United States Patent [19]

Carfi

[11] **3,929,142**

[45] **Dec. 30, 1975**

[54] **HAIR VACUUM WITH STRIPPING CLASP**

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[22] Filed: **Oct. 3, 1974**

[21] Appl. No.: **511,878**

[52] **U.S. Cl.** **132/9;** 15/402

[51] **Int. Cl.²** **A45D 1/00**

[58] **Field of Search** 132/9, 124, 119; 15/397, 15/402

[56] **References Cited**

UNITED STATES PATENTS

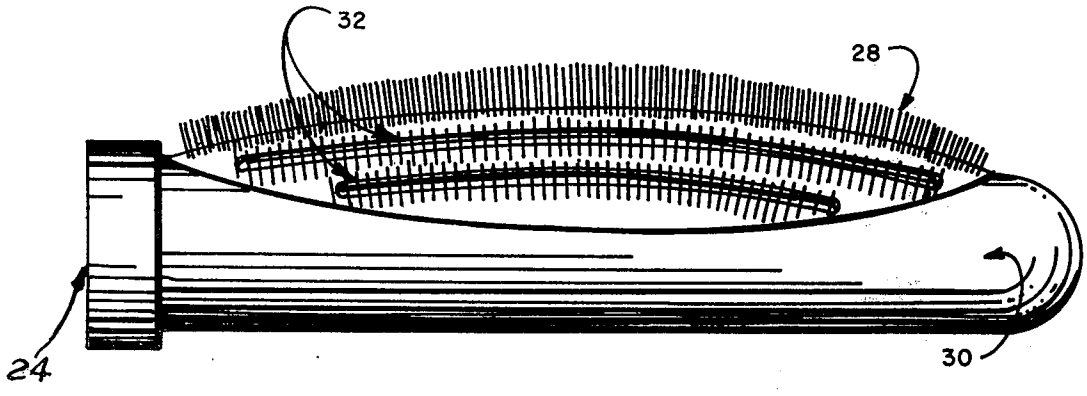
2,074,481	3/1937	MacMullen et al.	132/9
2,880,299	3/1959	Jones	132/36 R
3,668,736	6/1972	Loscalzo	15/402
3,768,491	10/1973	Barradas	132/36 R

Primary Examiner—G. E. McNeill

[57] **ABSTRACT**

A hair vacuum with a stripping clasp is disclosed comprising a base to which is connected a vacuum source, a handle for manipulating the vacuum, a vacuum head communicating with the base and a stripping clasp moveably attached to the base arranged to be moved against the vacuum head to strip or clean hair passed between the clasp and the vacuum head.

2 Claims, 6 Drawing Figures



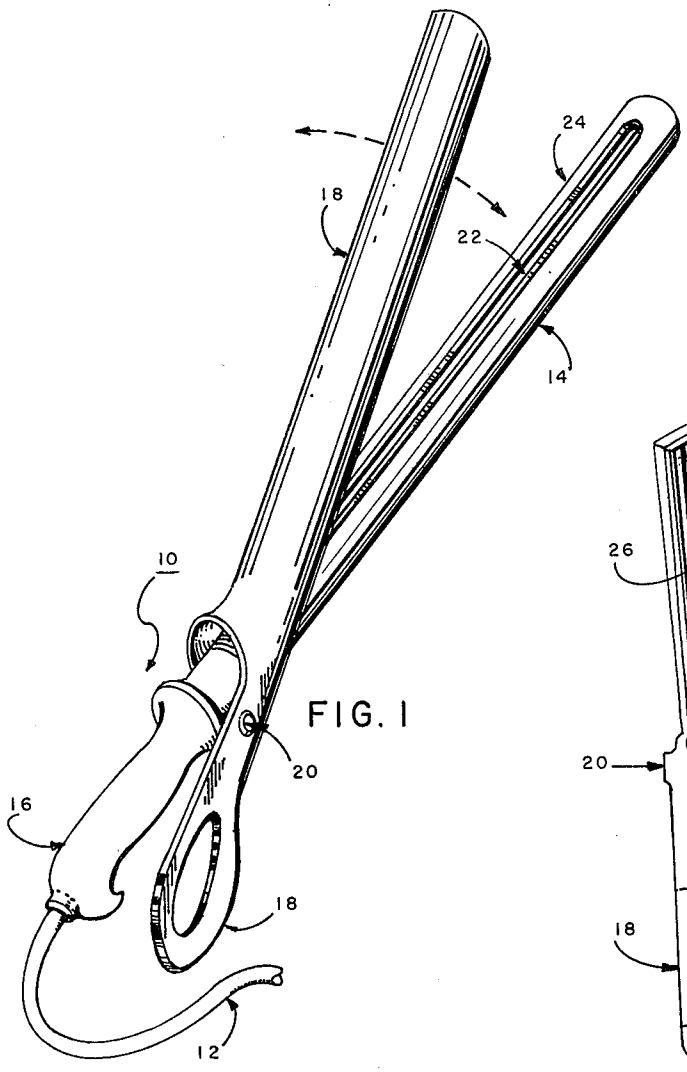


FIG. 1

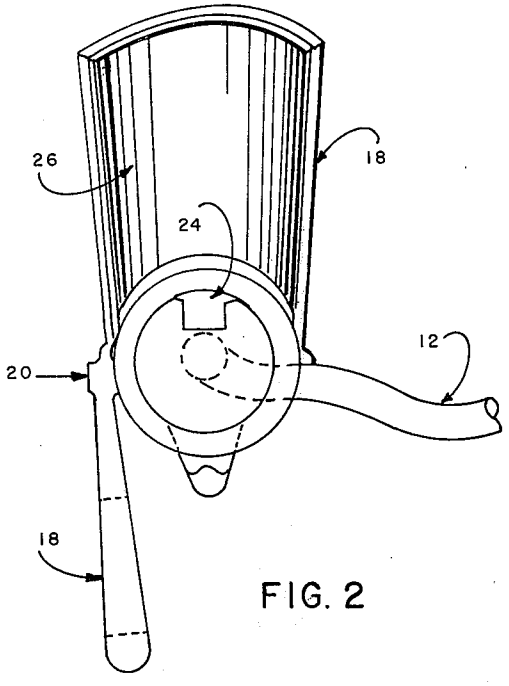


FIG. 2

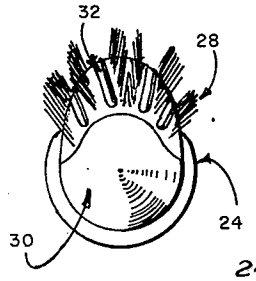


FIG. 4

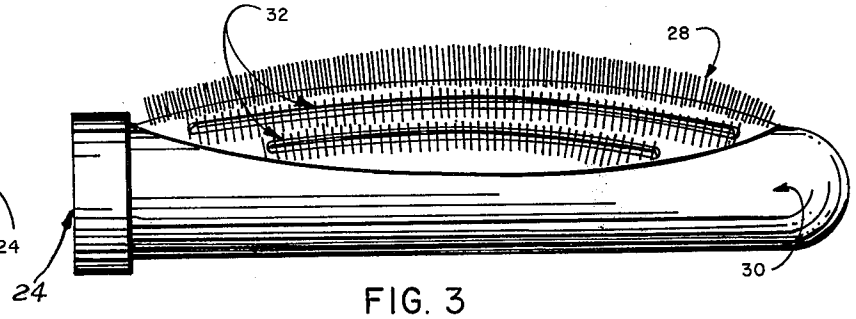


FIG. 3

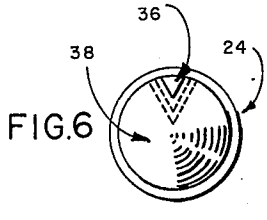


FIG.6

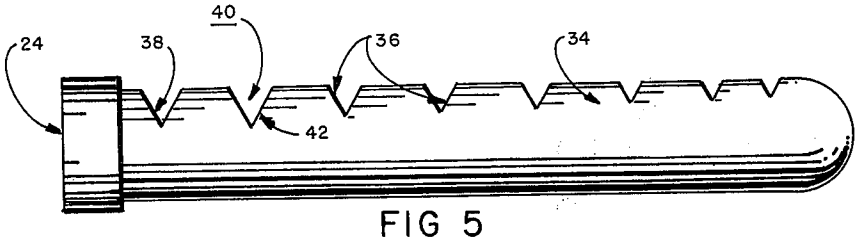


FIG 5

HAIR VACUUM WITH STRIPPING CLASP

BACKGROUND OF THE INVENTION

1. Field of the Invention

The invention resides in the field of hair removing devices and more particulary relates to hair vacuums for removing foreign material from hair without the use of water. It may also be used on animals as well as humans.

2. Description of the Prior art

Hand held hair vacuums of many types are to be found in the prior art. All of the devices now known to the inventor which function in the manner of the present invention use a vacuum head which is placed against the head and employ brushes or similar devices which attach directly to the vacuum head for loosening foreign matter. In contrast, the device disclosed herein utilizes a separate clasp moveably attached to the common base of the clasp and vacuum head in a manner to allow the clasp and head to be moved together catching a portion or hank of hair between them. Preferably the clasp is pivotally mounted such that the clasp and head move together in together in scissor-like fashion.

SUMMARY OF THE INVENTION

The invention may be summarized as a hand-held hair vacuum utilizing an elongated vacuum head and a stripping clasp which may be moved or pressed against the vacuum head to assist in loosening foreign material and in general clean head drawn between the clasp and vacuum head.

The apparatus presents a significant improvement in quality and thoroughness of cleaning ability and is particularly useful for removing dry shampoo which when used, is introduced intno the hair in quantities substantially greater than the accumulation of foreign material from natural causes. The frequent use of dry shampoo results in clean hair without the use of water with its attendant delilitating effects. It is therefore desirable to have a device which can remove the particles of dry shampoo in the home which is inexpensive to manufacture yet highly effective.

By utilizing the combination of clasp and vacuum head of the present invention, thorough cleaning results are obtained which have heretofore been unavailable to home users. It can be made with or without an internal vacuum source. The apparatus is arranged to accept any vacuum source through the use of a suitably sized hose and thus is particulary adaptable to be used in conjunction with a home vacuum.

These and other features of the invention will become more apparent from the drawings and description of the preferred embodiment which follow.

DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of the preferred embodiment of the invention.

FIG. 2 is a front view of the device of FIG. 1;

FIG. 3 is a side view of an attachment used in conjunction with the invention, showing bristles on a flexable rubber base;

FIG. 4 is a cross-sectional view of the attachment of FIG. 3;

FIG. 5 is a side view of another attachment used in conjunction with the invention; and

FIG. 6 is a top view of the attachment of FIG. 5.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring first to FIG. 1, there is illustrated a perspective view of the preferred embodiment of the invention. The device comprises a hollow base or body **10** to which is attached a vacuum source **12,** a hose leading from a home vacuum cleaner, for example, a vacuum head **14** communicating with the vacuum source through the base, a handle **16,** and a clasp **18.** In the embodiment shown, the handle and clasp are a unitary structure and are arranged to rotate about pivot **20.** It is however, only necessary for the purpose of the invention that the clasp rotate toward the vacuum head. Thus the handle may be separated from the clasp and permanently affixed to the base if so desired.

Vacuum head **14,** a hollow elongated cylinder has groove **22** within which is located a vacuum inlet aperture **24** running almost the entire length of the head. Material entering the aperture is drawn through the head and base and out of the device by the vacuum emanating from the vacuum source. As further shown in FIG. **2** the clasp **18** may be lined with felt **26** or a similar material to assist in the friction loosening of foreign material such as dry shampoo.

In use, the handle is grasped in either hand, the vacuum source is engaged and the vacuum head and clasp rotated together by the other hand in scissor-like fashion catching a quantity of hair between them. The entire vacuum device is then drawn and down the length of hair, the clasp loosening or stripping foreign material as it passes along the length of the hair and the vacuum head removing and withdrawing the material completely from the hair through the vacuum inlet aperture.

Referring next to FIGS. **3** and **4,** an attachment head which slips over basic vacuum head is shown. The attachment is hollow having a longitudinal cylindrical aperture its entire length. The aperture is slightly larger than the outside diameter of the head. Rows of bristles **28,** boar bristle, for example, are mounted in the body **30** composed of hard rubber or a similar flexible, washable material. Longitudinal slot aperture **32** positioned radially between the rows of bristles in the body lead to the vacuum head aperature **24.** The use of the device with the attachment is substantially the same as described above, the bristles serving to further loosen foreign material in conjunction with the clasp. The rubber base contracts, under vacuum pressure, bringing the bristles together, thus adding to the stripping action. The loosened or freed foreign material is drawn down through the longitudinal slots **32,** into vacuum head **14** through aperture **24,** and out of the device by the vacuum source.

Referring next to FIGS. **5** and **6** an additional attachment **34** arranged to fit over vacuum head **14** is illustrated. The attachment has a longitudinal aperture designed to receive the basic vacuum head in the manner of the previously described attachment. The attachment again composed of hard rubber or a similar substance has a plurality of triangular grooves **36** transverse the longitudinal axis of the body. Aperture **38** at the bottom of each groove communicate with aperature **24** when the attachment is installed on the basic vacuum.

The grooves may be arranged to increase in cross section toward the pivot end of the vacuum to account for the scissor-like action of the device, and to diminish

the likelihood of pinching or binding the hair as the clasp and head are pivoted together, and to account for greater vacuum pressure at the pivot end. The grooves may be further widened at points **40** to provide a free space for access to inlet aperatures **38** when a quantity of hair is placed in the groove. In use, the edges **42** of the grooves provide friction points to assist in stripping and removing foreign material similar to the function of the bristles of the previously described attachment.

Having disclosed the above it will be clear that other attachments and modifications to the basic device may be made by those skilled in the art without departing from the scope of the invention which accordingly is defined by the following claims.

What is claimed is:

1. A hair vacuum with a stripping clasp comprising in combination:

a hollow base adapted to receive a vacuum source;

an elongated tubular vacuum head attached to said base and in communication with said vacuum source through said base and adapted to receive stripping attachment;

said vacuum head having at least one vacuum inlet aperature;

a handle attached to said base for manipulating said hair vacuum;

an elongated stripping clasp pivotally attached to said base such that said clasp may be moved into close proximity to said vacuum head and said vacuum inlet aperature;

a handle attached to said stripping clasp for manipulating said stripping clasp relative to said vacuum head in a scissors-like movement;

a lining of a soft material on the inside of said stripping clasp;

an elongated tubular stripping attachment for said vacuum head having a plurality vacuum inlet aperatures arranged to communicate with said vacuum head inlet aperature;

said aperatures of said elongated tubular attachment fabricated of a soft, flexible material comprising triangular grooves transverse the longitudinal axis of said attachment wherein the cross-sectional profile of said grooves progressively increases from the inner longitudinal extremity of said attachment to the outer longitudinal extremity of said attachment.

2. The apparatus of claim **1** further including:

a plurality of bristles secured at one end thereof in said tubular attachment and extending vertically upwards therefrom to provide additional stripping capability.

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