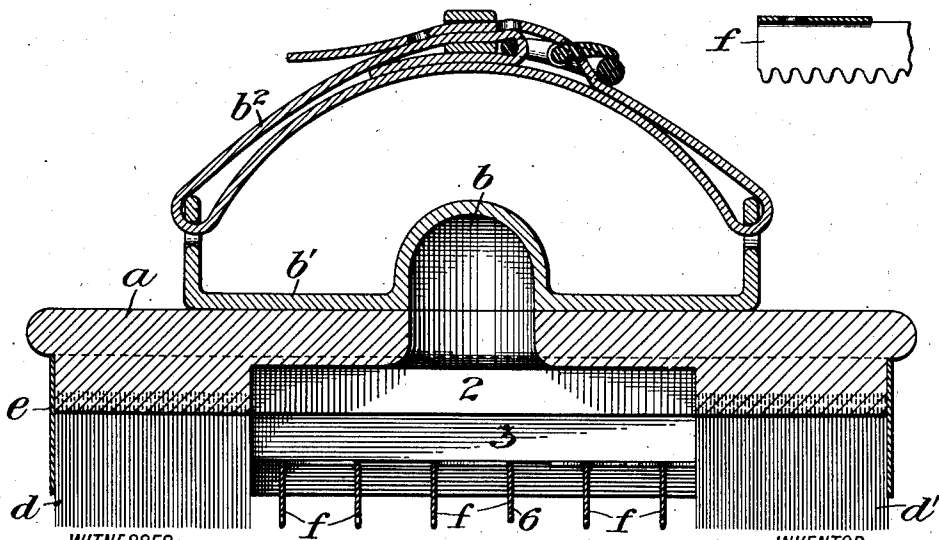


Fig. 4

Fig. 5



WITNESSES:
Chas. J. Clagett
Chas. H. Smith

INVENTOR
James J. Slevin.
 by *Harold Terrell*
 his ATTORNEY

UNITED STATES PATENT OFFICE.

JAMES J. SLEVIN, OF NEW YORK, N. Y.

VACUUM CLEANING DEVICE.

1,044,275.

Specification of Letters Patent.

Patented Nov. 12, 1912.

Application filed August 7, 1911. Serial No. 642,778.

To all whom it may concern:

Be it known that I, JAMES J. SLEVIN, a citizen of the United States, residing in the borough of Manhattan, in the city, county, and State of New York, have invented an Improvement in Vacuum Cleaning Devices for Cleaning Animals, of which the following is a specification.

My invention relates to an improved device for cleaning animals and for the removal of the particles of dust, dirt and hair, by the vacuum process, and the same is an improvement upon the device shown and described in my application for Letters Patent filed February 13th, 1911, Serial No. 608,435.

In the device of the said application, the series of bristles and the blades forming the curry-comb members were arranged across the foundation and at right angles to the line of the slot therein, and in alternating groups; that is to say, the curry-comb members were arranged between the bristles. In a series of experiments, I have demonstrated that this arrangement is not as advantageous for the thorough cleaning of the animals, as is the arrangement of the present application; and with the object of making the device as perfect and as efficient as possible, I provide in the device of my present invention, for arranging the bristles in masses at the ends of the foundation block; or in other words, across the ends of the block. The curry-comb blades are arranged between the masses of bristles and spaced apart from one another and from the bristles and also arranged at right angles to the line of the slot in the foundation.

In the device of my present invention, I connect an intake nozzle to the upper surface of the foundation and provide an opening therein and slots from this opening and also a recess, and the recess and slots come below the curry-comb blades or members, and I also prefer to form the curry-comb members of U-shape, connecting them at their respective ends to the foundation, and I prefer to cut away the central portion of the bottom of each U-shaped member so that there is a free entrance for the air not only between the series of bristles and between the curry-comb blade members, but in the center of each blade member.

In the drawing, Figure 1 is a plan and Fig. 2 a side elevation representing the device of my improvement. Fig. 3 is an in-

verted plan. Fig. 4 a central longitudinal section at the dotted line $x-x$, Fig. 1, and Fig. 5 is a detached section longitudinally and centrally through the U-shaped curry-comb blade members at one end.

Similar letters and numerals of reference indicate the same parts in all the figures.

a represents the foundation block of my improved vacuum cleaning device. This block is preferably of wood. It is provided centrally with a recess 3, which from the under surface is stepped down. Below the surface of the recess there is a slot or slots 2 and a central opening which communicates through the block a with the intake nozzle b . This intake nozzle is provided with a plate b' by which it is secured to the upper surface of the foundation block a , and I prefer to make the plate b' with upturned and slotted ends and to provide an adjustable strap handle b^2 , the parts of which pass through the said slots. This construction permits of the introduction of the hand of the attendant or operator above the plate b' and nozzle b and beneath the strap handle b^2 , so that the implement is readily and securely handled for the cleaning work.

c represents an end of flexible hose, and c' a coupling attached thereto and introduced into the intake nozzle b . Regardless of the exact construction illustrated for these parts, they may be suitably made in any desired manner.

d and d' represent the bristles in series at the respective ends of the foundation block a , and I prefer to provide this foundation block a with a skirt e preferably in the form of a metal band secured around the block and extending below the under surface thereof and appreciably around the bristles. This band assists materially in supporting the bristles and in preventing them breaking down or being spread too much in use, or in other words, holding up and stiffening the bristles for their work. This band or skirt e is advantageously endless and formed of some light metal like aluminum.

f represents the several serrated curry-comb blades which in cross section, as shown in Fig. 4, may be of U-shape, that is with a base and two parallel blades at right angles to the base, and the edges of the blades formed with teeth. I prefer, as shown in Fig. 5, to corrugate the edges of these blades and by so doing produce teeth with rounded points and bases, which are efficient for

the work performed and not injurious to the skin of the animal being cleaned, and at the same time I prefer to form one of the curry-comb blade members with a plain edge 6, which edge takes a bearing on the body of the animal,—as the body of a horse,—and prevents the teeth of the other edges bearing too hard or pressing too deep.

As plainly indicated in Fig. 3, I may remove the bases or bottoms of the U-shaped blades at the center so as to produce the openings at 4. This leaves the bases or the bottoms at the respective ends with openings by which the screws 5 secure said curry-comb blade members in position across the center recess of the foundation and at right angles to the slot 2. These curry-comb blade members are spaced apart and also preferably spaced from the adjacent edges of the bristle groups *d d'*, and at the respective ends of these groups there is nothing to interfere upon the opposite sides of the implement with the free entrance of air, or in other words, a free air draft as produced by the suction in a vacuum cleaning implement, this air draft being in line with the blades of the curry-comb members and with the spaces between the members.

In the operation of the device of my improvement, the implement is held in the hand,—that is with the hand between the strap handle and the under surface of the intake nozzle and its plate is moved backward and forward over the body of the animal to be cleaned in a direction agreeing with the lengthwise direction of the implement, so that in one direction of movement the bristles *d'* are in advance and the bristles *d* follow, while in the opposite direction, the bristles *d* are in advance and the bristles *d'* follow.

In motion, the bristles not only agitate the hair but tend to brush the same thoroughly, while the intermediate curry-comb blade member scratches the surface and loosens the dust, dirt, dandruff, etc., and in the space between the bristles makes it possible for the air suction to immediately remove the same. The suction also acts through the bristles to draw dust and particles from them also into the recess 3 and slots, and through the intake nozzle and away to the usual chamber employed as a receptacle for such particles. The following brush smoothes down the hair.

I have found as the result of experiments with the actual use of this device, that it is exceeding efficient; that the work is quickly and thoroughly done and without discomfort to either the operator or the animal.

In Figs. 3 and 4 I have shown some of the curry-comb blades *f* as formed with a bottom portion and of U-shape in cross section, and the other of the curry-comb blades *f* as separate blades with flat foot supports

secured by screws to the foundation. I do not limit my invention by the precise construction of the curry-comb blades or by the manner of fastening the same to the foundation, as the forms illustrated are equivalent and other forms may answer the purpose equally well.

I claim as my invention:

1. A vacuum cleaning device for cleaning animals, comprising a foundation of suitable material to be manipulated by hand and provided with an opening therein, an intake nozzle suitably secured to one surface of said foundation, series of bristles secured to the opposite side of said foundation and in groups at the respective ends thereof so as to form brushes, and series of blades forming curry-comb members secured to the said surface of the foundation and arranged in a spaced apart relation across the opening in said foundation and between the brushes at the respective ends thereof, and also at right angles to the longest axis of the foundation.

2. A vacuum cleaning device for cleaning animals, comprising a foundation of suitable material to be manipulated by hand and provided with an opening therethrough and a transverse central recess, an intake nozzle suitably secured to one surface of said foundation, series of bristles secured to the opposite side of said foundation and in groups at the respective ends thereof so as to form brushes, series of removable blades forming curry-comb members secured to the same surface of the foundation and arranged in a spaced apart relation across the recess in said foundation and between the brushes at the respective ends thereof and also at right angles to the longest axis of the foundation; and a skirt in the form of a metal band or plate extending around the foundation and extending down approximately over the bristles of the brushes at the ends of the foundation.

3. A vacuum cleaning device for cleaning animals, comprising a foundation of suitable material to be manipulated by hand and provided with an opening therein, an intake nozzle suitably secured to one surface of said foundation, series of bristles secured to the opposite side of said foundation and in groups at the respective ends thereof so as to form brushes, series of blades forming curry-comb members secured to the said surface of the foundation and arranged in a spaced apart relation across the opening in said foundation and between the brushes at the respective ends thereof, and also at right angles to the longest axis of the foundation, and each of the curry-comb members of U-shape in cross section with the edges provided with teeth and the central portion between the parallel members cut away for the movement of air between as well as outside of the members or parts thereof.

4. In a vacuum cleaning-device for cleaning animals, the combination with a foundation of suitable material, of an intake nozzle, a plate integral therewith and connected to one surface of the foundation and the opposite ends of said plate upturned and slotted, and an adjustable strap handle having the parts thereof passed through said slots and extending over between the upturned ends, thereby providing a receptacle for the hand between the upper surface of the intake nozzle and its plate and the under surface of the adjustable strap handle.

5. A vacuum cleaning device for cleaning animals, comprising a foundation of suitable material to be manipulated by hand and provided with an opening therethrough and

a transverse central recess and intake nozzle suitably secured to one surface of said foundation, a series of bristles secured to the opposite side of said foundation and in massed groups at the respective ends thereof and beyond the central recess so as to form two spaced apart brushes, and a skirt in the form of a metal band or plate extending around the foundation and down approximately over the bristles of the brushes at the ends of the foundation.

Signed by me this 26th day of July, 1911.

JAMES J. SLEVIN.

Witnesses:

ARTHUR H. SERRELL,
BERTHA M. ALLEN.