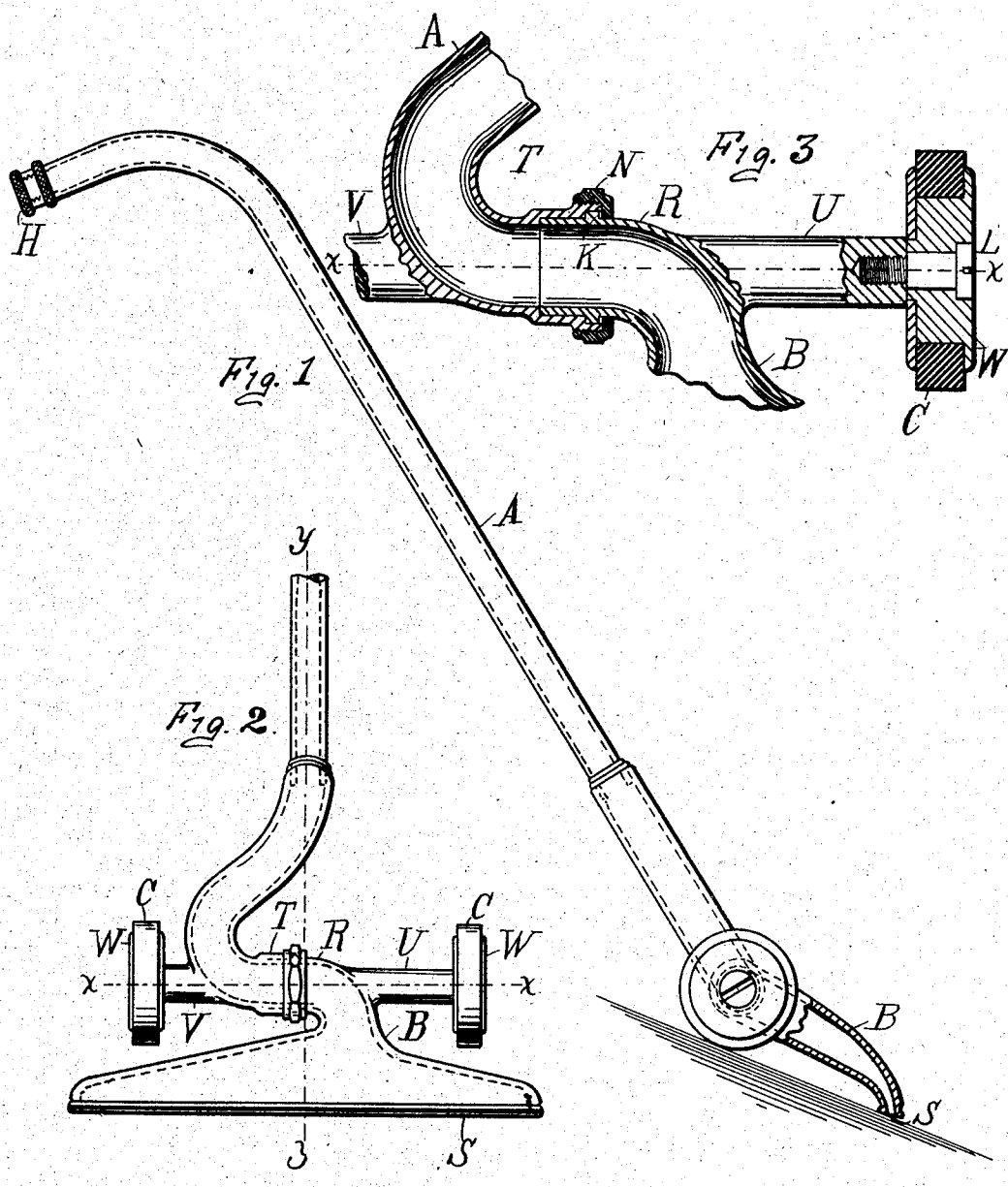
No. 781,532. PATENTED JAN. 31, 1905.

D. T. KENNEY.

APPARATUS FOR REMOVING DUST.

APPLICATION FILED MAY 28, 1904.



WITNESSES:

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PHOTO-LITHOGRAPHED BY SACHETT & WILHELMS LITHO. & PTG. CO. NEW YORK.

No. 781,532. Patented January 31, 1905.

UNITED STATES PATENT OFFICE.

DAVID T. KENNEY, OF NORTH PLAINFIELD, NEW JERSEY.

APPARATUS FOR REMOVING DUST.

SPECIFICATION forming part of Letters Patent No. 781,532, dated January 31, 1905.

Application filed May 28, 1904. Serial No. 210,214.

To all whom it may concern:

Be it known that I, DAVID T. KENNEY, a citizen of the United States of America, and a resident of the borough of North Plainfield, county of Somerset, and State of New Jersey, have invented certain new and useful Improvements in Apparatus for Removing Dust, of which the following is a specification.

My invention relates to a hand implement or cleaner to be used in connection with dust-removing systems, such as are, for example, disclosed in my United States Letters Patent No. 739,263, granted September 15, 1903, wherein a vacuum system of dust removal is set forth.

The hand implement is provided with a dust-inlet slot which is brought into contact with the object to be cleaned—as, for example, a floor or carpet—and the cleaning is effected by rapid movement of dust-laden air which is drawn from the carpet through the slot into the implement and thence through suitable flexible hose connections, through dust-separating apparatus, and thence to the exhaust-pump, by which the vacuum in the chamber of the cleaner is maintained.

One object of the invention is to provide a cleaner of simple and inexpensive construction consisting of a chambered hand portion and a nozzle portion, the chambers of which communicate through a swivel by which the two portions are connected, so that gravity of the nozzle portion will present the slot of the nozzle to the surface of the object to be cleaned without regard to the angle at which the handle of the hand portion may be held, it being necessary to hold the handle at a high angle when cleaning floors in confined places, while a low angle is required in cleaning under furniture.

Another object of the invention is to combine with the swivel connection a passage-way from the interior of the nozzle to the chambered hand portion, so that the vacuum in the nozzle may be produced by exhaust through a hose which is connected to the hand portion instead of directly to the nozzle, so that the free adjustment of the nozzle to the object to be cleaned will not be interfered with by the weight or drag of the hose.

Another object is to provide in a suitable and inexpensive manner wheels and suitable supports for the wheels, so that the cleaner may be freely moved over the surface to be cleaned and the nozzle properly alined and presented to the carpet or other object to be cleaned.

In the accompanying sheet of drawings, which forms a part of this application, Figure 1 is a side view of the cleaner. Fig. 2 is a front view of the cleaner with the upper portion of the handle broken away; and Fig. 3 is an enlarged view of the portion at the swivel, partly broken away to show the construction of the swivel and of one of the wheels.

The cleaner as illustrated comprises a hand portion A, which is provided at the upper end with a suitable coupling H for the attachment of a hose. The hand portion is in the form of a tube and has an S-bend at its lower end, by which the opening at the lower end T is directed along the line of an axis $x\,x$ at right angles with the median plane $y\,y$ of the cleaner. The other portion of the cleaner is the nozzle portion B, which is chambered so as to form a passage-way from an inlet-slot S to the upper end R of the nozzle portion, which is fitted into and swivels with the lower end of the hand portion. A shoulder K, formed on the upper end of the nozzle portion, is engaged by the inwardly-projecting flange of a nut N, which is screwed onto the lower end of the hand portion and holds the meeting ends of the two portions together, thereby forming a swivel connection.

Wheel-supports U and V are provided, respectively, on the nozzle and hand portions of the cleaner on the axial line $x\,x$ of the swivel. Wheels W, with rubber tires C, are connected to the supports by screws L, which serve as axles for the wheels on the axial line of the swivel. It will be seen that by this construction a change in the relation of the parts swiveled together will not alter the alinement of the wheels. The edges of the inlet-opening of the nozzle lie in a plane which is approximately tangent to the wheels; but the forward lip is beveled, so that the cleaner will ride onto objects of some size, but small enough to pass through the slot. The slot is

parallel to the axis of the wheels and the swivel and at right angles to the median plane of the cleaner and extending to about an equal distance on each side of the median plane.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A pneumatic cleaner comprising a tubular handle portion and a chambered nozzle portion provided with a dust-inlet slot, and a swivel connection between the two portions through which the chambers of the portions are connected, the swivel connection being located in substantially the median plane of the two portions and on an axis parallel with the inlet-slot, substantially as described.

2. A pneumatic cleaner comprising a tubular handle portion and a chambered nozzle portion provided with a dust-inlet slot, the two portions being swiveled together the swivel connection being located on an axis parallel with the inlet-slot, a wheel-support carried by the handle portion and a wheel-support carried by the nozzle portion, the axes of the supports coinciding with the axis of the swivel connection, and wheels carried by the supports, substantially as described.

Signed by me in New York city, borough of Manhattan, New York, the 27th day of May, 1904.

DAVID T. KENNEY.

Witnesses:
SAMUEL W. BALCH,
HUGH H. SENIOR.