March 22, 1960 S. B. WILSON 2,929,140

ACCESSORY FOR BARBER TOOLS

Filed Sept. 3, 1957

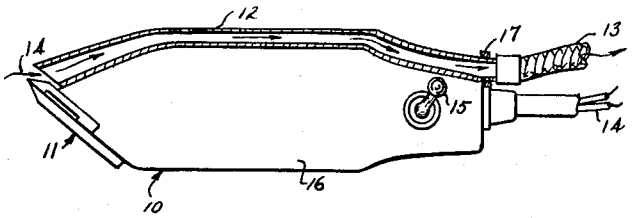


Fig. 1

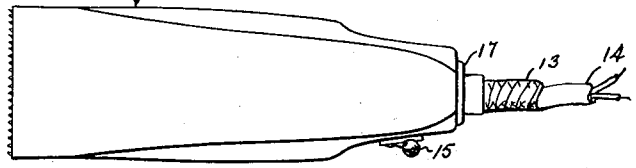


Fig. 2

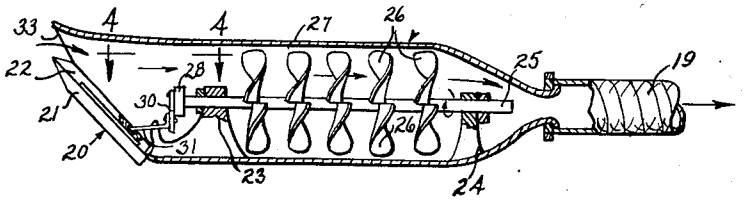


Fig. 3

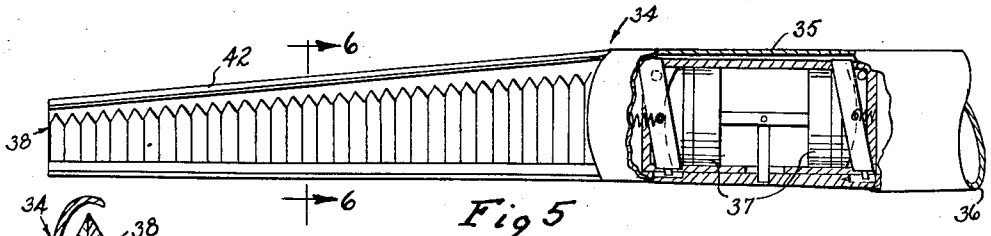


Fig 5

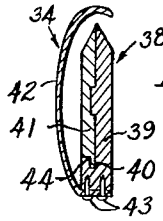


Fig. 6

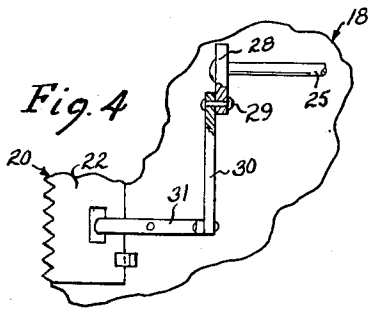


Fig. 4

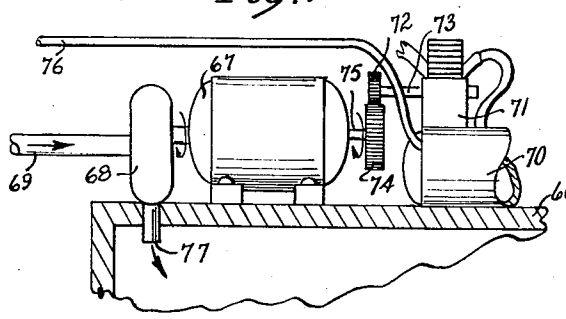


Fig. 7

INVENTOR.

Sherman B. Wilson

BY Victor J. Evans & Co.

ATTORNEYS

United States Patent Office

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ACCESSORY FOR BARBER TOOLS

Sherman B. Wilson, Huntington, W. Va.

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1 Claim. (Cl. 30—133)

This invention relates to barber tools or implements, and more particularly to a vacuum attachment for such tools whereby hair will be conveniently withdrawn or removed to a convenient location.

The object of the invention is to provide an attachment for use with barber tools such as hair clippers, combs, scissors and the like, whereby hair which has been cut is adapted to be withdrawn from the vicinity of the cutting head by means of a suitable vacuum producing mechanism so that such hair can be conveniently discharged at a remote location.

A still further object of the invention is to provide a device which is in the nature of a vacuum cleaner for use with various types of barber tools such as clippers, scissors, combs or the like, so that the hair which has been cut from a person's head can be conveniently removed from the area of the cutting implement or tool whereby a person's hair can be cut in a more sanitary manner and wherein there will be a minimum of discomfort to the person being worked on since there will be a means for removing the hair from the person's neck, head or the like wherein this cut hair will not remain on the person after the hair has been severed.

A further object of the invention is to provide accessories for barber tools which are extremely simple and inexpensive to manufacture.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawings, forming a part of this application, and in which like numerals are used to designate like parts throughout the same—

Figure 1 is a side elevational view illustrating one of the devices of the present invention attached to barbers' clippers, and with parts broken away and in section.

Figure 2 is a plan view of the assembly shown in Figure 1.

Figure 3 is a longitudinal sectional view taken through a modification.

Figure 4 is a sectional view taken on the line 4—4 of Figure 3.

Figure 5 is an elevational view of a further modification, with parts broken away and in section.

Figure 6 is a sectional view taken on the line 6—6 of Figure 5.

Figure 7 is a fragmentary sectional view illustrating the mechanism for producing the air pressure and vacuum.

Referring in detail to the drawings, and more particularly to Figures 1 and 2 of the drawings, the numeral 10 indicates a clippers which includes a body member 16 that has a cutting head 11 on the front end thereof, and extending longitudinally along the upper surface of the body member 16 is a hollow housing 12. A conduit 13 is connected to the rear end of the housing 12, and the conduit 13 is adapted to be connected to a suitable source of vacuum pressure. The numeral 14 indicates electric wires which are connected to the body

member 16 for actuating the usual mechanism that operates the cutting head 11. The clippers 10 are adapted to be provided with the usual "on" and "off" switch 15. As shown in Figure 1, the front end of the housing 12 is open as at 14, and this open end 14 is arranged contiguous to the cutting head 11 so that the hair which has been cut by the cutting head 11 will be sucked through the housing 12 whereby this hair can be discharged at a remote location. The housing 12 may be connected to the body member 16 in any suitable manner, as for example by means of clamping means 17.

Referring to Figures 3 and 4 of the drawings, there is shown a modified clippers which is indicated generally by the numeral 18, and the clippers 18 include a hollow body member 27 which has its rear end adapted to be connected to a vacuum source by means of a conduit 19. A cutting head 20 is arranged on the front end of the body member 27, and the cutting head 20 includes a stationary blade 21 and a movable blade 22. Bearing members 23 and 24 in the body member 27 support the shaft 25, and a plurality of fins or fan-like elements 26 extend outwardly from the shaft 25 and are connected thereto. An eccentric 28 is mounted on the front end of the shaft 25, and the eccentric 28 is connected to a link 30 through the medium of a pivot pin 29, the link 30 being connected to a bar 31 which leads to the movable blade 22. An air and hair inlet 33 is arranged in the front end of the body member 27 so that as the hair is cut by the cutting head 20, the hair will be sucked in through the opening 33 and will pass through the body member 27 and out through the conduit 29. As the air travels through the body member 27, it contacts the fins 26 so as to rotate the shaft 25 and this causes movement of the movable blade 23 through the medium of the members 28, 30 and 31. Thus, the vacuum source is also used to operate the clippers 18 as well as to provide a vacuum mechanism for removing the hair which has been cut by the clippers.

Referring to Figures 5 and 6 of the drawings, there is shown a modified clippers which is indicated generally by the numeral 34, and the clippers 34 include a body member 35 which is adapted to be connected to a source of vacuum pressure by means of a condut 36. Actuating pistons 37 are arranged in the body member 35, and the pistons 37 can be used for actuating a cutting head 38. The cutting head 38 includes a stationary blade 39 which is provided with a groove 40, and the cutting head 38 further includes a movable blade 41 which is provided with a tongue 44 that slidably engages the groove 40. The numeral 42 indicates a hollow housing or shield which has a portion thereof secured to the stationary blade 39 by suitable securing elements such as the screws 43. Thus, when the conduit 36 is connected to a suitable vacuum source, the cutting head 38 will be actuated by means of the pistons 37, and at the same time the vacuum pressure will be present in the area of the housing 42 so that the hair which is cut by the head 38 will be sucked up and discharged out through the conduit 36 to any desired locality or area.

Referring now to Figure 7 of the drawings, there is shown a mechanism which can be used for creating the suction and air pressure for operating the devices, and it will be seen in Figure 7 that the numeral 66 indicates a hollow receptacle which can be used to receive the hair that has been cut through the medium of the pipe section of conduit 77. Also in Figure 7 the numeral 67 indicates a motor which may have a pump 68 arranged adjacent thereto, and the pump 68 can be operated by the motor 67 for creating suction pressure in the conduit 69. The numeral 70 indicates an air reservoir which is arranged contiguous to an air compressor 71, and the

compressor 71 may be operated by a shaft 73 which has a gear 72 on an end thereof. The shaft 75 is operated by the motor 67, and the shaft 75 has a gear 74 which meshes with the gear 72. The numeral 76 indicates a line or conduit which may extend from the reservoir 70 whereby air pressure can be supplied to any desired location.

From the foregoing, it is apparent that there has been provided an attachment for use with various barber tools whereby hair which has been cut by a barber can be readily sucked away whereby a person will be able to get a haircut with increased comfort and in more sanitary manner, since the hair which has been cut from the person's head will not remain on the person's body. When using the clippers 10 of Figures 1 and 2, the cutting head 11 is adapted to be actuated in the usual manner so as to cut the hair growing on a person's head. A source of vacuum pressure is adapted to be connected to the conductor 13 whereby suction will be created in the housing 12 so that hair cut by the head 11 will be picked up by the entrance end 14 of the housing 12 whereby this hair will be moved through the housing 12 and discharged into any desired area or receptacle such as the receptacle 66 shown in Figure 7. The housing 12 may be readily connected to a conventional body member 16 which forms part of the clippers 10.

In Figures 3 and 4 the clippers 18 are constructed so that vacuum pressure will be created through the conduit 19 and this will have the effect of causing hair which is cut by the head 20 to be sucked in through the opening 33 whereby this hair can be discharged into any suitable remote location such as the receptacle 66. As the air passes through the body member 27, the fan-like members 26 are rotated and this causes rotation of the shaft 25, and as the shaft 25 rotates, it moves the eccentric 28 which in turn moves the link 30 so as to cause movement of the movable blade portion 22 of the cutting head 20. Thus, the vacuum pressure serves a dual purpose of actuating the cutting head 20 as well as providing a means of removing hair by means of suction.

In Figures 5 and 6 the member 34 includes the head 38 that is provided with the movable blade 41 which is adapted to coact with the stationary blade 39, and the suction pressure created by the suitable mechanism such as the mechanism shown at 14, will create a vacuum effect in the vicinity of the housing 42 so that hair which has been cut will be sucked up by the housing 42 and then discharged through the conduit 36 into a suitable area of receptacle.

The parts can be made of any suitable material and in different shapes or sizes. In Figure 5 the clippers 34 may have an oblong shape or so that one end thereof as shown at the left side of Figure 5 can be smaller than the other end thereof. In Figure 7 the motor 67 can operate the pump 68 which creates a vacuum in the conduit 69, and the conduit 69 can lead to any of the conduits such as the conduits 13, 19 or 36 so that the hair which has been cut from the person's head will be discharged through the pipe 77 into the receptacle 66. If desired, the device shown in Figure 5 may be operated by means of an electric motor or else an air pressure motor can be used for operating the device. The housing 12 can be made so that it conforms to the configuration of the body member 16. The housing 12 can be secured to the body member 16 in any suitable manner, as for example by means of clamps, or by means of suitable securing elements such as screws, or by means of tape or a suitable adhesive. The various conduits such as the conduits 13 and 19 may be of flexible material. The comb 52 and housing 56 may be made as a one piece integral unit or else they may be made as separate parts. By means of the vacuum attachment of the present invention, hair which has been cut will not remain on the barber or the customer and any suitable mechanism can be used for providing the vacuum pressure. The device can also be used when shearing animals and the hair will be collected as it is cut off. The devices are constructed so that they will not become clogged up with hair, and the oblong clippers shown in Figures 5 and 6 can be used instead of the present type of clippers and scissors which are used by barbers. The oblong clippers and the regular type clippers can be run or operated by means of an electric motor, an electric vibrator, vacuum or air pressure.

I claim:

Clippers comprising a body member, a cutting head on one end of said body member, conduit means connecting said body member to a source of vacuum pressure, a stationary blade connected to said body member and said stationary blade being provided with a groove, a movable blade arranged contiguous to said stationary blade and said movable blade being provided with a tongue that slidably engages said groove, and a longitudinally tapered housing that is arcuate in cross section and has a longitudinally extending portion thereof secured to said stationary blade, said housing including a portion extending to a position that substantially surrounds said movable blade and said portion being open along one longitudinal edge thereof whereby when the conduit means are connected to a suitable vacuum source, the vacuum pressure will be present in the area of the housing so that the hair which is cut by the head will be sucked up and discharged out through the conduit means to a desired locality or area.

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